COMMITTEE ON PUBLIC UNDERTAKINGS

(1972-73)

(FIFTH LOK SABHA)

THIRTY-EIGHTH REPORT

HINDUSTAN MACHINE TOOLS LIMITED

(MINISTRY OF HEAVY INDUSTRY)



LOK SABHA SECRETARIAT NEW DELHI

April, 1973/Vaisakha, 1895 (Saka)

Price Rs. 7.15

C_O_R_R_I_G_E_N_D_A

Thirty-Righth Report of the Committee on Public Undertakings (Fifth Lok Sabha) on Hindustan Machine Tools Ltd.

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COMMITTEE ON PUBLIC UNDERTAKINGS (1972-73)

CHAIRMAN

Shrimati Subhadra Joshi*

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- 2. Shri Dinen Bhattacharya
- 3. Shri G. Bhuvarahan
- 4. Dr. Kailas
- 5. Shri Murasoli Maran
- 6. Dr. Mahipatray Mehta
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- 12. Shri M. Kamalanathan
- 13. Shri U. N. Mahida
- 14. Chaudhary A. Mohammad†
- 15. Shri D. P. Singh

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^{*}Proceeded abroad on the 22nd April, 1973.

^{**}Appointed by the Speaker as Chairman with effect from 23rd April, 1973 during the absence of Shrimati Subhadra Joshi, proceeded abroad.

[†]Died on the 7th February, 1973.

COMPOSITION OF STUDY GROUP II ON MACHINE TOOLS, NEWSPRINT AND PAPER MILLS

- 1. Shri G. Bhuvarahan—Convener.
- 2. Shri Lal K. Advani-Alternate Convener.
- 3. Shri Dinen Bhattacharya
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- 5. Shri M. Kamalanathan
- *6. Chaudhary A. Mohammad
- 7. Shri D. P. Singh

[•] Died an the 7th, February, 1973.

INTRODUCTION

- I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report on their behalf present this Thirty-Eighth Report on Hindustan Machine Tools Ltd.
- 2. This Report is based on the comprehensive appraisal of the working of the Hindustan Machine Tools Ltd. done by the Comptroller and Auditor General of India as contained in the Central Government Audit Report (Commercial), 1970 Part IX and also on an examination in depth of the working of Hindustan Machine Tools Ltd. upto the year ending 31st March, 1972.
- 3. The Committee on Public Undertakings took evidence of the representatives of the Hindustan Machine Tools Ltd. on the 8th and 9th January, 1973 and of the Ministry of Heavy Industry on the 31st January, 1973.
- 4. The Committee on Public Undertakings considered and finalised the Report at their sitting held on the 23rd April, 1973.
- 5. The Committee wish to express their thanks to the Ministry of Heavy Industry and the Hindustan Machine Tools Ltd. for placing before them the material and information they wanted in connection with the examination of the Hindustan Machine Tools Ltd. The Committee wish to thank in particular the representatives of the Ministry and the Undertaking who gave evidence and place their considered views before the Committee.
- 6. The Committee also place on record their appreciation of the assistance rendered to them by the Comptroller and Auditor General of India in connection with the examination of the Hindustan Machine Tools Ltd.

AMRIT NAHATA,

New Delhi;

Chairman,

April 27, 1973.

Committee on Public Undertakings.

Vaisakha 7, 1895 (S).

INTRODUCTORY

A. Historical Background

- 1.1. Till the attainment of independence by the country, no serious efforts were made for the establishment of a Machine Tool Factory in India. In 1947, the Government of India set up the Disposals Utilisation Committee to advise them on the utilisation of Rs. 400 crores worth of surplus raw material. In their recommendation, this Committee, gave the highest priority to the establishment of a Machine Tool Factory.
- 1.2. With the introduction of Five Year Plans for the industrialisation of the country, it became evident that without a well established basic machine tool industry, India will have to rely heavily on imports for the implementation of its five year plans. Against a requirement of machine tools valued at Rs. 3.3 crores; machine tools worth Rs. 30 lakhs only were manufactured indigenously at the beginning of Five Year Plan while the requirement was estimated to rise ten times during the following decade. It was against this background that the Government of India decided to establish machine tool factory in the public sector and for this purpose the Government of India entered into an interim agreement with M|s Oerlikons in March, 1949. According to this agreement the foreign firm agreed to render all technical assistance in the matter of erection of the factory, training of Indian personnel and direction and supervision of production at the factory for 20 years from the date of the commencement of production. Under the agreement, the production of High speed Lathe, Milling Machines, Planning machines and Grinding Machines was to be taken up in five stages by the end of 1957.
- 1.3. Owing to financial stringency and representation from private sector, it was decided to limit the scope of the Project in the first instance and to establish a factory for the manufacture of 400 high speed lathes only. These preliminaries were finalised by 1953 and the Company, Hindustan Machine Tools Limited, was registered on 7th February, 1953 with an authorised capital of Rs. 12 crores.
- 1.4. As certain difficulties were experienced in the working of the interim agreement it was replaced by a new agreement dated 1st March, 1957, thereby reducing the scope of the agreement to the manufacture of H-22 Lathes only.

- 1.5. The production in the HMT factory at Bangalore commenced in October, 1955 with the manufacture of H-22 Lathes out of imported components. The delay in the production was attributed to the changes in the target and scope of production and differences with the foreign firm the interpretation of various clauses of the agreement leading to delay in supplying technical information and forecast of requirement.
- 1.6. Under the recommendation of Machine Tools Committee appointed by the Government of India in 1956 to consider the problem of the development of the machine tool industry in all its aspects, four types of machines were allotted to Hindustan Machine Tools viz., Lathes, Milling Machines, Grinding Machines and Radial Drilling Machines. In order to manufacture these machines the Company entered into agreements with four firms viz., M|s Fritzwerner (1.1.1957—Milling Machines), M|s. Herman Kolb (9.6.1958—Radial Drills), M|s. Batingnolles (2.1.1959 General Purpose Central Lathes) and M|s Olivetti (7.10.1959—Cylindrical Grinders). The production of Milling Machines, Radial Drills, General Purpose Central Lathes and Grinding Machines started in the years 1957-58, 1958-59, 1959-60 and 1960-61 respectively.
- 1.7. Subsequent additions to the range of Company's diversified production were also made with the approval of the Government of India from time to time.
- 1.8. The Company launched on expansion sheeme in January, 1960, on the basis of 'a new factory every year' programme and set up four machines tool factories each with an annual capacity of 1,000 standard machines. The new Units viz. II, III, IV and V were set up with the approval of Gevernment. All these Units of the Company (viz., Unit II at Bangalore Unit III at Pinjore, Unit IV at Kalamassery and Unit V at Hyderabad) were established and commissioned by December, 1965. The Commercial production in Units III, IV and V, commenced during 1964-65, 1965-66 and 1966-67 respectively.
 - 1.9. The products manufactured in the machine tool units are indicated below:—

Units Name of the Products

I & II Lathes, LB Lathes, Turret Lathes, L-45 Lathes, Grinders (G9), Surface Grinders, Cylindrical Grinders, Radial Drills, Single Spindle Automatics, Multi Spindle Automatics, Milling Machines (M2, M3), Gear Shapers, Gear Hobbers, Electricity Controlled Milling Machines (E2),

Special Purpose Machines, Mini Chuckers, Carbide Lapping Machines, (GT20), Column Drilling Machines (CDM) Mechanical Chuckers, Drilling and Boring Machines (GSP), Die Casting and Plastic Injection and Moulding Machines (DP).

- III Electrically Controlled Milling Machines, type F3, F4 & F5 EM|EM|3), Milling Machines (type M2, M2EP, FN2) FN2), Broaching Machines, Gear Tester and Universal Milling Machine (UMS).
- IV Lathes H-22|26, LB Lathes, Copying Lathes, Drum Turret Lathes, Centre Lathes (LT-20).
- V Multi-spindle Drills, Fine Boring Machines. Fay Automatics, Horizonal Boring Machines, Presses, Special Purpose Machines and Cartridge Case Line Presses.
- 1.10. The Company also set up a Watch Factory at Bangalore under the Technical collaboration agreement entered into by the Government of India with M|s. Citizen Watch Company Limited of Japan in March, 1960 for the production of 3,60,000 watches in two models and assembly of watches from imported components commenced in June, 1961. Subsequently, Government (June, 1970) approved a Detailed Project Report submitted by the Company for the expansion of the existing factory to produce 2 lakh automatic watches with day-date calendar mechanism (W.F. II) and establishment of a new factory (W.F. III) in Kashmir to produce 3 lakh watches of the existing type.
- 1.11. As on the date the construction of Watch factory II buildings in Bangalore is almost complete and installation of Plant and machinery is going on as per schedule. The production of indigenous Watch parts have also started.
- 1.12. Factory Buildings of the Kashmir Watch Factory have been completed to the extent of about 40 per cent.

B Other Public Sector Units

1.13. Besides HMT, there are two other major Units in the Public Sector which are producing machine tools. One is the Heavy Machine Tools Plant, a part of the Heavy Engineering Corporation complex at Ranchi and the other is the Praga Machine Tools Factory in Hyderabad which is now under the administrative control of the Ministry of Defence Production.

C. Private Firms

- 1.14. The main private firms that are manufacturing machine tools in the country are:—
 - 1. M|s. Mysore Kirloskar Ltd., Harihar, Mysore State.
 - 2. M|s. Cooper Engineering Ltd., Poona.
 - 3. M|s. Tata Engineering and Locomotive Co. Ltd., Poona.
 - 4. M|s. Traub India Ltd., Poona.
 - 5. M|s. Bharat Fritz Werner Ltd., Bangalore.
 - 6. M|s. Ex-Cell-O India Ltd., Bombay.
 - 7. M|s. Godrej & Boyce Pvt. Ltd., Bombay.

D. Examination of HMT by the Estimates Committee

- 1.15. The working of the Hindustan Machine Tools Ltd., was first examined by the Estimates Committee (1954-55). The Estimates Committee presented to the Lok Sabha their Fourteenth Report on the 21st September, 1955. The Second Report of the Estimates Committee (1957-58) containing the Action Taken by Government on recommendations contained in their Fourteenth Report was presented to the Lok Sabha on the 21st March, 1958.
- 1.16. The working of the HMT was again examined by the Estimates Committee (1959-60) in their Ninety-fourth Report which was presented to the Lok Sabha on 27th April, 1960. Hundred and Forty-seventh Report of the Estimates Committee (1961-62) on the Action Taken by Government on the recommendations contained in the Ninety-fourth Report was presented to the Lok Sabha on the 8th December, 1961.

REVIEW OF THE WORKING OF HMT UPTO 1960

A. Establishment of Hindustan Machine Tools Ltd.

- 2.1. Against the country's requirement of 3.3 crores worth of machine tools per annum, machine tools worth of Rs. 30 lakhs were manufactured indigenously at the beginning of the first flive year plan whereas the requirement of machine tools was estimated to rise ten times during the next decade.
- 2.2. Government of India entered into an interim agreement with Messers Oerlikons of Switzerland in March, 1949 for setting up factories for manufacture of the following machines at a total capital investment of Rs. 30 crores.

I. (a)	High Speed Lathes	•		•	1200	per	year
(b)	Shaping Machines				600	,,	,,
(c)	Heavy Duty Drilling	Machines	•		120	,,	,,
(d)	Milling Machines	•		1	040	,,	,,
(e)	Planning Machines	•			240	"	,,
(f)	Grinding Machines	•			600	,,	,,

- II. Central Foundry
- III. Ball Bearing Factory
- IV. Gear Cutting Factory
- V. Apprentice Training School & Workshop.
- 2.3. Owing to financial stringency and representation from the private sector it was decided to limit the scope of the project and the investment to about Rs. 9 crores in the first instance and to establish a Factory for the manufacture of 400 High Speed Lathes only to be achieved by 1960-61. These preliminaries were finalised by 1953.
- 2.4. The Hindustan Machine Tools Ltd. was formed on the 7th February, 1953 with an installed capacity of 400 H22 Lathes worth Rs. 2 crores per annum to be achieved by 1960-61. It was decided to build the factory at Jalahalli, Bangalore. The construction work started soon. Production in HMT commenced in October,

1955 with the manufacturing of H22 lathes out of imported components.

- 2.5. During evidence the Committee enquired about the justification for reducing the capital investment from Rs. 30 crores to Rs. 9 crores at the time of setting up of the factory on the basis of pressure from private sector.
 - 2.6. The Additional Secretary of the Ministry stated as follows:—
 - "There is absolutely no question of the Government having bowed down to the pressure of the private sector and reducing the investment. Oerlikons of Switzerland formulated a grandiose scheme for an investment of Rs. 30 crores for setting up a factory with an elaborate township with a lot of other ancillary facilities for a pyramidial sort of production at that stage. It was felt that keeping in view the immediate prospects, it would be better to start in a relatively more modest way. In retrospect, this decision has been a very wise decision, because instead of putting all the eggs in the same basket and at the place, it has enabled HMT to develop in a number of areas, keeping in view the requirement of balanced regional development and distribution of industries."
 - He added "on the eve of setting up this factory in Bangalore some discussions were entered into with the representatives of private sector with a view to see that from the point of view of priority and urgency and also marketability, what should be the type of machine tools the HMT should first take up for manufacture because if the private sector could manufacture these things there was little point to duplicate what other Units were already doing. Therefore, certain areas were demarcated which, while affording a sustained and continued market for HMT product would not affect the market for other products also."
 - 2.7. The Committee pointed out that various items including ball bearings were sought to be manufactured by HMT under the original agreement with Messrs. Oerlikons Machine Tool Workers. During all this period the private firms manufacturing ball bearings in the country have expanded considerably.

2.8. It was stated that "with regard to ball bearings, the scope of setting up a factory in the public sector has come up for consideration from time to time because there again out of a total available resources one has to take certain priority investment decisions and it was not possible to go into this line."

B. Examination of HMT by Estimates Committee

- 2.9. The Estimates Committee (1954-55) in paragraphs 13 and 14 of their Fourteenth Report pointed out the delay in the setting up of the factory and observed that the causes for the delay both on the part of Government and on the part of Messrs. Oerlikons should be investigated. In their reply dated the 31st January, 1956 the Government stated that at the time the Heads of Agreement were signed a comprehensive project with a diversified production programme, estimated to cost Rs. 30 crores, was contemplated. The task of steering such a big proposals through the Planning Commission and later through the Standing Finance Committee involved elaborate examination of the proposals. The period financial stringency also intervened and the fate of the proposal was undecided for a long time. Further, there was initially considerable opposition from the private machine tool manufacturers to the Scheme. Finally, the production programme included in the Heads of the Agreement was drastically modified by reducing the production programme in the first and second stages and by omitting altogether the last three stages of the programme. All these factors contribuated to the initial delay of twenty months in getting sanction to the project.
- 2.10. The delay in the production was attributed to the changes in the target and scope of production and differences with the foreign firm over the interpretation of various clauses of the agreement leading to delay in supplying technical information and forecast requirement.
- 2.11. The Estimates Committee expressed their concern over the possible overlapping in the manufacture of the various types of lathes etc., both by the public and private sectors. They felt that HMT should work as a complementary unit to the existing factories, and a coordinated programme for the production of the various types of machine tools which were either manufactured by the existing Units or were capable of being manufactured by the existing units with some assistance, should be drawn up in consultation with the indigenous industry. They desired that Government should immediately examine all the points and clear 504 LS—2.

up doubts and uncertainties that prevailed by a clear statemer of policy and programme.

2.12. In pursuance of the recommendations of the Estimates Committee the Government appointed a High Power Committee which included non-officials also. That Committee made an assessment of the country's requirements of machine tools in different categories and recommended a programme of the manufacture for the existing machine tools manufacturing units both in the public and private sectors.

C. Increasing the scope of the project

- 2.13. It became evident that with a capital investment of Rs. 9 crores and with a production capacity of 400 machine tools per annum the Unit would continue to incur losses and would never be economically viable, nor would it be possible to market one type of lathe in large quantities. It was, therefore, decided in 1956|57 to diversify production, as well as to increase it to about 2½ times the original target.
- 2.14. Under the recommendation of Machine Tools Committee appointed by the Government of India in 1956 to consider the problem of the development of the machine tool industry in all its aspects, four types of machines were allotted to Hindustan Machine Tools viz., Lathes, Milling Machines, Grinding Machines and Radial Drilling Machines. In order to manufacture these machines the Company entered into agreements with four firms viz., Messrs. Fritzwerner (1-1-1957—Milling Machines), Messrs. Herman Kolb (9-6-1959—Radial Drills), Messrs. Batingnolles (2-1-1959—General Purpose Central Lathes) and Messrs. Olivetti (7-10-1959—Cylindrical Grinders). The production of Milling Machines, Radial Drills, General Purpose Central Lathes and Grinding Machines started in the years 1957-58, 1958-59, 1959-60 and 1960-61 respectively.
- 2.15. The capacity of the factory Bangalore which was started initially with an installed capacity of 400 standard machines and accessories valued at Rs. 2 crores per annum on a single shift basis was later on (by March, 1960) raised to a production capacity of 1000 standard machine tools and accessories valued at Rs. 5 crores per annum on multiple shift basis (three shift working).

2.16. The production of standard Machine Tools in HMT commencing from 1956-57 to 1960-61 is shown below:—

Year	Nos.	Value (Rs. in lakhs)
1956—57	135	50
1957—58	402	155
1958—59	552	200
1959—60	702	224
1960—61	1002	329

D. Agreement with Messrs. Oerlikons of Switzerland

- 2.17. Government entered into an interim agreement with Messrs. Oerlikons of Switzerland in March, 1949 according to which the foreign firm agreed to render all technical assistance in the matter of erection of the factory, training of Indian personnel and direction and supervision of production at the factory for 20 years from the date of commencement of production. Under the agreement the production of High Speed Lathes, Milling Machines, Planning Machines and Grinding Machines was to be taken up in five stages by the end of 1957.
- 2.18. In considration of the transfer of the licence necessary for the selling up of the factory and the manufacture of the machine tools, Government was to assign to the firm free of payment 5 per cent of the shares of the Company. Further a royalty on a sliding scale on the actual sale of machine tools was payable to the firm for a period of 20 years. The firm on its part was to buy 10 per cent of the shares of the Company on which a return of 5 per cent per annum was guaranteed by Government for the first 5 years from the date of purchase. On the expiry of the period of 20 years, Government had the option to buy the firm's shareholdings at a price to be agreed upon.
- 2.19. The interim agreement with Messrs Oerlikon was replaced by a new agreement dated 1st March, 1957, thereby reducing the scope of the agreement to the manufacture of H-22 lathes only. Under Part A of the revised agreement, the firm ceased to have any interest in the share capital and its own holdings were purchased by Government at a face value of Rs. 30 lakhs plus interest for 5 years at 5 per cent per annum less tax.
- 2.20. Messrs Oerlikons were paid a net sum of Rs. 12.50 lakhs in consideration of their foregoing the right to 5 per cent free

shares as per the interim agreement and also in consideration of having transferred the licence necessary for setting up of the factory for the manufacture of machine tools. In consideration of this payment Messrs Oerlikons also released and discharged the Government from the obligation to assign the 5 per cent free shares. This amount was paid by mutual agreement.

- 2.21. Under Part B of the revised agreement, the firm agreed to render expert advice on all technical questions, to secure the service of suitable technical personnel from abroad, to assist in procuring advance training for the Indian supervisory staff in Europe, etc. etc., at a net fee of Rs. 25,000 per annum plus actual expenses incurred by the firm in this behalf. Under Part C of the revised agreement, royalty on the manufacture of H-22 Lathes was to be paid in terms of the interim agreement. Parts B and C of the Agreement were terminated by mutual consent from 13th July, 1959 and 1st July, 1966 respectively.
- 2.22. The Committee enquired as to what difficulties were experienced in the working of the interim agreement.

In a written reply the Ministry have stated as follows: —

- "(1) Under the old agreement Messrs Oerlikons had a right to participate in the Management and administration of the Company whereas we wanted the administration and management to be in Indian hands.
 - (2) Messrs Oerlikons were not prepared to help in the manufacture of new types of diversified machine tools. Particularly, they were not prepared to help in the manufacture of Drilling Machines and Milling Machines at that time. Hence it was decided to terminate the interim agreement and enter into separate agreements A, B and C, which stand terminated since."
- 2.23. During evidence the Additional Secretary in the Ministry stated as under:
 - "We were feeling rather uncomfortable in having M/s. Oerlikons as perhaps both in administration and Management. It was felt that if the factory was to be truly developed as a national venture, it should be an 100 per cent Indian venture. Again certain difficulties were experienced in diversification of machine tools production which was not a part of the Oerlikons production. There was a certain amount of resistance at that time and it was felt

that it was much better to acknowledge the help received from them and let them go off". He added that "the line of production which HMT has been able to achieve not only in all the Units but even in HMT I & II and these different types of machine tools would not have been possible had we depended solely on Oerlikon's collaboration and their assistance."

- 2.24. According to the Company M/s. Oerlikons rendered all such assistance, know-how and advice which was necessary for the establishment of the factory incorporating the most modern technique and methods of production and the training imparted to the Indian technicians by the Swiss technicians was such as enabled the Company to undertake with full confidence the setting up of new machine tool factories in various parts of the country without any foreign collaboration. The Company now enjoys the right for manufacture and sale of H-22 Lathes without payment of any royalty or any other remuneration.
- 2.25. The Committee find that though the Government initially decided to set up machine tool factories at a total capital investment of Rs. 30 crores and for this purpose, entered into an agreement in March 1949 with M/s. Oerlikons Machine Tools Works, they subsequently decided to limit the scope of Project and the investment to about Rs. 9 crores and to establish a factory for the manufacture of 400 High Speed Lathes only as a result of representations from private sector and entered into a revised agreement with the collaborators. The Committee also find that since under the limited scope of the revised agreement, the Unit did not become economically viable. Government again decided to diversify the production and take up in collaboration with the European Manufacturers production of most of the items which were earlier dropped in the original agreement. From the way the Government had been changing their decisions about the scope of the Project, the Committee are forced to conclude that precious years were lost between 1949 and 1956 due to lack of proper planning before setting up the project. The Committee feel that before setting up the Project Government should have made a thorough and detailed study about the requirements of the different types of machine tools in the country and specifically earmarked roles to be played by the public and private sectors in the field.
- 2.26. The Committee cannot also appreciate the undue haste in entering into an agreement with M/s. Oerlikons without a proper examination in depth of the various implications of the terms of

their agreement. It was only later that Government realised their earlier mistake in giving M/s. Oerlikons the right and advantage to participate in the management and administration of the Company and also find that collaborators could not assist in the manufacture of new types of diversified machine tools. The Committee can at this stage only hope that such mistakes are not repeated in future.

DEMAND PROJECTIONS AND CREATION OF CAPACITY

A. Establishment of units of HMT

- 3.1. The factory at Bangalore was started initially with an installed capacity of 400 standard machines and accessories valued at Rs. 2 crores per annum on a single shift working basis. This was later on (by March, 1960) raised to a production capacity of 1000 standard machine tools and accessories valued at Rs. 5 crores per annum on multiple shift basis (three shifts working).
- 3.2. It was estimated by the Company in January, 1960 that the demand of the machine tools in the country was of the order of Rs. 20 crores approximately of which only machine tools of the value of Rs. 5 crores were being indigenously manufactured. The Company expected this demand to go up to Rs. 65 crores per annum by the end of the Third Plan and even after doubling the capacity of Bangalore Unit to 2000 machines per annum valued at Rs. 7.2 crores, a considerable gap between the indigenous production and the demand was expected. In order to reduce this large gap between indigenous production and the total demand, the Company proposed three more new Units each capable of production of 1000 machines per annum, to be established in the Third Plan in different parts of the country. Accordingly, three Units (Unit III at Pinjore, Unit IV at Kalamassery and Unit V at Hyderabad) were established by October, 1963, October, 1964 and December, 1965.
- 3.3. The Working Group for machine Tools for the Third Five Year Plan gave the following demand projections for machine Tools during the year 1961 to 1965:

Year										An	nual Demand
											Rs.
1961			•	•		•		•			24·3 Crores
1962	•		•		•	•	•		•		28 4 "
1963			•	•	•	•	•			•	33.5 "
1964	•	•	•	•	•		•		•		38·8 "
1965	*	•	•		• *	•	•			•	45.3 "
										TOTAL	170 00 Crores

3.4. The total actual requirement of machine tools was however, as under:—

									·	Rs.
1961			•	•	•	•		•		. 31 · 55 Crore
1962	•	•	•	•		•	••			36.45 "
1963						•				48 29 ,,
1964			•			•				· 55°43 »
1965			•	•		•				. 60 42 ,,

3.5. It has been stated that according to the Third Five Year Plan, the yearly demand forecast for machine tools by the end of the Third Plan was of the order of Rs. 50 crores. As against this, the indigenous capacity envisaged by the Plan was Rs. 30 crores per annum. The additional capacity envisaged in the public sector in the Third Plan was for setting up of a Unit in Punjab and the expansion of the Bangalore Unit of the H.M.T. and that of Praga Tools, Hyderabad. In addition, a new heavy machine tools plant near Ranchi was contemplated.

B. Analysis of Requirement of Machine Tools

3.6. The Committee enquired about the basis on which the Company estimated the demand to go up to 65 crores per annum by the end of Third Five Year Plan, whereas the forecast made in the Third Plan was of the order of Rs. 50 crores. In a written reply the Management stated that "the estimated demand of Rs. 65 crores per annum by the end of Tihrd Five Year Plan was made in January, 1960. This was based on the then estimates of the demand by the end of Third Five Year Plan." In this connection the Ministry stated as follows:—

"It shall be noted that no realistic item-wise break-up of the demand in the Third and Fourth Five Year Plans was possible. In the Third Plan, however, an indicative pattern of item-wise demand was given.

- The estimate of demand which was worked out by the Management in 1960 was an independent exercise on their part and the government have nothing further to add to_the explanation given by the Management."
- 3.7. With regard to the analysis of requirement of Machine Tools, the Working Group for Machine Tools for the Third Five Year Plan *inter alia* observed that "the relevant statistical information required to make a 'demand survey' is unfortunately in many cases either inadequate or sometimes not available."
- 3.8. The Working Group set up for Machine Tool for the Fourth Five Year Plan also observed that "As no reliable statistics are available of the machine tools installed after 1954, it is not possible to evaluate correctly the pattern of machine tools installed in the country". It has been further mentioned in the Report of the Working Group that "Whilst it has been possible to make an assessment of the overall requirements of machine tools, both annual and for the Fourth Plan period, due to inadequate statistics, it is not possible to determine the category-wise requirements of machine tools. The basic requirements for such a study would be a pattern of machine tools now existing, which information will be available only after the completion of the proposed census of Machine tools."
- 3.9. The Estimates Committee (1954-55) in their fourteenth Report expressed regret that no reliable statistics or data of the demand of different variations and sizes of machine tools in the different quality ranges had been collected by Government.
- 3.10. During evidence the Committee enquired whether any detailed survey had been made for the requirement of different types of machine tools in the country. The additional Secretary of the Ministry stated that "no detailed survey as such of the requirement of machine tools has been made. In the beginning of each Plan, however, estimates are made of the requirement of machine tools by the end of the Plan period in broad terms taking into account the possible growth of user industries. It is, therefore, true that as at the end of the Third Plan and Fourth Plan, the total requirement of machine tools for the country were estimated and taking these estimates into account, production was planned accordingly."
- 3.11. As regards the item-wise break-up of the demand projections, the Chairman, HMT stated during evidence as follows:—

"We always give the estimated demand per year towards the and of the plan and in our detailed report we submitted

to the planning commission, we gave the detailed breakup year by year, but we never give item-wise. That is the job of the individual manufacturers. For the periods we give the total demand for the machine tools—just financial and number-wise and each machine tool company has today its own marketing organisation and it identifies whether item was in demand."

- 3.12. In a written reply, the management stated that "So far as the company is concerned the anticipated demand for the machine tools is assessed from time to time with reference to the following factors:
 - (1) Licences issuel by the Government to the various parties for starting new industries from time to time.
 - (2) Likely demand for machine tools by major projects under expansion of existing industries.
 - (3) The past demand pattern for machine tools.
- 3.13. The periodical sales budgets are generally formulated after taking into account the above factors.
- 3.14. The Committee are surprised to note that no realiable statistics or data of the demand of different types/categories and sizes of machine tools in different quality ranges has been made by Government so far. Due to inadequate statistics it was not possible for the Working Groups set up for Machine Tools for the Third and Fourth Five Year Plans to determine the category-wise requirements of machine tools. In spite of the observations made by the Working Groups in their reports submitted to the Government and also the recommendation made by the Estimates Committee, in their 14th Report (1954-55), the Government have not made any detailed survey of the requirement of machine tools in the country, with the result that only rough estimates had been made with regard to the requirement of machine tools during the Third and Fourth Five Year Plans. As against the total estimated requirement of machine tools for the years 1961-65 valued at Rs. 170 crores as worked out by the Working Group, the actual requirement of machine tools during this period was of the order of Rs. 232 crores.
- 3.15. The Committee feel that a reasonably accurate assessment of the country's future demand for machine tools is not possible unless a realistic item-wise greak-up of the demand is available. The Committee, therefore, recommend that a detailed survey about the requirements of different types of machine tools in the country

should be made without delay before investing nation's resources in the expansion programme for machine tools during the Fifth Five Year Plan.

C. Installed Capacity in HMT

3.16. The capacity of all the five Units, each capable of production of 1000 standard machine tools per annum was assessed by the Company at Rs. 5 crores per annum on multiple shift working (three shift working) on the basis of a sales realisation of Rs. 35,000 to Rs. 36,000 per standard machine tool. The introduction of three full shifts working was, however, considered uneconomical by the Company and all the five Units are, therefore, working on two shifts. On the basis of two shifts working, the installed capacity of the various Units has been worked out by the Management prorata as follows:—

Name of the	Unit			Capacity I (Rs. in crores)	Da te of approval by the B oard fo Directors
I & II	•		•	7:2	12.1.1960
III	•			3.2	27.9.1961
IV	•	•		3.2	18.2.1963
v		•		3.5	22.2.1964
				17.7	

3.17. The installed capacity for machine tools as collected by the DGTD in 1968 and the additional capacity which would be created with minimum balancing plan and equipment during the Fourth Five Year Plan was as under:—

			Existing	Capacity	With balancing Equipment		
			No.	Value (Rs. Cr.)	No.	Value (Rs. Cr.)	
I			2	3	4	5	
Private Sector Approx.			13,900	23.00	15,500	28.00	
Public Sector HMT	•	•	5,000	25.00	5,000	25.00	

		4	5
250	12.00	250	12.00
250	1.00	250	1.00
			-
5,500	38.00	5,500	38.00
	. ——		
19,400	61.00	21,000	66· o o
			Already ommitted
			5.00
			5.00
			76.00
	5,500	5,500 1·00 38·00	250 1·00 250 5,500 38·00 5,500

3.18. The existing position of installed capacity as given in the Report of the Working Group for Machine Tools for the Fifth Five Year Plan is as follows:—

							Capacity Crores)	Under implement (Rs. Cros	
Public Sector HMT	•	•		•	•	•	25	HMT Verson MTCI Ajmer	3 5
Heavy Machine Too	l Pla	nt .	•	•	•		12		8
Praga Private Sector	•	•	•	٠		•	2		
Approx	•	•	•	•	•	•	31	(Approx.)	2
				T	OTAL	-	70		10

3.19. Thus it is seen that in both the Reports of the Working Groups for Machine Tools for the Fourth and Fifth Five Year Plans

the installed capacity of all the five units of HMT has been mentioned as Rs. 25 crores.

- 3.20. It is also seen that the installed capacity in the Private Sector was mentioned as Rs. 23 crores in the Fourth Plan document, whereas in the Fifth Plan document it has increased to Rs. 31 crores.
- 3.21. As regards pro-rata installed capacity on the basis of two shifts, it may be mentioned that it was reported in the meeting of the Board held on 23-4-1965 as follows:—
 - "The third shift was planned at the time of the Emergency in order to increase the output to the maximum possible. However, it has been found from actual operation that a full-fledged third shift—as perhaps desirable in any process industry—is uneconomical in a precision machine tool industry because of low operational efficiency. Due to the unnatural working hours the highly skilled workmen and experienced technicians have come to dislike working in the third shift and due to this there has been certain 'flight' of experienced skilled workmen and technicians in HMT I & II factories. On the other hand, with refined technological improvements and increased operational efficiency it is possible to achieve the same output. in our case Rs. 10 crores per year, in two shifts. therefore, proposed to surrender about 1200 to 1300 posts earmarked for the third shift and restrict the standard force for HMT I & II to about 5000 adequate for only two shifts operation and maintain the same production targets."
- 3.22. The present capacity of Units I and II has been mentioned in the Annual Report on the working of the Industrial and Commercial Undertakings of the Central Government for the year 1969-70 as Rs. 10 crores.
- 3.23. During evidence the Committee enquired about the correct position with regard to the installed capacity of Units I and II of HMT. The Secretary of the Ministry stated as follows:—
 - "As regards installed capacity, all that we mean is the capacity of machine as and when installed in terms of optimum utilisation rate. The question is why at one place it is rated as Rs. 10 crores and at another place as Rs. 7.2 crores. There is no dichotomy in this at all, because the

installed capacity was rated at Rs. 10 crores on the basis of three shifts working, Rs. 7.2 crores has been worked out on the basis of two shifts working, such is the normal working ratio in an engineering industry. Therefore, this workout of 10 crores and 7.2 crores is the same except that one is done on 3 shifts and the other on two shifts basis. There is no conflict at all."

- 3.24. In a written reply the Management stated that "the capacity of HMT I & II, Bangalore Units initially fixed for two shifts working was Rs. 7.2 crores per annum. It is an error to have indicated Rs. 10 crores as the capacity of HMT I & II Bangalore during 1969-70 which is regretted."
- 3.25. Subsequently the Ministry in a written reply explained the position as follows:—
 - "The following clarification obtained from the Management sets the issue in perspective:—
 - "During the year 1964-65, HMT I & II Units, Bangalore achieved a production of Rs. 981.00 lakhs. The production consisted mainly of lathes, Milling Machines, Radial Drilling Machines and Grinding Machines during that year. The overall labour inefficiency in HMT I & II units during 1964-65 was 1.15 or—an efficiency of 87 per cent. It was in this background or overall performance and overall efficiency achieved by HMT I & II Units, Bangalore during 1964-65 that it was estimated that a production of Rs. 10 crores would be achieved in HMT I & II Units, Bangalore.
 - In the note put up to the Board of Directors in their meeting held on 23-4-1965 it was clearly stated that with refined technological improvements and increased operational efficiency, it would be possible to achieve an output of Rs. 10.00 crores per year in 2 full shifts. It was also stated in the note that the improvement in the production techniques, technological developments, methods, procedures, systems etc. would be a progressive process. It was also estimated during that period that the following products would be developed, at Bangalore under the control of HMT I & II, Bangalore.

L 32 lathes (Extra Heavy Duty).
Drum Turret Lathes
Copying Lathes
Single Spindle Chucking Automatics
Size 2 Milling Machines (Modern version)
Bed Type Milling Machines.
Deplex Milling Machines
Internal Grinding Machines, etc.

Unfortunately due to the appearance of recession and the consequential low demand for modern tools, production of more and more sophiticated products like Multi Spindle Automatics, Single Spindle Automatics, Gear Hobbers, etc. in the diversified production programme, peristent labour problems, etc., the overall labour inefficiency in HMT I & II Units showed deteriorating trends as can be seen from the following statistics:—

Year	Int fficiency	% of effi- ciency
1965—66	I·27	78.74
1966—67	1.36	73 · 53
1967—68	. 1.58	63.29
1968—69	I · 60	62 · 15
1969—70	1.51	66.22
197071	1.3	76.92
1971—72	1.26	79.36

In view of the factors explained above and also in view of the extremely low order position it was not possible to achieve a production of Rs. 10.00 crores as envisaged in April, 1965, based on certain factors then prevailing.

With a view to having consistent basis for comparison, we have calculated the developed capacity and furnished the same to the audit for the period 1966-67 to 1971-72. In the calculations of developed capacity, we have given due considerations to the availability of capacity in terms of men and machines from year to year, the inefficiency factor, the price increase during the period etc. We, therefore, hold the view that the developed capacity as calculated by the company would represent a more realistic consistent and uniform basis for comparison of achievements from year to year.

HMT I & II units have achieved a production of Rs. 1,070 lakhs during 1971-72 which compare extremly favourably with the developed capacity."

D. Developed Capacity

3.26 The Company has held that the rated capacity represents the ultimate capacity to be achieved if only a few standard products in economic batch quantities were taken up for manufacture.

3.27. According to the Management, any comparison of the actual performance should, therefore, be made with reference to the developed capacity. After taking into account the available men and machine capacity, the Company has worked out a theoretical developed capacity of each Unit as follows:—

(Rs. in lakhs)

•	Developed	l Capacity	
	At 1·3 ineffi- ciency	At actual ineffi- ciency	
I	2	3	
Units I & II			
1966—67	680	650	
1967—68	. 690	570	
1968—69	700	570	
1969—70	700	610	
1970—71	750	750	
1971—72	900	927	
Unit III, Pinjore			
1966—67 .	. 340	250	
1967 6 8	380	320	
1968 —6 9 .	. 400	350	
1969—70	410	370	
1970—71	420	400	
1971—72	421	415	
Unit IV, Kalamassery			
1966—67	370	310	
1967—68	390	290	
1968—69	400	280	

I		2	3
			-0-
1969—70		400	280
1970—71 .		420	315
1971—72 .	•	454	404
Unit V, Hyderabad			
1966—67	a .		
1967—68	Seek m	330	···190
1968—69		325	225
1969—70		340	245
1970—71	•	350	260
1971—72		. 343	318

Note—In Unit V the statistics were compiled from December, 1966 only and hence details have been furnished from 1967-68 onwards.

- 3.28. In arriving at the above developed capacity, the following assumptions have been made by the Management:—
 - (i) Production of a few standard general purpose machines only utilising 80 per cent of the available capacity in two shift working; the 20 per cent allowance being made to cover absenteeism, idle time for want of materials, tools etc., load imbalances and break-down and maintenance of machines.
 - (ii) Requirement of standard hours per standard machine being taken at 1000 standard hours.
 - (iii) Inefficiency factor being taken at 1.3.
 - (iv) Value of one Standard General Purpose Machine being assumed at Rs. 35,000 escalated by the percentage increase in selling prices during 1966-67 to *1969-70 in respect of Units I to IV. In respect of Unit V, it has been stated that an ad hoc price increase of 10 per cent. has been as sumed for the calculation of developed capacity.
- 3.29. In this connection, the Company has also contended that this theoretical developed capacity would stand reduced if the following considerations are taken into account:—
 - (a) The actual product pattern was different, inasmuch as the Company was in the process of introducing new products

[&]quot;The time of factual verification the Management has stated as follows:—
'In arriving at the developed capacity for the year 1970-71 and 197172 also, the exemption mentioned in para 3.28 hold good'.
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- of its own design as well as products under technical collaboration including highly sophisticated and tooled up machines. The actual inefficiency, was therefore, more than the norm of 1.3 assumed in the original calculations.
- (b) Actual absenteeism and idle time, etc. was more than the provision of 20 per cent made in the original calculations.
- 3.30. During evidence, the Committee pointed out that the developed capacity had been worked out with reference to the production of a few standard general purpose machines utilising 80 per cent of the available capacity on 2 shift working and was subject to certain assumptions regarding requirement of standard hours, inefficiency factor, value of machineries etc. They enquired as to why action had not been taken to formulate a scientific yardstick to adjudge the production performance of the Company. The Chairman HMT explained the position as follows:—
 - "We measure the capacity in terms of value; in terms of number and in terms of standard hours available. The developed capacity is the one that bears, of course, relation to the market requirement of the machine tools and the standard hours required for producing the full developed capacity, taking into consideration the various factors during the past year. We have taken action to formulate installed capacity, developed capacity in a scientific manner and the yardsticks are available in terms of these criteria, that is, the value of the products at the given period, number of machines depending upon the complex of the various types of the machines and the total standard hours available vis-a-vis the programme in terms of machines and numbers depending again on the market consideration."

In a written reply the Management stated as under:-

"The developed capacity has been worked out on certain valid and basic assumptions which have been described in the audit review. The basis adopted by the Company for working out the developed capacity has been arrived at after careful consideration. The system followed by the company for working out the developed capacity provides a uniform and consistent basis for the comparison of actual performance with the developed capacity calculat-

ed on a theoretical basis. In view of the diversified range of products and changing product-mix to keep pace with the changing demand pattern for mathine tools from time to time, it would in our opinion, not be practicable to have any other method for assessing the periodical developed capacity on a uniform and consistent basis."

- 3.31. As regards the developed capacity, the Secretary of the Ministry stated during evidence that the concept has been developed by the HMT to illustrate as to what capacity can be treated as, in fact, available in a particular year. Therefore, the developed capacity means the concept of an achievable capacity as against the installed capacity.
- 3.32. During evidence the Committee pointed out that the installed/Developed capacity should take into account the increase in price level and asked about the steps taken to work out the installed/Developed capacity on a realistic basis. The Chairman, HMT explained the position as follows:—
 - "In my business there is no such guideline. Sometimes we evaluate the capacity in terms of tonnage, sometimes by number of machine tools and sometimes by the value of machines produced and sometimes in HMT we measure in terms of standard hours. All these methods are disadvantageous in one way or the other. One can produce a machine tool of half a tonne weight, and also a machine tool of 20 tonnes weight. The efforts are not vastly different and you are likely to be misunderstood if you go by tonnage alone. When we go to numbers again the same disadvantage exists. The machine that costs the lowest is Rs. 19,500 and the highest is Rs. 2.2 million. If one were to say why only 8 machines were produced at one place as against a thousand another place, the value of the eight machines would be about Rs. 2 crores whereas the value of the thousand machines would be Rs. 5 crores, so that there is 50 per cent production in terms of value. The fourth is more advantageous and that is the standard hour capacity the standard hour required to produce each component, each assembly, each group assembly and sub-assemblies and finally the machine. Suppose a lathe has 700 components, it will have so many turning hours, so many milling hours, so many assembly hours and suppose we arrive at the figure of 11,00 hours, we see how many 1100 hours are in each section.

When we started the factory in 1954 our workers' efficiency was 4.5; in other words our workers took 4.5 times the time taken by the Swiss workers; today we have brought it down to 1.3 that means we are inefficient to the extent of 1.3 as against 1. Our aim is to cut it down to 1. It would have been possible if I was allowed to produce one product and our workers had been doing nothing but the same printing machine or something else. I would have even beaten the Swiss efficiency. But, our boys change the tools, change often the components of materials, etc. and to that degree our efficiency goes down.

We have standard hours and based on the standard hours we calculate the actual hours available for each man, his section, we calculate the actual hours available: we have before us the performance, the efficiency of each section and we multiply it by the inefficiency factor and calculate how many standard hours are available and from that standard hours, how many of these machines we can produce and see whether the total number of machines we produce and see whether the total number of machines that we have planned absorb the standard hour capacity or not. After having done that exercise we check up with the marketing whether they are able to market them. First marketing gives us the number of machines to be produced and we go back to the planning and to detailed planning. We evolve a sort of achievable plan for a year in advance. We have completed it for 1973-74 and our budgets are going to be placed in February.

We do this exercise six months in advance of the budget preparations. Then we evolve what is really possible to be achieved by available standard hours. Then we keep that as the target. That target again changes, depending upon the pattern of the market. We do not produce something to keep in stock. We produce only to sell. So, we change this planning every three months. We do not freeze the production programme for the whole year. We review it every three months in the corporate strategy committee consisting of various officials.

We cross-check everything, based on value, tonnage, number etc. We again take this configuration, check it up from the available standard hours and see whether our standard hours are observed. For that we go to the shop level. I have in some cases reached the ratio of 1:1. But the moment I introduce a new machinery it goes down. When-

ever we introduce a new product, my efficiency goes down. It is no use my insisting that I must have that efficiency even when I change the product. When you are dealing with highly sophisticated engineering items, the weight varying from 1½ tonnes to 20 tonnes, I think it is an inherent disadvantage of the machine manufacturers. With a limited export market, I cannot try to make such large numbers of one item."

3.33. About the fixation of capacity in money value the Secretary of the Ministry stated as under:—

"We are aware that fixation of capacity in money terms has a lot of defects because really when the prices of machines go up for the same capacity it only means physical production goes down. The alternative which is suggested is fixation of capacity in physical terms. Here the problem arises supposing the structure of production is constant for all time to come and if there is a continuing and reasonable market one can certainly measure in terms of production whether full capacity has been reached but what happens if the company is diversifying in new lines to cater to changing market. Therefore, if today capacity is measured in milling machines tomorrow it is measured in a different set on machines. So, the scientific way is in terms of the actual machine capacity that is available in the shop and also in terms of the machine hours and working force. When somebody says that so many machine hours and so many man-hours it does not give a physical impact or money value but for the company purpose they are accounting in that manner."

3.34. The Committee are surprised to find that the Report of working group for Machine Tools for the Fourth Five Year Plan, and the draft Report of the Working Group for the Fifth Plan mentioned the installed capacity of HMT as Rs. 25 crores when actually the Board of Directors had indicated the installed capacity of all the five units at Rs. 17.7 crores on a two shift basis. The Committee need hardly point out that when the Units of HMT are actually working on two shifts, the mentioning of the installed capacity calculated on the basis of 3 shift working gives only an incorrect picture about the role played by HMT in the overall development of machine tool industry in the country.

3.35. The Committee further note that whereas the value of production at the existing installed capacity in the private sector was

mentioned as Rs. 23 crores in the Fourth Plan document. in the draft Report for the machine tools for the Fifth Five Year Plan, the same is mentioned as Rs. 31 crores. The existing installed capacity in the public sector in the Fifth Plan document remains almost the same as quoted in the Fourth Plan document. As the actual installed capacity of HMT is even less than the capacity quoted in the Plan documents, the Committee feel that the advantage of meeting the country's requirement with regard to machine tools goes to the private sector especially when the actual production in HMT is much less than the actual installed capacity.

3.36. The Committee also find that the installed capacity of HMT fixed in 1960 in terms of value continues to remain the same even now in spite of the increase in the price level, and no allowance for price escalations has since been made while fixing the installed capacity in terms of value. The Ministry have admitted that "fixation of installed capacity in money terms has lot of defects because when the prices of machines go up for the same capacity, it only means that physical production goes down."

3.37. The Committee further note that the installed capacity of Units I & II was intially approved in January, 1960 at Rs. 7.2 crores on the basis of two shift working as the introduction of three full shifts was considered uneconomical. On the basis of production of Rs. 981 lakhs during 1964-65, it was concluded that a production of Rs. 10 crores would be achieved in HMT I & II units on two shift working with refined technological improvement and increased efficiency. The Committee have now been informed that the capacity of HMT I & II Units on two shift working is only Rs. 7.2 crores as it was not possible to achieve a production of Rs. 10 crores due to the appearance of recession and consequential low demand for modern tools, production of more and more sophisticated products in the diversified production programme, persistent labour problems, etc. The Committee feel that installed capacity in terms of ortimum utilisation rate cannot be changed due to variable factors like labour inefficiency, low order position etc. as in such a case the actual utilisation of capacity cannot be correctly judged.

3.38. The Committee are not happy about the way in which the installed capacity has been fixed. They, therefore recommend that the installed capacity should be fixed on a scientific basis so that a correct parameter may be available for assessing the performance of HMT.

3.39. The Committee also find that in order to evaluate the actual performance of HMT, the Company have calculated the capacity as actually available from year to year. This developed capacity has been worked out with reference to the production of a few standard general purpose machines utilising 80 per cent of the available capacity on two shift working and is subject to certain assumptions regarding requirement of standard hours, inefficiency factor, value of machines etc. The Committee strongly feel that this cannot provide a realistic parameter to evaluate the actual production performance which comprise a totally different product pattern and has been undertaken under conditions materially differing from those assumed in the working of developed capacity. The Committee, therefore, recommend that a realistic appraisal of the developed capacity, taking into account the actual product standard hours requirement, efficiency factor may be made from year to year so as to serve as a suitable parameter to evaluate the actual production performance.

DIVERSIFICATION

A. Collaboration Agreements

4.1. Since the time Company went with production in October, 1955 with the production of lathes, it started diversifying its products. The table below indicates the details of collaboration agreements entered into by the Company for the establishment of production of more sophisticated machine tools and the progress made thereagainst:—

Product and Unit to which allot- ted	Date of agreement	Year of com- mencement of produc- tion from CKD com- ponents	- Name of the collaborator
I	2	3	4
Units I and II			M/s
1. Surface Grinders	6-3-1961	1967-68	Limex German Demo- cratic Republic.
2. Gear Shapers	23-1-1963	1965-66	Drummend Brothers, England.
3. Single Spindle Automatics (Type TR)	4-5-1964	1967-68	Manufacture De Machine du Haut Rhin, France.
4. Gear Hobbers	23-8-1964	1967-68	Hans Liebherr, West
5. Multi Spindle Automatics	10-2-1966	1967-68	Gildmeister & Company, West Germany.
6. Single Spindle Automatics (Type PF)	12-2-1966	1967-68	Manufacture De Machine du Haut Rhin, France.
 Die Casting Machine and Plastic Injection Mould- ing Machines 	12-5-1969	1971-72	Interfenda, Switzerland.
8. Drilling & Boring Machines	20-5 1969	1971-72	Ateliers GSP, France
 Heavy Duty Engine Lathes and Machining Centre for drilling & Boring Machines. 	4-11-1970	Not yet started	American Tool Works Co., USA.

τ	2	3.	4'
Unit III			
Electrically controlled Milling Machines	28-2-1963	1964—65	Fritzwerner, West Ger many. (Out of four types of Milling Machines, only three types have been taken up for manufac ture).
2. Broaching Machines	12-6-1967	1968—69	Oswald Forst, Solingen
Unit IV			
1. Copying Lathes	12-2-1966	1967—68	Ernault Somua, France.
2. Drum Turret Lathes	16-8-1966	1969—70	Gildmeister, West Ger many.
3. D.A. Lathes	27-6-1969		Machine Tool Works, Oerlikons, Switzerland.
Unit V			·
1. Special Purpose Machine	16-3-1961	1963-64 (in Units I & II)	Regie Nationale Des Usines, Renault, France.
2. FAY Automatics	21-3-1966	1967—68	Jones & Lamson Division of Waterbury, Farrel, U.S.A.
3. Horizontal Boring Machine	expired or been furth	1968—69 cment which 1-3-1972 has er renewed for riod of 5 years)	Pegard, Belgium
4. Ram Bed Type Milling Machines	12-9-1970	Not yet started	M/s Fritzwerner
 Unit Assembled Bed Type Milling Machine 	29-7-1971	do.	**
Watch Factory, Bangalore			
Swiss Type Automatics	1-3-1971	do.	S.A. Jos. Petermann, Switzerland

4.2. Some of the cases relating to the manufacture of diversified items by the Company are discussed below:—

Surface Grinders

- 4.3. According to the Company, it takes a minimum time cycle upto 1½ to 2 years for general purpose machines and 4 to 5 years for highly sophisticated machines to develop the requisite skill and efficiency norms involving design and manufacture of complicated tooling.
- 4.4. It has been stated that the time taken in the case of Surface Grinders (Sl. No. I under Units I and II) was longer because the collaboration agreement executed in March, 1961 was only a general agreement for rendering of technical assistance in respect of machines of collaborator's design, and the process of selection of the family of machines to be manufactured by the Company took some time. After the final choice was made by the Company, the collaborators

agreed to grant the licence in July, 1963. Thereafter, Government's approval for payment of technical assistance fee was received in November, 1963 and the third instalment of fee payable against final acceptance of the documents in India was paid in April, 1965.

Die Casting Machine and Plastic Injection Moulding Machines

4.5. In the case of Die Casting Machine and Plastic Injection Moulding Machines it has been stated that the agreement with the foreign firm was entered into for rendering technical assistance only and no collaboration or consultancy was, however, involved for setting up of the Project. The agreement was signed in May, 1969. The DPR was submitted by the Company in March, 1971 and the the same was approved by Government in August, 1972. The estimated capital expenditure on the project is Rs. 105 lakhs and the actual expenditure as on 31-3-1972 was Rs. 2.25 lakhs. The value of production during 1971-72 was 53 lakhs.

Heavy Duty Engine Lathes and Machining Centre for Drilling and Boring Operation

- 4.6. It has been stated that three prototype heavy engine lathes C-21 have been manufactured and tested in HMT I & II, Bangalore. One machine is now ready for despatch to Messrs American Tool Works for shop trials and another machine is being installed at HMT I & II, Bangalore for shop trials and the other machine is proposed to be given to one of the inland customers for shop trials.
- 4.7. As regards the machining centres the specifications have been just finalised and the prototype work is being taken up at HMT III, Pinjore.

Ram Bed Type Milling Machines

- 4.8. In regard to collaboration agreement for the manufacture of Ram Bed Type Milling machines the management have stated as under:—
 - "The collaboration for Ram Bed Type Milling machines with M/s. Fritz Werner, West Germany, comes into force only after the first order is placed on them. So far no order has been placed. As the documents will be sent by M/s. Fritz Werner only after the collaboration agreement comes into force, the question of commencement of production will arise only thereafter."

Unit Assembled Bed Type Milling Machines

- 4.9. As regards Unit Assembled Bed Type Milling machines, it has been stated that though the agreement was signed on 29-7-1971, the agreement came into force only from 1-12-1971. Since the commencement of the agreement the technical documents has been received from M|s. Fritz Werner according to the schedule.
- 4.10. The assembly of first 3 machines for which orders have already been received is expected to be completed by end of June, 1973 partly from imported components and partly from indigenously manufactured components.

Manufacture of Swiss Type Automatics

- 4.11. With regard to the manufacture of Swiss type Automatics the management have stated as follows:—
 - "As per the DPR for manufacture of Sliding Head Stock Automatic, the implementation of the first stage, viz., assembly of machines from SKD_S was expected to be taken up in the last quarter of the financial year 1972-73, provided—
 - (a) the approval of the phased manufacturing programme by the Government was accorded before July, 1972 and
 - (b) the release of foreign exchange for import of components and initial plant and machinery by 2nd week of August, 1972.
 - The industrial licence for the manufacture of these machines was approved by the Government of India on 28-11-1972. The Company has applied to the Government of India in June, 1972 for approval of the phased manufacturing programme. We understand that the DGTD has given the clearance for the same and the matter is pending before Government for their approval.
 - Even though the phased manufacturing programme has not been approved by the Government of India we have applied for the release of foreign exchange for import of components in November, 1972. The same is also still pending clearance at the Government level.
 - Since as on date we have not yet received the Government approval in respect of the phased manufacturing programme and the release of foreign exchange for import of components, the start of the first stage of manufacture of these machines can only be made during 1973-74 after the receipt of the above-mentioned sanctions."

4.12. Asked about the latest position, the Ministry have stated as under:—

"The application of HMT for an industrial licence for the manufacture of automatic lathes was received in October, 1971. DGTD's comments were received in the last November, 1971. After examination in the Ministry we addressed HMT for some clarification on January 12, 1972. Reply of HMT was received in the last week of June, 1972. After further examination in the Ministry the case was taken to the Licensing Committee in the first week of August, 1972. On receipt of the minutes of the Licensing Committee they were issued the industrial licence dated November 28, 1972 for the manufacture of lathes 50 Nos. per annum. The phased manufacturing programme has been examined by the DGTD and found acceptable. HMT has been advised accordingly by the DGTD on 15.1.73. The licence for import of machinery has already been issued."

Manufacture of Multi Spindle Automatics, Single Spindle Automatics (FF series), Broaching Machines, Copying Lathes, Fay Automatics and Horizontal Boring Machines.

4.13. It has been stated that the manufacture of Multi Spindle Automatics, Single Spindle Automatics, (PF series), Broaching Machines, Copying Lathes, Fay Automatics and Horizontal Boring Machines was taken up keeping in view, substantial demand for these machines by the defence organisation and also by one of the public sector undertakings (M/s. Bharat Earth Movers Limited for Horizontal Boring Machines) against bulk orders.

4.14. The value of orders placed by the Defence Organisation and Bharat Earth are as follows:—

				(Rs	in lakhs)
Defence Organisation					
Multi spindle automatics					281 · 49
Single spindle automatics (PF & TR)					83.33
Gear Hobbers					56.30
Copying lathes					186.65
Fay automatics					26.64
Horizontal boring machines .					88 · 56
Broaching Machines	•	•		• •	38 · 16
Bharat Earth Movers					
Horizontal boring machines			•-	••	45.74
Fay automatics			• ·	• •	3 .84

4.15. The Committee enquired if the total requirement by the Defence Organisation and Bharat Earth Movers justified the setting up of the capacity for these machines on economic considerations and whether the likely demand for these machines would be able to utilise the capacity to the full extent. In a written reply the Management have stated as follows:—

"The requirement for these machines by the Defence Organisation was extremely urgent and important from the point of the national security. Hence, it was necessary to undertake the manufacture of these machines. It helped establishment of indigenous manufacture of these machines thereby resulting in a saving of foreign exchange on a recurring basis. Incidentally, this also helped the company to meet partly the effects of recession in the engineering industries which had seriously affected the demand position for the machine tools.

The plant layout of the various units of the company is such as would facilitate the undertaking of the manufacture of any type of machines with minor adjustments of balancing capacity. The product-mix is changing from year to year depending on the requirement. Since the capacity is not established exclusively for the manufacture of any specific type of machine the question of the idle capacity due to lack of production of one or the other type of machine generally does not arise. However, the full utilisation of the developed capacity depends entirely on the demand pattern and market conditions which certainly are beyond the control of the company."

4.16. The Committee enquired whether the Management had been able to adhere to the delivery schedules indicated by the defence organisations and Bharat Earth Movers Ltd. the management have stated as under:—

"The delivery schedules, to a large extent, have been met with modifications to the same due to unavoidable reasons. Some of the reasons for delay in not very strictly adhering to the original delivery dates are as follows:—

- (i) Labour agitations.
- (ii) Delay in receipt of technical classifications from DGOF for design of tooling.
- (iii) Delay in recept of trial components from DGOF factories.

- (iv) Unforeseen difficulties which had to be solved in establishing production of these complex machines of higher technology. As most of the sophisticated machines were being assembled and tried out for the first time in the country, sufficient experience to achieve end results could not be gained as originally planned, due to the technological handicaps.
- (v) Most of the sophisticated machines were to be tooled up to suit the components. A few items of toolings, such as Gear Hobs. Threading Dies, etc., were to be imported and the delivery of these items after completion of tool design and placement of orders were delayed considerably. Sine the trials of the tooled up machines could not be completed due to the delay of the above toolings, the deliveries originally indicated could not be adhered to.
- (vi) A few sub-assemblies for the sophisticated machines are still being imported from our collaborators and due to slight change in the specifications that occurred during the detailed design, the order on our collaborators had to be amended consequently affecting the deliveries of subassemblies.
- (vii) Delay in receipt of CKD/SKD machines from Collaborators."
- 4.17. The Committee note that valuable time was lost in procedural details before starting the actual production of several diversified items. The main object of diversification was to meet the extremely urgent and important need of many of the productive organisations both in the public and private sectors. Diversification was also intended to help the Company to utilise the spare capacity particularly during the periods of recession. The Committee feel that the purpose for taking up of diversification scheme is defeated if the manufacture of items is delayed.
- 4.18. The collaboration agreement for the surface gridner was signed in 1961 whereas their actual production was commenced in 1967-68. The process of selection of the family of machines to be manufactured by the Company took a lot of time. Agreement for Die Casting machine and plasting Injection Moulding Machines was signed in 1969, whereas the DPR was approved more than 3 years after the signing of the agreement. Collaboration agreement for the manufacture of Heavy Duty Engine Lathes and Machining Centre for drilling and boring machines was signed in November, 1971,

whereas only 3 prototypes of Heavy Duty engine lathes have been manufactured uptil now. In case of machining centres only the specifications have just been finanlised. Collaboration agreement regarding manufacture of Ram Bed Type Milling Machines is lying ineffective since September, 1970 as not even the first order has been placed with the collaborator so far. This clearly indicates that the need for diversification was not examined with regard to the market demand.

- 4.19. The manufacture of Swiss type automatics could not be taken up as per schedule because of undue delay on the part of Government in according approval to the phased manufacturing programme as well as delay in the release of foreign exchange for import of components and initial plant and machinery.
- 4.20. The collaboration agreement for the manufacture of Swiss type Automatics was signed in March, 1971. The Company applied for the Industrial licence in October, 1971 but the same was issued by Government in November, 1972. The licence for the import of machinery has however, been issued only now. As a result of these delays the assembly of machine which was to start in the last quarter of 1972-1973 will now be started during 1973-1974. Delivery schedules relating to the supply of multi-spindle automatics, single spindle automatics, Broaching machines, copying lathes, Fay automatic and Horizontal Boring machines to the Defence Organisation and supply of Horizontal Boring machines to M/s Bharat Earth Movers Limited could not be adhered to although the demand for these items was quite urgent from the point of the national security.
- 4.21. The Committee recommend that all the cases of delays in starting the manufacture of diversified items may be investigated with a view to fix responsibility for the delays. The Committee would also like to be informed about the original schedules drawn up for the manufacture of different diversified items, the extent of delay in starting commercial production in each case and the extent to which the delay was avoidable. The Committee also recommend that Government should evolve a procedure for expeditious disposal of procedural formalities so that delays at all levels are avoided.
- 4.22. The Committee further recommend that the cases where diversification programme was launched without realistically assessing the actual demand for such items should be investigated with a view to fix responsibility. The Government/Management should ensure that such mistakes are not repeated in future.

4.23. It has been stated that Company could not adhere to the delivery schedule with regard to machine tools supplied to the Defence Organisation and M/s. Bharat Earth Movers Ltd. as most of the sophisticated machines were being assembled and tried out for the first time in the country and sufficient experience to achieve end results could not be gained as originally planned due to the technological handicaps. The Committee are given to understand that "it takes a minimum time cycle up to 1½ to 2 years, for gerenal purpose machines and 4 to 5 years for highly sophisticated machines to develop requisite skill and efficiency norms involving design and manufacture of complicated tooling." The Committee need hardly stress that before launching on a diversification the Company/Government should satisfy that there is assured market for the diversified product. It should also take timely action for acquisition of the necessary skill and training of personnel etc.

The Committee recommend that the Company should ensure fuller utilisation of capacity augmented by creation of facilities for taking up production of new items in the event of demand for the new items not being recurring and/or not materialising to the anticipated extent.

B. Manufacture of Tractors Printing Presses and Heavy duty Presses

4.24. A sub-Committee of the Board of Directors constituted in July, 1968 in the context of falling demand and under-utilisation of capacity suggested in its Reports (September, 1968) that a tractor project may be taken up in Unit III, the manufacture of Printing Presses may be taken up in Unit IV and manufacture of Heavy Duty Press may be taken up in Unit V. The details of the Schemes and their present position is discussed below under different heads.

(i) Manufacture of Tractors

- 4.25. In order to utilise the available spare capacity Government approved (July, 1970) in principle the proposal to enter into collaboration agreement with M|s Motokov of Czechoslovakia for the manufacture of Zetor Tractors. The technical collaboration agreement was signed in January, 1971. The DPR was submitted to Government for their approval on the 12th June, 1972. Government have not yet approved the DPR.
- 4.26. During evidence the Committee enquired about the delay in the approval of the Detailed Project Report. The Secretary of the Ministry explained that as soon as the DPR was received it was found that the Board of Directors of the Company had themselves

not considered the Project Report and approved of it. The DPR was approved by the Board of Directors with certain changes in August. 1972. The DPR was, thereafter submitted to the Bureau of Public Enterprises in the Ministry of Finance, the Agriculture Ministry. which is the user Ministry and the Planning Commission with a view to see that the Project Report was complete in all aspects. The comments received from these Ministries were communicated to the HMT for clarifications and explanations. HMT had now given all the clarifications and a meeting was proposed to be held on the 6th February in order to finally clear the Project.

- 4.27. During evidence the Chairman, HMT stated that the Company was not going to wait for the formal approval of DPR by the Government. A working Plan had been submitted to the Ministry. It aimed at producing 6.000 tractors by 1973-74. They had started producing 3,200 tractors already. He added that the effect of delay, firstly in the preparation of the DPR and then in its approval was not going to be significant, because in the meantime they had a working plan which would be dovetailed into the main plan, although new equipment would not be brought until the DPR was approved.
- 4.28. The Committee enquired whether any survey of the prospective demand of tractors had been made in coordination with the Ministry of Agriculture before deciding on the manufacture of tractors. The Secretary of the Ministry stated that Zetor tractors of 20 to 25 hp, were being manufactured at Pinjore. The bulk of the tractors used in the country were of the 35 hp. variety. This venture was specifically at the instance of the Agriculture Ministry which felt that there was an acute shortage of tractors of this range of 20 to 25 hp. This particular hp. range Zetor tractor was one of the most outstanding. The farmers who had been used to that were quite happy with that.
- 4.29. As regards the demand position he stated that they had discussed it with the Agriculture Ministry. Recently there had been some difficulty in the offtake. The present position was better than what it was six months ago. There were some difficulties and some uncertainty in the past.
- 4.30. Asked about the reasons for lack of demand the Secretary of the Ministry explained as follows: --
 - "It is true that there have been fluctuations in demand. Norby a large demand. But unfortunately because of the diffimally a very good agricultural season is always followed

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culties on the agricultural front there has been a certain fall in demand. Also, there was some uncertainty caused by the future of land holdings. But my latest reports from Pinjore are that a significant part of the tractors manufactured by them has already been disposed of and 300 tractors remain to be disposed of. This only amounts to a month or 5 weeks' production and not much. This is always in the pipeline. The agro-industries Corporations of the various States are assisting a great deal in marketing these tractors. But perhaps in order to keep up the demand and movements, Government will have to take a greater initiative in setting up agro-service centres. This is also engaging the attention of the Agriculture Ministry and we are in touch with them on the subject.

4.31. About the capital cost, the Secretary of the Ministry stated during evidence that "Rs. 500 lakhs was envisaged at a time whenit was felt that this would be a joint effort of the HMT and Mining and Allied Machinery Corporation, Durgapur. Just as the Pinjore unit of HMT was expected to have some spare capacity, it was felt that MAMC at Durgapur would also have significant surplus capacity. But when the details were worked out, it was ascertained that MAMC would not be in a position to contribute to this project because they were themselves thinking of taking up yet another tractor project on a design developed by one of our national laboratories -the Central Mechanical Engineering Research Institute. They had also some more orders than earlier envisaged for their primary line of production, i.e. mining machinery. So, we had to re-work the tractor project on the basis of HMT taking primary interest and other ancillaries being brought from outside. So the total project capital cost is now estimated to be Rs. 11.8 crores.'

4.32. The expenditure incurred on the tractor project as on 31st March, 1972 was Rs. 11.04 lakhs as per details given below:—

					(R	s. in lakhs)
Fixed Assets .						1.55
Technical Assistance Fee			•			6.16
Development & Com. exp	•	•	•	•	•	3.33
						11.04

4.33. The Committee enquired whether the delay in the completion of the Project was likely to push up the estimates of costs. It

has been stated that "it would be difficult at this stage to make any estimate of increase in capital cost due to delay in completion of the Project. However, we would like to point out the work of construction of buildings required for the tractors has already been taken up in HMT III, Pinjore."

- 4.34. About the economics of the project it has been stated that according to the phased manufacturing programme, 100 per cent indigenous production of tractors is expected to be achieved by 1976-77. Under full production, the unit HMT III will produce 12,000 Tractors involving an estimated sales turnover of Rs. 33.26 crores. The net profit before tax but after providing for interest on loans and after writing off development and commissioning expenditure is estimated at Rs. 159.29 lakhs for full production of 12,000 Tractors during 1976-77.
- 4.35. The net profit before tax on capital employed is estimated to be 10.25 per cent in full production.
- 4.36. As against the total production of 2,867 tractors, the sale of tractors upto 30th November, 1972 was 2,250 tractors. It has been stated that during 1972-73, 4,000 tractors are planned for production. The indigenous content of production during 1972-73 would be 32 per cent to 45 per cent.

4.37.	The	phased	manufacturing	programme	is	as	follows: —
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Years	No. of Tractors	% of deletion to imports
1972-73	4,000	. 32% to 45%
1973-74	6,000	. 45% to 65%
1974-75	8,000 .	. 65% to 86%
1975-76	10,000 .	86% to 90 %
1976-7 7	12,000	. 90% to 100%

^{4.38.} In a written reply the Management have stated that the production and assembly of tractors has so far been progressing according to schedule. However, HMT III, Pinjore is facing the problem of power cut and consequently the overall production performance of the factory for 1972-73 is likely to be affected.

"The final sale price of tractors is to be fixed by the Government of India. The price for the 2,000 tractors (batch of

^{4.39.} The Committee enquired about the profits earned on the sale of tractors so far. In a written reply it has been stated as under:—

500 and 1,500 tractors) imported with and without deletions during 1971-72 out of which 1,605 tractors were assembled during that year have not been yet finally approved by the Government of India. In view of this, we feel it will not be proper to disclose the provisional profits accounted for during 1971-72 subject to final fixation of prices by the Government of India. Apart from this, we are of the opinion that the working of a unit should be judged on a composite basis and not with reference to the profitability of each and every product produced."

(ii) Manufacture of Printing Presses

- 4.40. After failure of initial attempts made with other firms a technical assistance agreement was concluded with an Italian firm in September, 1969. However, the Government's final approval for the various clauses of the Technical Collaboration Agreement was received only on 23rd January, 1971. The Detailed Project Report envisaged a capital outlay of Rs. 428 lakhs. The Detailed Project Report was submitted to the Government in April, 1971 and was approved by the Government in September, 1972. As regards the delay in the approval of the DPR the agreement have stated that the approval of the DPR by the Government of India involves several procedural formalities such as the examination of the same by the Administrative Ministry, Bureau of Public Enterprises, Ministry of Finance, etc., before the same is put up for the approval of the Cabinet. After submission of the DPR the Government of India wanted certain clarifications such as demand analysis, profitability, etc. All these factors as well as procedural formalities have contributed to the time taken for the approval of the DPR. It has, however, been stated that this did not adversely affect the project as preliminary actions to commence assembly of Printing machines was taken during 1971-72 and assembly work has commenced during 1972-73.
- 4.41. During evidence the Secretary of the Ministry explained the position as under:—
 - "It is true in the examination and final approval of the project report about printing presses proposed to be taken up for manufacture in the Kalamassery unit of HMT in Kerala, more than usual time was taken.
 - In regard to certain types of machinery in the past we have had some difficulties where we had not been able to carry

the user industries along with us. The printing industry, especially the newspapers industry is very important section of the user industry and we have been wanting to carry them with us in deciding what types of machinery we will take up for manufacture. We had discussions with the Master Printers' Association and various printing interests.

213 After the project report was worked out, there were some provisions in it about certain commissions to various parties. Further the channel through which sales be made were not free from objection. In trying to find out a method by which these objections could be completely obviated, some time was taken. Then being a core industry, we had to take the case right up to the Cabinet level and the same sort of question had to be answered about markets for the various types of machines which HMT was taking up. All these were completed by September, 1972 and we were able to grant the final approval of this project. They have started assembly of printing machines by importing a number of components and by adding some indigenous components. The first printing machine has been released by the Chairman HMT about three months ago."

- 4.42. He further informed the Committee that only one printing machine had been released so far. The rest were in the pipeline and were pending orders.
- 4.43. As regards the import of components for printing Press, the Chairman HMT stated that the import application was of the order of Rs. 35 crores. The components were being imported from Italy. He added that "it is a high degree of import content today because we have not got the components."

(iii) Manufacture of Heavy Duty Presses

4.44. The Technical Collaboration agreement for the manufacture of Heavy Duty Presses in collaboration with M/s. Version All Steel Press Company, USA was concluded with the firm in May, 1989 and a Project Report was submitted to Government in March, 1970 envisaging a capital investment of Rs. 330 lakhs including Rs. 126 lakhs in foreign exchange. The D.P.R. was, however, approved by Government in March, 1972. The Committee enquired about the reasons

for delay in according approval to the Detailed Project Report. In a written reply the Management have stated as under:—

"After a preliminary scrutiny, the Finance Ministry, BPE and Planning Commission had raised a few queries on the DPR particularly with regard to the market forecast by us in the DPR. Additional data had to be collected to answer all these queries and a few more meetings were held with all concerned in the Government, wherein Chairman, HMT answered all the points to the satisfaction of the Finance Ministry, BPE, etc. This process consumed quite some time and resulted in the delay in the approval of the DPR."

4.45. During evidence the Joint Secretary of the Ministry, however, explained the position as follows:—

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"The DPR which was first submitted by the HMT had to be completely revamped, because that did not come up to the needs and expectations of the different agencies which have to be consulted before an investment decision is to be taken by the Government. After the DPR was vamped, it was circulated to the Bureau of Public Enterprises, Finance Ministry and the Planning Commission. Then a meeting was held at the level of the Additional Secretary where also considerable misgivings were expressed as to whether the percentage of growth assumed for the metal cutting press. would actually materialise or not, because this is a new type of machine which is being made, for which no precise estimation of demand is possible. This information, on the basis of which the demand projections have been made, had again to be re-worked and a second meeting was held by the Additional Secretary and finally we could achieve agreement among all the agencies concerned after three meetings. This being a specialised machine tool and a core item, had to go to the Union Cabinet. After securing its approval we could communicate the approval of the investment decision."

- 4.46. According to the representative of the Ministry the time which had been taken for approval of the DPR was primarily due to two factors namely:—
 - "(i) inadequate preparation of the DPR by HMT in the first instance and (ii) the misgivings among the different agencies of the Government, notably, Finance, Bureau of Public Enterprises and Planning Commission, in the con-

text of the development of the machine tools used in our country."

- 4.47. As regards the procedure followed in the approval of DPR the Ministry stated as under:—
 - "A special procedure has been laid down for approval of DPR on the basis of which investment decisions are taken by the Government. The procedure is that the DPR, when received, has got to be circulated with an appreciation of the Ministry concerned to the different Ministries which are involved in it. Then we have to consult Finance, Planning Commission and BPE. After their views are received, they are relayed back to the organisation which has prepared the DPR for its answers. After the receipt of the answers, there is another inter-ministerial meeting, on the basis of the conclusions of the inter-ministerial meeting, a note for the Cabinet is prepared. That has to be circulated to the Ministries concerned for their concurrence and then placed before the Union Cabinet."
- 4.48. It was, however, stated by the Ministry that the time taken by Government in finally approving the DPR did not in any way come in the way of implementation of the Project. In 1971-72, metal forming machines, worth Rs. 126 lakhs were actually assembled and supplied by HMT. Therefore, the preparatory work and also all that was necessary to launch full production of metal forming machine had been going on.
- 4.49. The following table indicates the expenditure incurred and commitments made against project cost as on 30-11-72.

(Rs. in lakhs)

Particulars	Project cost	Actual ex-	Commit- ments
	COST	penditure	Henes
Land	3.51	1.11	1 · 69
Buildings	38·04 190·90	13·74 38·48	15·86
Electrical Installation & Office Equipment .	10.65	5.00	6. 13
Others (Vehicles & Railway Siding)	12.30	1.30	1.35
Technical Assistance Fee	45.00	10.32	43.33
Development & Commissioning Expenditure .	30.00	12.81	••
	330.00	82· <i>7</i> 6	121-50

Note: The total estimated commitments for 1972-73 as per budgets would be Rs. 129.00 lakbs. The Commitmen tragainst this during 1972-73 (upto 30-11-1972) was Rs. 30.31 lakbs.

4.50. The value of production and the imported CKD components used in production are as follows:—

		Value C.K.D. Com- (Rs. in ponents.used lakhs)
1969-70		10.00
1970-71		35.57
1971-72	•	125.96*

^{*}Note: Value of production indicated above is exclusive of imported content of Rs. 156.76 lakhs for the manufacture of Cartridge Case Lines for the Defence-Organisation.

- 4.51. The order placed by Director General, Ordnance Factories for supply of Cartridge Case Line amounting to Rs. 237.92 lakhs was completed in 1968-69. Inclusive of the order for Rs. 307.85 lakhs, the value of orders placed by DGCF upto 31-3-1972 amounted to Rs. 428.81 lakhs and the orders executed amounted to Rs. 280.08 lakhs.
- 4.52. The Committee enquired whether the company had been able to adhere to the delivery schedules agreed to with the Director General of Ordinance Factories. It has been stated that in respect of one press ordered by Vehicle Factory, Jabalpur, there is a delay of about 6 months*. In the other cases, no major delay is anticipated. Against the supply order of Cartridge Case Line valued at Rs 307.85 lakhs, all the presses have been supplied according to schedule. Only toolings involving complete imports are yet to be supplied. The non supply of tooling had been beyond the control of the company as supplies from United States were seriously affected during and after the India Pakistan War in December, 1971 due to Government of India Policy.
 - 4.53. The Committee find that in the context of falling demand for machine tools which were being manufactured by HMT and the under-utilisation of capacity as a result thereof a Sub-Committee of the Board of Directors suggested diversification of production. They suggested the manufacture of Tractors, Printing Presses and Heavy Duty Presses in Units III, IV and V respectively.

^{*}At the time of factual verification the adult has stated as follows:-

According to the verification done by the D.C.A, Bangalore, it should be 8 months.

It has also been mentioned by DCA that the Company has paid liquidated damages amounting to Rs. 7325/- for this delay."

The Committee regret to note that valuable time has been lost in finalising the details of the schemes for these projects. Procedural formalities consumed much of the time.

- 4.54. The Technical collaboration agreement for the manufacture of tractors was signed in January, 1971 and the DPR was submitted to Government by the Company in June, 1972 but the same has not been approved by Government so far. A technical assistance agreement for the manufacture of Printing Presses was concluded with an Italian firm in September, 1969 and was approved by Government in January, 1971. The DPR for the Project was submitted to the Government in April, 1971 and the same was approved after about 1½ years (September, 1972). The technical colaboration agreement with an American firm for the manufacture of Heavy Duty Presses was concluded in May, 1969. The Project Report was submitted to Government in March, 1970 and the same was approved by Government after two years i.e. in March, 1972.
- 4.55. The Committee fail to appreciate the justifications offered by the Government for delaying the approval of the Project Reports. Instead of giving a green signal to the Company to go ahead with the projects Government should have completed their examination of the DPR and the profitability of the project and approved the DPR in time to enable the Company to proceed with the project after the financial sanction is actually available.
- 4.56. The Committee are informed that a special procedure has been laid down for the approval of DPR on the basis of which investment decisions are taken by Government. The Committee would like that the special procedure should be given a fair trial. They would, however, emphasise that most of the issues involving different organisations in the Ministries should be resolved by joint meetings at high levels so that the approval of DPR is not delayed.
- 4.57. The Committee recommend that the DPR for the manufacture of tractors should be finalised without any further delay. The Committee find that despite the fact that the company decided to go ahead with the projects without waiting for the formal approval of DPRs by the Government, they have not yet started the process of indigenisation but are still struggling with the assembly of machines out of imported components. The Committee recommend that the process of indigenisation of tractors, printing presses and heavy duty presses may be accelerated so as to achieve self-reliance expeditiously. Effective steps should be taken to solve the problems like power cut so that production of tractors is not retarded.

4.58. The Committee fail to understand as to why Government have not so far fixed prices for the tractors, printing presses and heavy duty presses. The economic viability of these projects cannot therefore be accurately assessed. The Committee recommend that the details regarding pricing and profitability may be finalised without further delay.

CONTRIBUTION MADE MY HMT IN THE DEVELOPMENT OF MACHINE TOOL INDUSTRY IN THE COUNTRY

A. Performance of HMT in relation to total requirement of Machine Tools

5.1. The figures regarding total requirement of machine tools, imports, total indigenous production and HMT's production for the years 1956 to 1970 are given below:—

					(Value in	Rs. lakhs)
Year	Total requirement	*Imports	% of imports to total requirement	*Total Inggenous production	ii- HMT's produc- on tion	%HMT produc- tion to total indi- genous production	% of HMT production to total imports
	2	3	4	5	6	7	8
1956	942 · 9	835· I	88 · 56	107 · 8	30.9	28.66	3 · 70
1957	1694 · 8	1460-6	86. 18	234 · 2	119-2	50· 99	8. 16
1958	1778 · 4	1438 · 3	8o·88	340· I	176.7	51.96	12. 28
1959	2043 · 9	1628 · 8	79 · 69	415. 1	196·2	47 · 26	12.04
1960	2679 · 5	2093 · 5	78 · 13	586∙ o	310.2	52 · 94	14.82
1961	3154.6	2422· I	76 · 78	732 · 7	424 · 7	57 · 96	17. 53
1962	3644 · 7	2604 · 5	71 · 46	1040 · 2	552 · 9	53 · 15	21 · 23
1963	4828 · 8	3150.0	65 · 25	1678 2	866 · 9	51·66	27 · 52
1964	5542 · 8	3444 · 4	62 · 14	2098 · 4	934 3	44 · 52	27. 13
1965	6041 · 6	3493.2	57 · 82	2548 · 4	1119-4	43.91	32.04
1966	7147 · 2	4299 · 3	60. 15	2848· o	1221.0	42 · 87	28 · 49
1967	6487· <i>7</i>	3940 · 4	60.74	2547 3	931·0	36 · 55	23 · 63
1968	5687 · 9	36 24 ·8	63 · 73	2063. 1	975.0	47 · 26	26· 90
1969	4565· o	1898·0	41 · 50	2667·0	1338· o	46 · 42	65.23
1970	5553.0	1830.0	33.00	3723 · 0	1512.0	40.61	82 · 62
		•		22620: 5	T0608: T		

^{*}Source Indian Machine Tool Manufacturers' Association.

- 5.2. It can be seen from the above table that the value of indigenous production of machine tools during this period amounted to Rs. 236.3 crores. The contribution of HMT during this period amounted to Rs. 106 crores. The cumulative contribution of HMT alone to the development of indigenous production of machine tools in the country during this period amounted to about 45 per cent of the total indigenous production. It has been stated that the contribution of HMT up to 31-3-1972 would amount to Rs. 135.7 crores.
- 5.3. In 1971, out of the total production of Rs. 50.3 crores worth of machine Tools in the country, the contribution of HMT was about Rs. 21.23 crores. By 1973-74, it is anticipated that the total indigenous production will be of the order of Rs. 65 crores out of which the contribution of HMT would be of the order of Rs. 24 crores. Roughly, their contribution would be of the order of 40 to 45 per cent. As regards the contribution made by HMT in relation to the overall development of machine tools in the country, the Secretary of the Ministry stated during evidence that:
 - "While in terms of value, the contribution of HMT has been below 50 per cent, some of the very sophisticated and improved types of machine tools have been taken up by HMT and but for it, the production of these machine tools may not have been taken up at all. Strictly, it is not only interms of the money, but in terms of the gap which has been filled and which would not have been filled by any other Indian parties taking into account, their resources, skill and technological competence that the contribution of HMT has to be assessed.
- 5.4. In his statement made at the Nineteenth Annual General meeting of Hindustan Machine Tools Ltd., the Chairman, HMT reviewed the developments since 1964 and stated as under:—
 - "If the years between 1953 and 1964 marked the first phase in the history of the HMT, the period between 1964 to 1971 marked the second phase. During the first phase, the output of the HMT exceeded Rs. 12 crores mark. In the second phase, the output more than doubled to Rs. 25 crores. The expansion was achieved by establishing a number of factories to produce machine tools in Bangalore (Mysore State), Pinjore (Haryana), Kalamassery (Kerala) and Hyderabad (Andhra Pradesh), and watches in Bangalore.

During these two periods (1953—64 and 1964—71) taking good years together with bad once, the HMT had a fairly

good record in terms of achievements in the field of sophisticated technology, expansion of output, profits and generation of internal surpluses to finance new projects.

It was during the later years of the second period that, along with the entire engineering industry of the country, the HMT was hit badly by the recession. But instead of flinching in the face of adversity, we in the HMT, with the full support of the Government, decided to meet the challenge by a bold programme of expansion in varied directions. This strategy has proved successful. The sales have started improving and the Company has again started making profits.

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The current programme of expansion marks, the beginning of the third phase in the development of the HMT. In 1970-71. before this expansion programme was taken on hand, the sales and production of the HMT were of the order of Rs. 20 crores and covered only two items viz., machine tools and wrist watches with export running at Rs. 1 crore level. The year under report viz., 1971-72 witnessed the real beginning of the third phase of the Company's expansion programme when we reached a turnover of Rs. crores which included new items other than Machine Tools and Watches. When the current expansion programme is completed, within the next few years, sales are likely to reach Rs. 60 crores covering, apart from machine tools and winding type wrist watches, several new items like tractors, printing machines, heavy-duty presses and press brakes, die-casting and plastic injection machines and automatic day-date watches. The exports of the HMT are planned to rise five-fold to Rs. 5 crores per annum in the course of next five years."

B. Expansion Programme

5.5. During evidence, the Committee enquired about the directions in which expansion was contemplated and how much expansion would be on sophisticated tools. The Secretary of the Ministry explained as under:—

"It has been our experience during the last two Plan periods that there are occasions when there are recessions in demand for machine tools. It is perhaps right to say that whenever there is a recession, the first to be affected and ١.,

the last to recover is the machine tool industry. Therefore, so far as HMT is concerned, we have decided that it would be very necessary to have certain lines of production which would be able to absorb some of the fluctuating fortunes of the machine tool industry. This is why we have been diversifying the lines of production even during the Fourth Plan period in some of the major HMT units.

- So far as the HMT factory, Pinjore, is concerned, the milling machine which is produced there is subject to fluctuating fortunes. Despite four or five years of working, the return on the investment has not been sufficient to service the capital and we had to go in for some other product which would enable us to have a sustained market. That is why we have gone in for the production of tractors in Pinjore. We went in for tractors partly for this reason and partly because we anticipated that there would be surplus machine capacity in the factory which can be used and which would enable us to reduce investment on a new tractor factory.
- So far as the Hyderabad unit is concerned, the line of production is special purpose machine tools which depend primarily on the growth of the automobile industry and some of the sophisticated and user industries. So, we should give them some items of batch production. Therefore, we have taken up the manufacture of heavy duty press, because that will to a certain extent balance the production there. So far as the Fifth Plan is concerned, lamp making machinery would be manufactured at the HMT unit, Hyderabad. That will solve to some extent the difficulties, of the Hyderabad Unit of HMT.
- So far as the Kalamassery unit is concerned, we have taken up a new item, namely, printing machinery of different types. In fact, this is one of the reasons why in Bangalore, watch was taken up as one of the consumer items, though it is a separate unit altogether.
- We shall be identifying some of the more difficult and more sophisticated machine tools which can be taken up for production in HMT factories in the Fifth Plan so that both in terms of value and range of production we would be expanding in all the machine tool units. Again, we are identifying what other items could be taken up there, partly to balance production and partly to absorb

any surplus machine capacity that may be there in the different HMT units."

- 5.6. The Committee pointed out that they had been informed that the earlier expectation that the HMT would concentrate on the production of sophisticated machine tools leaving the manufacture of simple, single purpose tools to small and medium units in the private sector did not materialise much to the charging of small sector. They enquired about the correct position in this regard. The Secretary of the Ministry stated as under:—
 - "On the question whether HMT should concentrate on more difficult items, it is true that at the time when the factory was set up there was a broad production profile which was thought of for HMT. That was the time when it was felt that the public sector should take more difficult items, leaving it to the private sector to take up less difficult items. In the case of capital goods, the profitability and return on capital would be less. Over the years, the approach and pattern in this regard have changed, e feel there should be balanced production, balanced both in the sense technology and proper return on the capital invested. Therefore today there is no such thing as leaving all the simpler or more profitable items to be produced by the private sector. We would certainly like to take up mixed package of production in public sector units so that the profitability of the undertaking would be better that what it would be otherwise. So, we have taken up both sophisticated and less sophisticated simpler machines in HMT. It is a mixed and balanced package that have been taken up for manufacture.
- 5.7. In a written reply, the management have explained the position as follows:—
 - "There is no specific bar on the range of products which HMT should produce. The Company should have the liberty and choice of product pattern, keeping in view the demand and overall profitability of the company. The question of chagrin of small sector should not, therefore, arise. The Company by and large has concentrated on the production of general purpose machines with which production started in the various factories and has also diversified the production to include production of highly sophisticated machines."

It was further stated that:

"The Company has mainly concentrated on the manufacture of general purpose machines and sophisticated machines of higher price range. However, in view of the out-in-demand from the large scale industries like Automobile manufacturers due to various Socio-economic reason the demand for sophisticated machine tools is limited and hence, the company has also to undertake manufacture of small ranges of general purpose machine tools."

- 5.8. During evidence, the Committee enquired whether it would be correct to say that during the so called recession period the demand for standard machines fell but the demand for the sophisticated machines continued and these continued to be imported. The Chairman, HMT stated as under:—
 - "It was inescapable. But these import figures were down. Since there was no facility to make in the country we were rather struggling for the manufacture and establishment of techniques, we were afraid to take up these items in the initial period. When the force of recession came, we had to plunge in. In November, 1966 when the demand from the Defence came for the manufacture of sophisticated machines, we took up these projects-truck tractors and some of the defence weapons were manufactured during 1966-67. I went abroad and took defence requirements and negotiated. We had to get into that, although our boys were not ready. We had spent some of the energies and resources in developing these very sophisticated machines which you see had to be produced in the country. We admit that we were hesitant whether we would be able to make or not and it took us five years. Now we are confident to handle all this.
 - 5.9. Asked about the steps taken to meet the growing requirement of sophisticated tools in the country the management stated that the company has from time to time taken up the manufacturer of sophisticated machines, such as follows:—

Multi Spindle Automatics,

Single Spindle Automatics,

Electrically Controlled Milling Machines (E2),

Gear Hobbers, Surface Grinders,

Electrically controlled milling machines (type F3/F4),

Broaching machines, Copying lathes,

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Drilling and Boring machines, Special purpose machines, FAY Automatics Horizontal boring machines,

Die Casting & Plasting Injection Moulding machines, Drum Turret Lathes etc.

5.10. It was added that the Company were also entering the field of manufacturing Numerically controlled machines, Machining Centres, Electro Discharge machines etc.

C. Future Production Programme

5.11. The Committee enquired about the demand projections for the Fifth Five Year Plan and the steps taken to meet the increasing demand of machine tools in the country. In a written reply, the Ministry have stated that "the final demand estimates for the Fifth Plan period is yet to be made." About the steps taken to meet the increasing demand for machine tools, it has been stated as follows:—

"The actual steps for increasing the total production of machine tools in the country will be clarified as soon as the estimates of demand etc. are finalised. The expansion and diversification in the public sector undertakings to meet the increasing requirement are under constant review. The units in the private sector may also expand and new undertakings can also come into being, having regard to the over-all demand in the domestic and export market."

5.12. During evidence the Chairman, HMT, however, stated that a very detailed project report had been worked out for every expansion that was to take place. The Plan for the future was to reach Rs. 60 crores turnover per annum by the end of the Fifth Five Year Plan. It was estimated that the profit after taxes would be of the order of Rs. 3 crores when Rs. 60 crores level of turnover was reached? Before taxes it would be double. He stated that the report had been accepted by Government.

5.13. As regards the expansion of production and sales after 1975-76, the Chairman, HMT in his statement at the nineteenth Annual General Meeting of the Hindustan Machine Tools Lide has stated as under material and the first course of the first c

"By far the largest part of the increase in output during recent wy years has come from the new types of machine tools introduced for the first time as part of diversification, prog-

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rammes. Particularly, in the case of HMT, a sizeable part of the increase in production and sales come from the new items like tractors, heavy-duty presses and die casting and plastic injection moulding machines as also new types of machine tools. Thus between 1969-70 and 1971-72 the actual sales of the HMT increased by Rs. 11.93 crores. Of this increase, only 31 per cent (Rs. 3.75 crores) came from old products and as much as 69 per cent increase (Rs. 8.18 crores) came from new products. The lesson is thus clear; the tempo of expansion of production and sales is determined largely by the new items of production.

The increase in the output of the new items, taken up by the HMT as part of the current expansion programme can be expected to import continued and vigorous momentum to the expansion of production and sales of HMT, say upto about 1975-76. By this time, the momentum derived from the current expansion schemes would have been fully exploited. Thereafter, other things being equal, the expansion of production and sales of the HMT will lose its vigour and tend the level off, with familiar adverse impact on the profitability.

- I, therefore, suggested that in order to maintain our dynamic expansion of production and sales even after 1975-76, we should plan some new expansions in such a manner that the new production capacities may be commissioned during the years after 1975-76. Since the gestation period of a new engineering project from preliminary conceptual thinking to actual production is about five years, the time to start thinking about the new round of expansion is right now."
- 5.14. The Committee find that on an average the cumulative contribution of HMT to the development of indigenous production of machine tools since the commencement of production has been of the order of 40 per cent to 45 per cent. The Committee however, note that the value of production in HMT indicated a sudden drop from Rs. 12.21 crores in 1966 to Rs. 9.3 crores in 1967 and Rs. 9.75 crores in 1968. The Committee were informed that when the factory was set up there was a broad production profile and it was felt that public sector should take up more difficult items leaving the private sector to take up the less difficult ones. The Committee, therefore, feel that had the Company engaged itself in more sophisticated machine, tools rather than on standard machines, the HMT would not have been:

affected by recession as has been admitted by the Chairman, HMT himself during evidence.

- 5.15. Due to fall in demand of the machine tools manufactured by HMT, the Company decided to expand their activities in various directions through diversification of production, with the result that the production in HMT is now showing an upward trend. It has been stated that the increase in sales during the recent years has been from new types of machine tools introduced for the first time as part of diversification programme. From the sales performance of HMT from 1969-70 to 1971-72, the Committee note that 31 per cent of the increase in sales was contributed by old products and the remaining by the new products. It is, therefore, evident that the demand for old type of machine tools manufactured prior to the launching of the expansion programme has not picked up sufficiently even though the recession was over long ago.
- 5.16. The Committee are therefore inclined to feel that in the past the planning of production and product-mix of HMT had not been related to demand for the products as otherwise this situation would not have arisen.
- 5.17. The Committee would like Government to take a serious note of this demand projection and examine the matter in depth to see what further diversification programme could be taken up by HMT so as to maintain its dominant role as producer of machine tools in the country. The Committee, also stress that product-mix and the pattern of machine tools should be carefully worked out keeping in view the demand of machine tools in the country and overall profitability of the Company. The Committee need hardly stress that before deciding the future production programme for the Fifth Five Year Plan the Government should clearly demarcate the respective roles of the private and public sectors so that they can meet in full the overall needs of machine tools in the country at the same time ensuring that the interest of small scale sector is not in any way affected.
- 5.18. It has been pointed out by the Chairman, HMT that the increase in the output of the new items taken up by the HMT as part of the current expansion programme can be expected to impart continued and vigorous momentum upto 1975-76. Thereafter. the expansion of production and sales of the HMT will lose its vigour and tend to level off, with familiar adverse impact on the profitability.

5.19. Since according to the Management, the gestation period of a new engineering project from primary conceptual thinking to actual production is about 5 years, the Committee need hardly stress that Government should plan right from now, for the programme of expansion to be taken up after 1975-76, so that the Company can utilise its capacity to the maximum.

D. Imports and import substitution

- 5.20. It is observed from the statement in Para 5.1 that the percentage of imports of machine tools to total requirement in the country dropped to 33 per cent during 1970 as against 88.56 per cent during 1956.
 - 5.21. During evidence, the Secretary of the Ministry stated that:
 - "At the moment, about 65—70 per cent of the requirement of the country are met out of indigenous production and about 30 per cent is met through imports. If we check up the figures in the last few years the percentage of the requirement that has been met by imports has been showing a steadily declining trend and we expect that at the end of the Fifth Plan the percentage met through imports will be reduced to anything between 20 and 25 per cent."
- 5.22. The Committee enquired about the contribution made by HMT in this regard, it was stated:
 - "We have not made a detailed analysis of the contribution of HMT to import substitution, but it would be somewhere between 40-45 per cent.
- 5.23. As regards imports, in the Fourth Plan the Chairman, HMT stated during evidence that:
 - "Import was there and it was considerably high; but the items that have been imported into the country, amounting to Rs. 30 crores, consist of those items which India cannot develop overnight. They are extremely complicated, costly and sophisticated machines.
- 5.24. The Committee enquired whether imports were being made because of delay in setting up of new capacity or want of the particular types and how the gap was proposed to be bridged.

In a written reply, it has been stated that:

"there has been a significant drop in the import of machine tools." However it will have to be mentioned that no

country in the world can claim to be self sufficient in the production of all types of machines. It is necessary to depend on imports for several reasons such as the difficulty in production of certain types of machine tools as well as the un-economic nature of production of small quantities of machine tools."

5.25. In his statement at the Nineteenth Annual General Meeting of Hindustan Machine Tools Ltd., the Chairman, HMT has made a brief review of some significant trends, in the machine tools industry in India during the recent years. As regards achievement of self-sufficiency in machine tools he has stated as follows:—

"Taking the indigenous production and import together, the total requirement of machine tools in India reached the peak level of Rs. 71 crores in 1966. Thereafter due recession, there was a drastic fall in the requirement to Rs. 43 crores in 1969. However, there was good recovery in the subsequent two years which lifted the total requirement in 1971 to Rs. 68 crores, which was still Rs. 3 crores less than the peak level of 1964. Thus, if we concentrate attention on the two terminal years viz., 1966 and 1971, the domestic market for machine tools did not show any expansion; in fact there was a small contraction of the market. Yet the significant fact is that during the same period there was a sizeable expansion in the domestic production of machine tools from Rs. 28 crores in 1966 to Rs. 48 crores in 1971. How did the Indian machine tool industry manage to sell Rs. 20 crores worth more of machine tools in the face of near stagnant domestic demand? By vigorous and successful efforts for import substitution, as a result of which, the imports of machine tools were brought down sharply from the peak level of Rs. 43 crores in 1966 to Rs. 20 crores in 1971. In short, indigenous producers could increase their sales of machine tools by Rs. 20 crores primarily because the imports could be cut down by the corresponding amount. These facts are of great importance in relation to any thinking and planning about the future of the machine tool industry in India.

I may touch upon one more notable aspect of the development of India's machine tool industry. When we began production in 1956 the indigenous production of machine tools for the HMT and other units in the country met only 11 per cent of the total machine tool requirement of the Indian economy. The other 89 per cent of the requirement was met by imports. Even as late as 1968, the domestic production met only 38 per cent of the total national requirement. Then with a sudden jump, the percentage leaped to 62 per cent in 1969. In 1970 and 1971, the domestic production provided as much as 70 per cent of the machine tool requirement of the country. Within a few years, this figure may reach 75 to 80 per cent. But beyond that, it may not be possible to go.

In this connection, I may draw your attention to the fact that no country in the world can achieve cent per cent self-sufficiency in machine tools. Even the most advanced countries of the world import machine tools from abroad. This is particularly true of India in respect of machine tools whose import is restricted to so few numbers that it is impossible to start domestic production of such machines at economical and viable price level. So, it appears that the scope of expanding indigenous production by further import substitution would not hereafter be as large as it has been during the past five years. The most important policy implication of this analysis is that the recent upward trend in the domestic production and consumption of machine tools is unlikely to continue at the same tempo."

5.26. During evidence, the Committee pointed out that the working group of the Machine Tools had recommended that it must be ensured that there would be no possibility in future date to import under pressure, machine tools similar to those already manufactured in the country. The Secretary of the Ministry stated that:—

"whenever any proposal for import from any industry comes, the applicant is required to advertise the requirement. Then 45 days have got to be given as the time for indigenous manufacturer to respond and all the responses received are then examined. If there is no response from the indigenous manufacturer in respect of any item/items then such item/items are included in the application. Then it comes up before the Capital Goods Committee where they examine whether any type of machine tools which is proposed for import is being manufactured in the country or not. We take particular care to see that no import is allowed of any type of machine tool which is manufactured in the country."

- 5.27. The Committee find that as a result of sustained efforts for imports substitution, the import of machine tools has been gradually brought down. In 1956, the indigenous production of machine tools from the HMT and other units in the country met only 11 per cent of the total machine tool requirements of the Indian economy. The other 89 per cent of the requirement was met by imports. In 1970 and 1971, the domestic production provided as much as 70 per cent of the machine tool requirement of the country. The Committee were informed that at the end of the Fifth plan the percentage met through imports is expected to be reduced to anything between 20 to 25 per cent. It has also been stated that it may not be possible to go beyond this limit as it is necessary to depend on imports for several reasons such as the difficulty in production of certain types of machine tools as well as the uneconomic nature of production of small quantities of machine tools.
- 5.28. The Committee, however, regret to note that no detailed review has been made by the Government/HMT to find out the contribution made by HMT with regard to import substitution. It has been stated that roughly the contribution of HMT would be of the order of 40 to 45 per cent of the total contribution made in the country in regard to indigenisation of the manufacture of machine tools.
- 5.29. The Committee feel that although at the earlier stages it was imperative for HMT to enter into technical arrangements in order to bridge a wide gap that existed between India and more developed countries in the field of design and development of machine tools, a stage has now come when dependence on foreign technical assistance and know-how should be reduced to the minimum.
- 5.30. The Committee, therefore, recommend that Government/HMT should chalk out a realistic phased programme of achieving self-reliance so that not only the imports of machine tools are reduced to the minimum feasible limit but the dependence of foreign technical assistance and know-how is also gradually brought down if not altogether eliminated.
- 5.31. It has been stated that whenever any proposal for import from any industry comes, the applicant is required to advertise the requirement in order to find out whether the item can be manufactured indigenously. The Committee, however, recommend that the Government/HMT should make a detailed study about the items which can be manufactured indigenously. The Design and Development Department of HMT and the Central Machine Tool Institute. Bangalore should keep themselves uptodate in this regard so that the necessity of finding out this information through advertisements

is obviated. The Government/HMT should also analyse the pattern of imports so as to decide as to which items should be feasible for indigenous manufacture.

E. Manufacture of Several New Types of Machines by HMT

5.32. It has been stated that in addition to the new machines established for production under the various collaboration agreements, the Company has also produced subsequent to 1965-66 several new types of machines developed out of its own design efforts, such as Milling Machines of M2 series (seven types) in Unit III, Grinding Machines (two types) Tool Grinding and Lapping Machines (two types), Mechanical Chucker, Mini Chucker, Central Lathes, Heavy Duty Lathes (4 types) in Units I and II and several types of Special Purpose Machines in Unit V. The turnover of these products aggregated Rs. 1,703.77 lakhs upto 31st March, 1972.

5.33. The statement given below indicates the sale of Company's own design products.

Products/Units HMT I and II, Bangalore	Cumulative turnover as on 31st March, 1972 (Rs. in lakhs)
L12 · · · ·	278-22
L 45 ·	58 · 09
E,2, ·	164:06
GT 20	, 6 ·88
SPMs ·	119:47
S G.2 362 tree *	48 38
Minichucker · ·	• 27:98
GTR	0.70
Column Drills	20: 54
ATW lathes—A 24	6.12
er cerso de	730. 43
HMT III, Pinjore	
M ₂ P/M ₂ EP	. 215.49
MUTR	31 .00
FN2/FT2	· 13·18
E 2	3.22
	262 · 89

I.	2 ·	
HMT IV, Kalamassery		•
LT 20	39 · 64	
HMTV, $Hyderabad$		
SPMs/FBMs	• 670 · 23	
Unit heads	0.28	
	670.81	
Cumulative as on 31:	3.1972 1703 77	

- 5.34. Time taken for the production of machine from the start of design work to the date of production of first machines varied between 1 to 3 years.
- 5.35. As regards the performance of these new types of machine tools as compared to similar imported machine tools both in the matter of operation and pricing it has been stated as under:—
 - "The performance of the new machine designed by the design and development department of the company has been found to be satisfactory.
 - The optices of these machines cannot be strictly compared with the imported machines since in some cases the imported equivalents are not available. In the case of other machines involving adaptations such as M2P, M2EP, PN2, etc., the prices are quite comparable."
- 5.36. The Committee enquired about the significance of, the term "developed out of its own design efforts", whether it implied development of completely new designs by the Company or adaptations of existing designs of Collaborators with minor modifications therein. The Management explained the position as follows:—
 - "There can't be anything like 100 per cent original idea in the designing of new machine tools. Several types of existing designs are carefully studied before bringing out a new design concept. To put it in other words, the designers learn new ideas from the old designs and not copy the very same existing ideas. The machines developed out of the "Company's own design" efforts represent such new design concepts and do not involve any outside technical collaboration for technical assistance in manufacture of such new machines.

- or GTR machines, the Central Machine Tool Institute, Bangalore has given the basic design. The developmental work has been done entirely in the Company's works and the company has thus put in a substantial original effort in designing the machines and developing their production. M2P|M2EP, M1TR, FN2|FT2 machines are adaptations."
- 5.37. Asked whether patents for any of the designs had been registered, it was stated as under:—
 - "We have not so far applied for any patent for the machines designed and developed by us indigenously. To the best of our knowledge, machine tools as a complete unit are not patented by any manufacturer. Patents are applied for in respect of some of the indigenous mechanisms, systems, etc. We have submitted the following items recently for Inventions Promotions Board's Award:
 - 1. Pragmato
 - 2. Worm type Chip Conveyor."

F. Development of New Designs

- 5.38. A team of engineers of HMT in collaboration with Central Machine Tool Institute, Bangalore and engineers from American Tool Works, Cincinnati have jointly developed a centre lathe C21-first in the series of modern lathes—for international market. The prototype of the machine has been made and is undergoing test. The lathe has features which are acceptable to European and American markets and also fills the missing gap in the country for centre lathes of 260-450 mm, size.
- 5.39. The Design engineers of HMT are engaged in designing 'Machining Centres' with Numerical Controls (N.C.) jointly with British and American engineers. The Design engineers in coordination with the Central Machine Tool Institute and Bharat Electronics Ltd. are also trying to evolve design, for Numerical Control systems for machine tools.
 - 5.40. The National Committee on Science and Technology (NCST) has prepared a plan to develop indigenously design of over 50 important machine tools. HMT has been assigned the task of developing on their own or in coordination with the Central Machine Tool Institute, Bangalore as many as 28 machine tools, out of 50 selected designs.

G. Design and Development Department

5.41. The annual Expenditure incurred on the Design and Development was as follows:—

		 			 	(Rs. in lakhs)
1966-67					•	21.74
1967-68						34·30
1968-69	•					31.29
1969-70			•		•	36· 22
1970-71	•	•			•	52.00
1971-72				•		57.00

- 5.42. During evidence the Committee enquired whether the achievements of the Design and Development Department were commensurate with the expenditure incurred on it. The Chairman HMT stated as under:
 - "I should say that the achievement from the design and development are commensurate with the expenditure incurred. We incurred far too little because we did not have sufficient liquid finance for investment. In 1966-67, we spent Rs. 21.74 lakhs and in 1971-72 we spent Rs. 57 lakhs. So we are continuously increasing and I say now the design department is doing a very good work and in fact, we should expand its activities a little more."
- 5.43. Asked as to whether the performance of the new types of machine tools designed and developed exclusively by the design and Development of the Company compared well with similar imported machine tools, both in the matter of pricing and of operation and pricing, it was stated that "in the design we evolve, 100 per cent indigenous, they are cheaper than the FOB price to a comparable machine abroad."
- 5.44. The Committee enquired about the steps taken by the company to coordinate the functions of the Design and Development Department and Sales and Marketing Department. In a written reply it has been stated that the "design and development department works in close cooperation with the sales and marketing department. Whenever the design and development department wants to bring out new design of products, the same is examined as to marketability in consultation with the sales and marketing department. The marketing department also asks this department to take up design of new products as and when warranted by the market."

5.45. During evidence the Committee pointed out that there was a general complaint that the existing designs of many of the indigenous machine tools were out-moded. The Additional Secretary stated:—

"This criticism, I would submit, is partly justified because in a protected market, there is not that amount of incentive at least for domestic requirements to keep the designs and technology as up dated as it should be in a freely competitive market. But this lacuna has been noticed by Government and in various meetings of Development Councils. we have been urging both HMT and other public sector units, to undertake research and development facilities so that they can, in their organisation and in the industry as well, keep the production technology and designs, up-todate. We have also constituted very high level groups under the National Committee of Science and Technology to devote attention to this problem and see how the designs can be kept constantly updated, what sort of assistance is peeded by the various units and also to take up development of newer type of machine tools which are today being imported. This problem is receiving attention and one of the tests is that, when they go into the export market—obsolete and out-dated designs will stand no chance at all. To the extent the industry gets exposed to competition in the overseas markets, and when they have got to fulfil certain production and export targets, also serves as incentive for developing production technology etc. ... I would submit that the criticism, is to extent, valid. The attention of the industry has been drawn to this and we have asked them to make all out efforts in this direction."

5.46. In regard to the development of technology, the Chairman, HMT in his statement of the Nineteenth Annual General Meeting of Hindustan Machine Tools Ltd. stated as follows:—

[&]quot;The HMT started with the production of simple general purpose machine tools. So did other machine tool producers in the country. No wonder, therefore, that the market for such machine tools was soon saturated and in some cases even oversaturated. Whatever objective one has in view either the survival and prosperity of the company or saving valuable foreign exchange through import substitution—the HMT had to accept the logic of this particular industry and go in for the production of more sophisticat-

ed machine tools. Furthermore, there is no scope of expanding machine tool exports from India unless we take to the production of the sophisticated machine tools in such a manner as to be able to face the competition in the world market from the established international giants both in terms of quality and prices.

All these call for a determined drive for mastering new technologies such as those required for the production of Single and Multi-spindle Automatics, Gear Shapers and Gear Hobbers, Horizontal Boring Machines, Copying Lathes, etc., and the latest types of NC machines like Machining Centre and NC Turning Centre. Viewed in the context of these considerations, the way we expanded the range of production of sophisticated machine tools at the HMT can be regarded as an eloquent testimony to our successful drive for mastering the advanced technology in this field. Last year alone, our outlay on research and development was as high as Rs. 57 lakhs. We have plans to further expand our activity in this direction.

In this connection, I would like to draw your attention to two recent testimonies to the level of technological sophistication achieved by the HMT.

In the wake of the recent conflict with Pakistan and the unfriendly postures of some of the foreign aid-givers, the Government of India has/called upon the scientists and technologists in the country to intensify the drive for selfreliance. In furtherance of this objective, the National Committee on Science and Technology (NCST) has been preparing crash plans for accelerating the advance to selfreliance in a number of fields which are of vital importance for the economy in general and our defence capabihty in particular. In the field of machine tools, the NCST has prepared a plan to develop indigenously, designs of over 50 important machine tools. "It is a measure of the confidence which the country has in the technological capability of the HMT that we have been assigned wither task of developing on our own and or in coordination with the Central Machine Tool Institute. Bangalore as marry as 28 machine tools, out of the 50 selected designs. ment would get require all to the our mutitions out and

The second testimony has come from a highly advanced country in the basiness of machine tools. I am referring to a

ten-year technical collaboration agreement which the HMT has recently concluded with M|s. Wickman Limited, a leading machine tool manufacturing company of the U.K. Under this agreement, the HMT would give technical know-how for the manufacture of 'Mini Chuckers' to the British Company on royalty basis. The sense of gratification which this agreement has generated in the country was reflected in the remarks of an economic daily of Bombay which described it as "a near miracle" and "a breakthrough for the first time in the history of Indian machine tool technology."

- 5.47. The Committee find that in addition to the new types of machines established for production under the various collaboration agreements. HMT have also produced several new types of machines developed out of its own design efforts. The sale of Company's own design products upto 31st March, 1972 amounted to a little over Rs. 17 crores. HMT have also been assigned the task of developing on their own or in collaboration with the Central Machine Tool Institute. Bangalore as many as 28 machine tools out of 50 selected designs. The Committee also note that the annual expenditure on Design and Development Department of HMT has been gradually increasing. As against Rs. 21.74 lakhs incurred in 1966-67, Rs. 57 lakhs were spent in the year 1971-72. While all such efforts on the part of HMT to achieve self-reliance are highly commendable, the Committee feel that activities in this direction should be further intensified in order to master the advanced technology in the manufacture of sophisticated machine tools and to evolve designs for numerical control systems.
- 5.48. The Committee regret to note that although the Working Group for Machine Tools for the Fourth Plan had pointed out in their report that many of the existing designs of indigenous machine tools were outmoded, it is only recently that this facuna was noted by HMT when they found that their machines did not find ready market. The Committee feel that the Indian Machine Tool Industry has not been backed up by a vigorous and dynamic research and development programme which studies in depth the requirements of users.
- 5.49. The Committee note that Government have been urging both HMT and other public sector Units to undertake the Research and Development facilities so that they keep the production technology uptodate. A high level Group under the National Committee

of Science and Technology has been constituted to devote attention to this problem.

5.50. The Committee recommend that the activities of the National-Committee on Science & Technology, the Central Machine Tool Institute, Bangalore and the Design & Development Department of HMT should be well coordinated and all possible assistance and encouragement should be given to Indian engineers to evolve and master basic designs so that machine tool industry in India may be able to stand on its own feet.

H. Exports

- 5.51. The Working Group for Machine Tools for the Fourth Five Year Plan recommended a target of export of approximately 2500 machine tools valued at Rs. 7.5 crores by 1973-74.
- 5.52. It is stated in the Report of the Working Group that a relatively low target for export was fixed deliberately in consideration of the existing incentives and facilities for export. It was noted that India was practically unknown in the international market, either in the developed or developing countries, as a manufacturer of quality engineering products, leaving aside such sophisticated items as machine tools. In view of this, the Working Group felt that the first major step for furthering exports of machine tools was to build up this image in the international machine tool market.
- 5.53. The Working Group observed that the major means of bringing to the user industries the latest developments in the machine tool industry, was by display of their machine tools at national and international engineering and machine tool exhibitions. As the cost of display at such exhibitions abroad was exceedingly high, the Working Group recommended that in the first few years, Government should bear, if not all, a very considerable part of the cost of The Working Group observed that the advantage of exhibitions. such exhibitions would be two fold. Not only it would help promote the sale of machine tools but the image that would be created India, as a manufacturer of an item as sophisticated as machine tools would help open up a large potential for export of other sophisticated engineering goods. The Working Group also recommended that it should be ensured that there would be no possibility at some future date to import under pressure machine tools similar to those already manufactured in the country. It was further recommended that indigenous machine tools, specially general purpose machine tools, should be included in the export list of the country in the bilateral

agreements and Government should take particular care to see that this part of the agreement was faithfully implemental; and the second that

5.54. The Working Group favoured the setting up of a separate Export Promotion Council for machine tools devoted exclusively to promotion of export of machine tools accessories and other metal working machinery. It was hoped that such an export Promotion Council if formed would be in the best position to advise the Government on the premotion of exports of machine tools and also assist and advise the industry in all matters concerned with exports.

5.55. As against an export target of Rs. 7.5 crores for the machine tools industry to be achieved by 1973-74, the actual total export of machine tools during the years 1969-70, 1970-71 and 1971-72 was as under:—

1969-70 ·	•	Rs. 295 · 70 lakhs
1970-71	•	Rs. 283 · 85 lakhs
1971-72		Rs. 304 36 lakhs

5.56. During evidence the additional secretary of the Ministry stated that "it is hoped that 50 per cent of the target would be achieved by 1973-74".

5.57. The details of machine tools exported by HMT during the years 1969-70, 1970-71 and 1971-72 are given below.—

						1950-70	Figures in	1 lakh 1971-72
1.	Lathes					41.45	35.68	43 67
2.	Radial Drills			•		22 44	42 70	20 70
ġ.	Grinders			•		2.75	3 50	4.58
4.	Chuckers ·		•	•		• •	0.49	1 · 18
5.	Milling Machines			•	•	11-49	15.70	23.51
6.	Press Brakes					5.38	2.70	0.33
7.	Spares & Accessories					3 83	4 85	12:36
8.	Others		•	•		*	1.31	''
a	Tr. Syst	TOTAL				87.34	106.92	106.33
								

- 5.58. The Working Group for machine tools for the Fifth Plan have mentioned in their Draft Report submitted to the Government that "the export of machine tools cannot be treated at par with the export of other general engineering products and many recommendations in this regard were made in the last working Group Report in 1968. Unfortunately, the export of machine tools has not been tackled in proper way resulting in the present situation. Under the circumstances, the Working Group have recommended an export target of Rs. 7.5 crores for the end of Fifth Plan i.e. 1978-79. The Working Group have observed that this can be achieved only if the export of machine tools is tackled on a different footing.
- 5.59. HMT Plans to achieve an export of Rs. 5 crores in respect of machine tools during the Fifth Five Year Plan.
- 5.60. In his statement at the nineteenth Annual General meeting of Hindustan Machine Tools Ltd. the Chairman, HMT explained the strategy for exports as follows:—
 - "Even a few years ago, the very idea of exporting sophisticated equipment like machine tools to the advanced countries of the West would have seemed chimerical to anyone. Yet the unbelievable has started happening. From a nominal beginning of about half a crore of rupees in 1966, India's machine tool exports reached about Rs. 3 crores level by 1969 i.e. within three years. But, thereafter India's exports of machine tools have been practically stagnant at the level of Rs. 3 crores both in 1970 and 1971.

The same stagnation is also evident in the HMT's exports of machine tools. Yet as can be seen from the experience of the machine tool industry in all major countries of the world, sizeable exports are a sine qua non for the very survival and prosperity of a machine tool industry. The reasons are obvious. As a highly sophisticated industry, it involves large scale investment in capital equipment and skilled manpower. But if the machine tool industry in any country were to rely solely on the domestic market, the investment would not be viable. This is also true of the HMT. Besides, there is the great imperative necessity of expending India's exports on a top-priority basis.

Taking these factors into account, we in the HMT have worked out a multi-pronged strategy to expand the HMT's exports of machine tools from the current (stagnant) level of about Rs. 1 crore per year to about Rs. 5 crores. With this purpose in view, we are working in three directions, simultaneously.

Firstly, we are working out an arrangement involving the HMT, the American Tool Works of USA and Marwins of England under which the engineers of the three concerns will jointly prepare new designs of machine tools to cater to the international markets. These machines will be produced by the HMT in India and would be marketed abroad by a world marketing corporation to be jointly set up by the HMT and the Wyle laboratories (owners of the American Tool Works).

Secondly, we have taken steps to strengthen the foothold which we have already established in Australia and New Zealand. We have registered the HMT as a foreign branch in Australia and this branch would soon be setting up a direct sales network in Australia.

The third part of our strategy is aimed at Europe which constitutes the second biggest machine tool market of the world next only to the United States. We have already sold 400 machine tools in Europe and further prospects of expanding our sales should be carefully explored. However, there are two major obstacles which have to be removed. The first obstacle is the low profitability in export. One of the main reasons for this is the executive mark-up as high as 50 to 100 per cent over the CIF price by our Agents. We can get around this problem only if we open our own base/branch abroad and import ourselves and machines through dealers and sometimes directly to customers. The second obstacle is that most of the machine tools required abroad have to be suitably engineered before supplies could be effected i.e. machine tool has to be fitted with particular electrics and other types of control systems (including Numerical Controls) and special accessories like copying attachement, etc., to suit the specific requirement of a customer. As things are today, most of these controls, accessories and attachments etc. are being imported by us from abroad and then re-exported from India along with the basic machine from HMT factories. It is evident that our functioning would be far more efficient, economical and successful in terms of volume of exports if some arrangement could be made to export only the basic machine tool from India to some HMT base abroad where these electricals, accessories and attachments could be fitted to the basic machine tool according to the requirements of the customer.

With a view to solve these problems, we have planned, to begin with, to set up a HMT base near Luverbourg. With implementation of these measures, we expect that

HMT's exports would increase from the present stagnant level of about Rs. 1 crore to about Rs. 5 crores per year within the next five years."

- 5.61. During evidence the Committee pointed out that HMT will have to turn increasingly to export market to utilise its full capacity. They enquired as to whether HMT will have unutilised capacity if the export market was not favourable and how HMT proposed to overcome the stiff competition in developed countries. The Chairman, HMT explained as under:—
 - "Export is not merely to utilise the idle capacity. That part of the job we have taken care of by introducing various other products—tractors, printing press, etc. Export, is to balance to a considerable extent the ups and downs in the economy & demand pattern of the machine tools. We entered into export market when we were hit badly by recession. That was a blessing in disguise. If there is an established market for us abroad and demand in the country, we can export them to the extent of breaking even covering our factory cost. That is one aspect.
 - 2. We want to earn foreign exchange. We wish to balance our trade and to see that there is not big gap between export and import.
 - 3. For a company like ours which is in the line of manufacturing very sophisticated technology, I must be exposed to the world market. I must be able to know what is the demand pattern or what is the development-stage machine tool in the various countries abroad. By the very fact that we are entering into machine tool, we keep ourselves abreast of time and we redesign and introduce new inventions. We go abroad half a dozen times. Some of us are abroad looking what is going on there. What is the foreign manufacture and what is going to be thrown in the world by exhibitions and all that. So we learnt quite considerably in the sophisticated line of machine tools what is best forthe country and what is best for the world market. I will give you an instance. HMT entered into the export market for standard machines but very soon we found we cannot increase our volume of export. For one thing, we have to stand competition from all over world, particularly from the East European countries; their price is considerably lower because their raw materials are absolutely much lower, their efficiency, from country to country to country is much higher; they have an industrial culture far better than ours. The result is that we cannot compete. So, because of these factors we have

come to the conclusion that we have to enter into the field of sophisticated machines and sell them cheap. the whole world of machine tools is struggling to produce numerical controls which would be within the capacity of the common buyer. Today a numerical control costs anywhere between 200,000 dollars and 900,000 dollars. world is frantically trying to cut this down and make it somewhere about 75,000 to 1,00,000 dollars. We are all struggling for this. In London they are killing selves with research; so also in Germany and America. So, what we have decided upon is to do the mechanical part of the machine tool here, which would be a specially labour intensive part, to use sophisticated equipment for this by import from abroad, and sell them cheaper. If a company like HMT is not in the export business you cannot ensure the growth of the company. These are the three main reasons why we must be in the export market -not merely to utilise the capacity. After all, HMT will be able to sell in the export market at the most about 15-20 per cent of the total domestic market in the foreseeable future and this 15-20 per cent is because we buy this knowledge of the market, up-to-date technology and design and valuable foreign exchange to import whatever is needed for the country in the shape of machine tools. and in case there is recession or depression we can concentrate on increasing our exports just to cover up our expenses."

5.62. During evidence the Committee enquired as to how Government proposed to accomplish the export targets keeping in view the past experience. The Secretary of the Ministry stated as under:—

"It is through past experience that we have been trying to learn and improve all our methods for promoting export. Now we are allowing facilities to our delegations to go abroad as liberally as possible. Recently in the Asian Fair the Machine Tools pavilions were very well displayed. We are also taking advantage of dealership arrangement in overseas countries and they are backed with very good service and spare parts supplies. We find that this effort has to be properly sustained and that is why we have allowed HMT to establish a factory in Luxemburg. We will take the spare parts from this place and use them as best as possible for servicing purposes. We have also been trying with appointment of dealers for our products on commercial basis. Our experience in this regard has

been of mixed type. In some cases dealership arrangements have worked well, in some other case they have not worked well and have landed us in unnecessary litigation because we did not have sufficient experience in this regard. Again we have been trying to establish some agency offices in some other countries. In Australia it is being done and in the United States it has been done. HMT has also entered into collaboration with two other foreign parties, one in the United Kingdom and other in the United States for production and development of machine tools which will meet the requirement of overseas markets."

5.63. The Committee enquired about the policy of Government with regard to the export of machine tools to developed countries, socialist countries and developing countries. The Secretary of the Ministry explained as under:—

"It is true for historical and other reasons in the very early years our exports were concentrated primarily towards west European countries, USA, etc. But the importance of the socialist countries not only for export but also as a source of our essential requirements has been recognised now. During the last two years concerned efforts have been made by HMT and other machine tool manufacturers to study very closely the potentialities for exports to these countries. It was as a result of this that the recent order from Poland was obtained. Today we are negotiating with Hungary the establishment of lampmaking machinery plant manufacture in this country. As a quid-pro-quo we have suggested that they should take from us some of the requirements which they are now getting from the west European countries, because our machines are of the same quality. About Czechoslovakia, we have at least two units operating which manufacture machine tools on the basis of their designs. Very shortly Indo-Soviet trade meetings will be held and we will see to what extent we can include machine tools as a longterm item of supply. The economies of these countries are such that they anticipate their requirements over a long-term period. In the past there have been difficulties in our being able to meet their requirements on schedule. We are learning from experience and we will see that we do not fail them once we take up certain commitments. About the third world, viz., the developing HMT and other machine tool manufacturers have been

trying to export to these countries, but just as was the case in India in the early years, the glamour of importing from European countries is still there in these countries. Even if we tell them that we are producing equally good machine tools as West Germany or UK or USA, unless they have actual experience of using our machine tools. they do not realise how good these are. But we are penetrating those markets, although the present success is limited. In Ceylon they wanted to set up a machine tool factory to meet their requirements. HMT has entered into an arrangement whereby progressively they will be enabled to manufacture machine tools, just as we were enabled by Oerlikons to do it. Some discussions been going on about exports to Phillippines and some Middle-East countries also. This is the three-pronged effort we are making."

5.64. The Committee pointed out that one of the reasons for the decline in export was due to the fact that the outmoded Indian machine did not find market abroad. The Secretary of the Ministry stated as under:—

"It is partly true because Indian companies both in the machine tool area and in other areas have not in the past been backed up by vigorous and dynamic research and development efforts.

In the early fifties, we allowed collaboration in a fairly liberal measure, and, therefore, some designs and know-how were obtained; because of the growing and protected internal market, there was no incentive as such to industry including some of the public sector units to go in for research and development in a big way. But because of this partial failure to meet the export effort, the Industry has realised that unless it is kept uptodate, it will have no chance in the external market. Government have also contributed to the Research Development effort by strengthening the facilities at the Central machine tools institute and set up Committee on Science and Technology for the development of the Tool Industry. We are actively assisting in the creation of research and development facilities in individual units and also for the industry as a whole by strengthening the Central Machine Tools Institute."

He added:-

"Some of our designs and know-how have to be updated, and we have got to keep in pace with what is happening in the outside world. Partially, this can be done by our own efforts here by research and development and in selected areas, we can certainly get designs and know-how from abroad, and when getting these designs and know-how and manufacturing machine tools here according to those designs and know-how within the country is not going to be economic, we would try to manufacture only that part of the software which will command acceptance elsewhere and buy controls such as electronic controls, calculation controls etc., from abroad and try to fit them in the machine tools and sell them in the over-seas markets."

- 5.65. The Committee enquired about the pricing policy followed by the Government so far as exports were concerned. It was stated:—
 - "It depends on what the industry can bear and what the market is willing to pay. Just as in other countries, the internal sales of machine tools also subsidise our export effort. The export incentives admissible to engineering industries are admissible to machine tools. But even after taking this into account, the realisation by way of market price plus these incentives are not anywhere near the domestic prices. In some case the margin of profitability has to be cut down and in some other cases, it only meets the direct cost, and not even the overheads. So, we have no firm pricing policy for exports. Export prices vary from country to country."
- 5.66. Asked whether HMT was losing as a result of the present policy of Government with regard to exports, the position was explained as follows:—
 - "No. I put this question to the HMT Chairman. Suppose there was market for all the machine tools within the country, the prices we would have got for them would have been much more than what we have got by exporting them. But the capacity installed in the country is adequate to meet the internal requirements and also throw up a surplus for exports. So we have been exporting. We have been making profits in some cases, but in every case we have certainly been getting the direct cost, if not the overheads. So we are not losing in that sense."

5.67. So far as HMT is concerned, the loss suffered on export. during the last 5 years after taking into account the cash assistance: and customs duty drawback is as follows:—

Year						Rs. in lakhs
1967-68 •	•	•	•	•	•	3.07
1968-69	•	•	•	•	•	9.71
1969-70 •	•	•	•	•	•	• 24 · 32
1970-71	•	•	•	•	•	· 22·8I
1971-72 •	•		•	•		· 45·01

- 5.68. It has been stated that on an average 70-75 per cent of the internal prices has been realised after taking into account the cash assistance and customs duty and drawback.
- 5.69. In regard to the loss suffered in exports the management have stated in a written reply as follows:—
 - "The export performance should not be judged merely with reference to the financial profit or loss arising from exports. As a result of the export activities our products have been exposed to stiff competition in the world market. This has enabled the company to learn and understand how other machine tool manufacturers in the world are producing the machine tools. This has also enabled the Company to improve the quality of its products and to update the technology in the manufacture of machine tools. As a result of our entering to export market it has become possible for us to enter the field of development of numerically controlled machines in the country.
 - This has also helped us to earn valuable foreign exchange.

 The value of foreign exchange earned on exports upto31st March, 1972 amounted to Rs. 420.808 lakhs.
 - The export of machine tools has more than any thing elsehelped the company to utilise the capacity available in the various units and to this extent has made a significant contribution to minimise the effects of under absorption of costs arising out of under utilisation of capacity. Taking all these factors into consideration we are of the firm view that on the whole the company and the nation has gained substantially as a result of its export activities. It is also worthwhile to point out that it is neces-

sary for the company to continue its export activities: particularly in view of the Government's policy relating to exports."

- 5.70. The Committee regret to note that as against the export target of Rs. 7.5 crores for the machine tool industry in the country to be achieved by 1973-74 only 50 per cent of the target is expected to be achieved by that year. During 1970-71 India's export of machine tools has been of the order of about Rs. 3 crores. Out of this the share of HMT was Rs. 1.06 crores.
- 5.71. The need for giving priority to the export of machine tool was realised when the machine tool industry was badly hit by recession. It was felt that the export was absolutely necessary in order to balance the ups and downs in the economy and demand pattern of the machine tools. It has been stated that in case there is a slight indication of recession, the first industry to be hit would be the machine tool industry. Exports, therefore, act as a safety valve when there is no internal demand. Secondly exports here the country to earn foreign exchange which helps to bridge the gap between export and import and thus balance the trade. Thirdly, it is only by entering into the export market for standard machines that the country can keep itself abreast of the time and redesign and introduce new inventions.
- 5.72. The Committee note that the Working Group for machine tools for the Fourth Five Year Plan made valuable observations/recommendations with regard to the promotion of India's exports but the Committee find that the export of machine tools has not been tackled successfully resulting in unsatisfactory performance in respect of export of machine tools from the country in general and exports by HMT in particular.
- 5.73. The Company has now worked out a multipronged strategy to expand the HMT's export of machine tools from the current stagnant level of about Rs. one crore per year to about Rs. 5 crores per year during the Fifth Plan period. The Committee feel that in case such steps had been taken earlier HMT's export business would not have suffered as it has during the past years. In spite of the fact that HMT collaboration agreement has turned out various sophisticated items under numerous collaboration agreements, it has not been able to attract foreign buyers. HMT also entered into dealership arrangements with foreign firms but it has been stated that some of these did not work well as HMT had not got sufficient experience in this regard.

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Yet another reason for the decline in export was that the outmoded Indian Machine Tools did not find market abroad. It has been admitted that the Indian machine tool industry had not in the past been backed by vigorous and dynamic research and development efforts. There was no incentive to the industry including the public sector units to go in for research and development in a big way.

- 5.74. The Committee find that Government are now learning through past experience in order to improve all the mothods for promoting exports. The Committee need hardly stress that unless the machine tool industry is kept uptodate, it will hardly have any chance in the external market. They, would, therefore, like to stress that all possible encouragement should be given by Government to the Central Machine Tools Institute and Design and Development Department of HMT so that designs and know-how are kept updated in order to keep pace with what is happening in the outside world.
- 5.75. The Committee further recommend that in view of the imperative necessity for expanding Indian's export on top priority basis, Government/HMT should try to build up the image in the developing countries and socialist countries where there is great potential for India's exports. This can be done by improving the quality of our products after sales service and participating in Exhibition held in these countries.

I. Encouragement to Small Scale Industries

- 5.76. The Company has set up an Industrial Estate attached to HMT, I&II, Bangalore where 51 small scale entrepreneurs are engaged in the manufacture of various components and accessories required by the Company. There is a separate department to look after exclusively the requirement and functioning of these units.
- 5.77. The Company has encouraged these units to develop and establish many of the items, specially accessories which were hitherto being imported by giving preferential consideration. This has resulted in saving of substantial foreign exchange.
- 5.78. The value of production in these units for HMT during 1962-63 to 1969-70 was as follows:—

1962-63 · Rs. 9.54.000·00

1963-64 · · · Rs. 40,00,000·00

1964-65 · · · Rs. 57,00,000·00

1965-66	•	•	•	•	•	•	•	Rs. 51,00,000·00
1966-67	•	•	•	•	•		•	Rs. 74,00,000 · 00
1967-68	• .	•	•	•	•	•	•	Rs. 36,94,108.61
1968-69	•	•	•	•	•	•	•	Rs. 41,29,940. 84
1969-70	•	•	•	•	•	•	•	Rs. 51,06,770.00
1970-71	•	•	•	•	•	•	•	Rs. 65,31,630·00
1971-72	•				•	•		Rs. 71,65,400·00

5.79. It has been stated that HMT are also considering actively the question of setting up a Small Industrial Estate at HMT IV, Kalamassery.

5.80. The Company has undertaken the consultancy work on behalf of SICOM, Maharashtra, and QUETCO, Quillon to enable them to establish machine tool industries. This will help these agencies to manufacture quality machine tools in the small scale sector. The Company also supplies machines to the Small Scale Entrepreneurs through the National Small Industries Corporation and also directly. Details of sales made to Small Scale Industries during 1967-68 to 1971-72 are as follows:—

(Rs. in lakhs)

		19	67-68	19	68-69	19	69-70	19	70-71	19	71-72
		No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Lathes · ·	•	127	57 · 15	208	93 · 60	555	266 · 40	383	191 · 50	142	71.00
Radials · ·		29	11.02	58	23 · 20	104	41.60	86	34 · 40	46	18.40
Milling Machine	в .	38	17.10	84	46.20	163	89.65	110	66·00	102	61 · 20
Grinders ·	•	32	14.40	61	36·60	103	61.80	98	63 · 70	79	51.30
		226	99.67	411	199.60	925	459.45	677	355.60	369	201

5.81. During evidence, the Committee enquired as to the manner in which small scale industries were encouraged to manufacture quality machine tools. The Chairman, HMT stated that the small scale industry had considerably improved in sophistication and also in engineering marketing part of it. But still if the heavy and large scale industry had to depend on the small scale ancillary industries, they had to improve their quality. The small scale industries were encouraged to manufacture quality machine tools by planning and insisting that they buy equipment produced by HMT. As regards the industrial estate it was stated that HMT gives all the draw-

- ing's, designs. HMT even goes to the extent of negotiating with their collaborators.
- 5.82. Asked whether there were any special arrangements for supplying machinery to Small Scale Industries, it was stated that they had got a hire purchase scheme. At present, they were paying 20 per cent. They could also pay on deferred payment basis. The Committee enquired as to the percentage of HMT machinery that was used by the small scale industry. It was stated that as regards their own ancillaries it was 75 per cent.
- 5.83. The Committee pointed out that if HMT entered the field which was the domain of the small scale industry that would affect-the small scale sector. The Secretary of Ministry, explained as under:—
 - .. "It has been the policy of HMT to encourage the small-scale units wherever some ancillaries or components can be profitability, economically and technological manufactured by the small-scale units. We farm them out to the small scale units. HMT unit at Bangalore has an industrial estate attached to it."
- 5.84. The Committee find that Government/HMT are giving encouragement to small scale industries by asking them to buy the equipment produced by HMT on hire purchase or deferred payment basis. The Committee were informed that although the small scale industries had considerably improved in sophisticated technology but still if the heavy and large scale industry had to depend on small scale ancillary industries, they had to improve their quality. . .
- 5.85. The Committee recommend that Government should make a detailed study about the items which are and which can be profitably, economically and technologically manufactured by the small scale industries and ensure that such items are given only to the small scale units who may be given the requisite technical assistance so that the quality of the products does not in any way affect the main industries.
- 5.86. The Committee note that the HMT, Bangalore, have an industrial estate attached to it wherein they have been encouraging the small scale sector to produce parts required for their manufacturing programme. The Committee expect HMT to give a similar lead for development of small scale industries to supply items for their manufacturing programme in their other factories also.
- 5.87. The Committee note that HMT have been supplying machines to the small scale sector on hire purchase basis. The Com-

mittee would like HMT to maintain close liaison with the small scale Industries Corporation, the Commissioner for Small scale industries centre and the Director of Industries in the states so as to study in depth the requirements of machinery for small scale sector and make it available in time to the small scale sector.

PRODUCTION PERFORMANCE

7

TOTAL TRANSPORT TOTAL TO

6.1. The table below indicates the installed capacity, the developed capacity, the targets of production, actual production and the percentage (Rs. in lakhs) A Actual performance vis-a-vis installed capacity, developed capacity and targets of short fall with reference to targets, etc :-

Units/Year		# 00	Rated Capacity (based on	Capacity in full on 2	Developed Capacity on two shift working	Apacity working	Targets	•	Actual Production	uction	Percentage of shortfall,	Percentage Percentage of of shortfall, utilisation
		m >	shift vorking)		at 1.3 inefficiency	At actual inefficiency	Š	value	No.	Value	excess to targets target (9&7)	on a sunt Working at 1:3 inefficiency (984)
I			7	3	+	\$	9	7	∞	٥	Q	H
Units I & II Bangalore												k ;
. 1966-67	•	•	1,000	720	989	650	1,666	731.00	1.668		19.7(—) 26.111	104.69
1967-68			1,000	720	6 69	570	1,248	717.78	086	487.01	(-)32·15	70.58
1968-69	•		1,000	720	700	\$70	1,077	635.00	696	509.52	96.61(-) 25.605	72.79
. 07-6961	•	•	1,000	720	97 00	610	1,475	722.88	1,288	583.28	583.28 (—)19.31	83.33
1970-71	•	•	1,000	720	750	750	1,466	00.006	1,205	730.00	730.00 (-)18.88	00.46
1971-72			1,000	720	8	927	1,431*	\$00.286	1,540	1070.00	1070.00* (+)8.40	68.811.

168·26 (—)49·40 49·49	206.00 ()40.11 54.21	258.00 (+)14.07 64.50		285.00 (-) 9.82 69.81	
287 168·26	402 206.00	452 258.00	477 285.00	\$41 386.00	486
\$60 332.50	630 344.00	405 225.00	315.00	545 396.00	493 34b·00
250	320	350	370	400	415
350 340	350 380	350 400	350 410	350 420	350 421
200	\$00	\$00	. 500	. 300	. 300
_			•	_	0
1966-67	1967-68	1968-69	01-6961	1970-71	1971-72

11	47.65	11.14	92.42
01	−)37·∞	()14.72	317.00 (+)0.63
6) 00.291	270.00 (-)14.72	317.00
œ	135	83	&
7	257.00	316.63	315.00
9	:		:
s.	245	260	318
4	340	350	343
E	350	350	350
4	\$00	% %	\$00
		•	
-		•	•
		•	•
	02-6961	16-0/61	1971-72

NOTES: -... The original targets were revised at the fag end of the year and hence comparison has been made against the original targets.

3. HMT I & II, Bangalore include Die casting during 1971-72.

Figures of actual production exclude the value of shop manufactured assets.

- 4. HMT III, Pinjore excludes tractors during 1971-72.
- 5. HMT V, Hyderabad excludes Presses during 1971-72.
- 6. The figures of target and actual production are inclusive of the value of CKD components.
- The figures of rarget and actual production are inclusive of the value of CKD components. The following table indicates the unitwise details of imported CKD components included in the actual value of production during the period 1967-68 to 1971-72: ۲.

			HMT I& II	HMT III	WT IV	HMT V	TOTAL
89-1-961			10.22	:	40.03	15.511	232.55
69-8961	•	•	92.99		30.14	32.20	155-33
02-6961			3.90	:	88.61	29.74	53.52
12-0261	•	•	36.94	27.00		24.64	88.58
1971-72	•		39.42	13.06	:	7.64	110.13
	•	ا ا	300.26	40.06	\$0.06	209·73	640.10

- 6.2. A product-wise quantitative analysis of the performance of the units during the years 1966-67 to 1969-70 with reference to original and revised targets and the reasons for short-fall is givn in Appendix....I.
- 6.3. The statement showing product-wise production analysis for the years 1970-71 and 1971-72 is given in Appendix II.
 - 6.4. The following features deserve mention:-
 - (i) Developed capacity on two shift working as worked out by the Management at 1.3 inefficiency was more than the installed capacity in full two-shift working in the case of following units:—

Units		Year				
I & II—Bang	alore ·	•	· 1970-71			
			1971-72			
III—Pinjore		•	· 1967-68 to 1971-72			
IV—Kalamas	sary · ·	•	· 1966-67 to 1971-72			

(ii) Developed capacity on two shift working as worked out by the Management at actual inefficiency was more than the installed capacity in full two-shift working in the case of the following units:—

Units	Year
l & II— Bangalore	· 1970-71 1971-72
лп	1969-70 to 1971-72
ıv	· 1971-72

(iii) Targets fixed in respect of Units I & II were higher than the developed capacity at 1.3 inefficiency or actual inefficiency except for the year 1968-69.

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6.5. The Committee are surprised to note that the developed capacity as worked out by the management at 1.3 inefficiency or even at actual inefficiency on two shift working exceeded the installed capacity fixed in full two shift working in Units I, II, III and IV. The targets fixed in respect of Units I & II were higher than the developed capacity at 1.3 inefficiency or at actual inefficiency, except for the yar 1968-69. All this clarly indicats that both the installed capacity as well as the developed capacity have not been worked out on a realistic basis. The Committee have already pointed out the lacunae in this regard. They would again like to stress that Government Management should fix the installed capacity on a realistic basis and work out the developed capacity in a more scientific manner so as to serve as a suitable parameter to evaluate the actual production performance.

B. Shortfall in Production

- 6.6. I regard to shortfall in production the following features deserve mention:—
 - (i) The table at page 117 indicates that the actual production in all the units was less than the targets fixed (except for 1971-72 in Unit I & II, for 1968-69 and 1971-72 in Unit III and for 1967-68 and 1971-72 in Unit V).
 - (ii) the figures of targets and actual production are inclusive of the value of C.K.D. components as per details given in the foot note 6 to the table at page 117-118.
 - (iii) from the data given in Appendix I and II it is clear that there was shortfall in respect of a large number of machine tools in all the units.
 - (iv) It was noted in Audit that shortfall in production was mostly in respect of the manufacture of new machines taken up for production under various collaboration agreements as well as of machines developed with the Company's own design efforts as per details given in Appendix III.

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(v) Targets fixed for Production in some years were far less than the developed capacity as indicated below:—

Unit	Year					The extent to which the targets fixed were lower than the developed capacity at 1·3 inefficiency
III	1968-69 1969-70		•	:	•	43 [.] 7% 23 %
IV	1967-68 1968-69 1969-70				•	38·5% 37·5% 22·5%
V	1966-67	•				About 50% (The develope depacity at 1·3 in efficiencies had not been worked).
	1967-68					36. 4%
	1968-69	•				44%
	1969-70	•				24.4%

(vi) Actual production in some years was far less than the targets fixed. Some of the cases are cited below.

Unit	Year		 			Percentage	of 	shortfall in targets	production	to
1 & II	1967-68 1 968-69	:						32·15% 19·76%		•
	1969-70 19 70- 71	:						18.88%		
III	1966-67							49 40%		
	1967-68	•						40.11%		
IV	1966-67	•		• •	•			19%		
	1967-68	•		•	•			17% 28·88%		
	1968-69	•		Ċ				23.87%		
	1969-70	٠.		•						
	1970-71 1971-72			•	•			39: 44% 38: 43%		
V.	19 66- 67			•	•			48:43%		
	1968-69	•	•	•	•			15.79%		
	1969-70	•	•	•	•			37 %		
	1970-71	•	•	•	•			14 72%		

(vii) From (v) and (vi) it is clear that in some years the target fixed were lower than the developed capacity and during the same years the actual production was much less than the targets, particularly in Units IV and V.

(viii) The extent to which the capacity remained unutilised in some of the units is indicated below:—

Unit	Year						Percentage of unutilised capac
I &II	1967-68		•	•		•	29·42%
	1968-69	•	•	•	•	•	27.21%
	1969-60	•	•	•	•	•	16.67%
III	1966-67						50. 51%
	1967-68	•	•	•		•	45.79%
	1968-69	•	•	•		•	35.50%
	1969-70	•	•	•		•	30.49%
IV	1966-67						29.95%
	1967-68	•	•			•	48.74%
	1968-69	•	•			•	55.37 %
	1969-70		•			•	41%
	1970-71	•	•				48%
	1971-72	•	•				58.37%
	1966-67	•	•				About 70%
	1967-68	•	•	•	•	•	32.75%
	1968-69	•	•	•	•	•	52 84%
	1969-70	•	•	•	•	•	52·35%
	1970-71	•	•	•	•	•	23%

Reasons for short fall in Production

- 6.7. The poor production performance during 1966-67 to 1969-70 was ascribed by the management to the steep fall in demand mainly due to recession in the engineering undertakings and Machine Tools Industry in particular from the latter half of 1965-66 onwards.
- 6.8. In this regard the management explained the position, in a written reply, as follows:

"The economic recession which made its appearance during the middle of 1965 and reached alarming proportions during 1967, was the main cause for the relatively poor turnover, idle capacity and the resultant financial losses suffered by the company during the years 1967-68 to 1969-70. In the first 3 years of the III Plan period, conditions were favourable for industrial investments and growth and the progress achieved was significant. Thereafter, nearly for five years, the economy was subjected to considerable stress and strain and the growth rate in the industrial production declined first slowly and then steeply till it reached virtual stagnation. These vicissitudes may be illustrated with reference to the index of industrial production. The increase in the industrial output (1960)

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as the base) stood at 8.2 per cent in 1961-62, 9.6 per cent in 1962-63, 9.2 per cent in 1963-64 and 8.3 per cent in 1964-65. Thereafter there was a sharp deterioration in the rate of growth of industrial output. It fell to 4.3 perc ent in 1965-66, 1.7 per cent in 1966-67 and 0.3 per cent in 1967-68.

On account of the serious set back to the economy, the industrial growth declined considerably in spite of the fact that foreign aid, which had been suspended during 1965, was resumed in 1966 and the import policy for raw materials liberalised after devaluation in June, 1966. The increase in the capacity of the machine tool units of the company by completion of the new projects already initiated more particularly at a time when domestic demand for machine tools was at a subdued level, accentuated the problem of unutilised capacity and depressed demand prevented fuller exploitation of HMT's potential. Added to this, inflationery environment and the resultant rise in labour and material costs, consequent on devaluation led to serious problems of rising cost of production. All this made deep inroads into the company's resources and ultimately resulted in loss for the years 1967-68 to 1969-70. The plight of HMT during the recession, can also be appreciated from the fact that Indian Machine Tool Industry as whole could not utilise about 40 per cent to 50 per cent of its capacity. The company was therefore not an exception to general slump in the country's machine tool industry during this period. Further the major machine tool using industries in the country during the worst year of the recession viz., 1967-68 had an underutilised capacity of Rs. 576.00 crores representing 37.8 per cent idle capacity. This again proves beyond doubt that the metal working and other engineernig industries in the country who are the main buyers of machine tools suffered heavily as a consequence of economic recession in the country. As these major machine tool using industries would first use the unutilised capacity before further expansion, the revival of machine tool industry could take place only after stabilising their working and using their unutilised capacity. In the present set up of country's economy, the machine tool industry would be perhaps the last to revive after recession. As a matter of fact the order position for machine tools during 1971-72 has not been quite

encouraging and the value of orders on the books of the company for forward delivery during 1972-73 onwards is Rs. 150.00 lakhs only.

- The curtailment of planned expansion in the machine tools using industry in the last 2 years of the III plan and post-ponement of the IV Plan Plan by three years which resulted in considerable unutilised capacity in machine tool industry also had its adverse impact on the working of the company."
- 6.9. Apart from the reasons stated above it has been stated that the initial production difficulties in respect of new products called for solution of several design, technical and manufacturing problems which in any manufacturing organisation are inevitable. The labour agitation also made their own contribution to the loss in production.
- 6.10. During evidence the Committee enquired about the factors which led to the fall in demand for machine tools. The Chairman, HMT stated that "The factors are: no orders, no industrial development. The growth of industrial development went very low. The Committee enquired whether sufficient efforts to explore the possibility in the various public sector undertakings for the supply of machine tools had been made. It was stated that
 - "I would like to assure you we really combed the market to the last customer. During the recession periods we learnt very heavily. The orders from the public sector were so low in these years; they had no money; no investments were made; plan holidays; the public sector suffered very very heavy set-back during these last few years. They could not even give me replacement orders."
- 6.11. The Committee desired to know the products where the Company found that the market was shrinking. The Chairman, HMT explained as follows:—
 - "The market is shrinking in the common items i.e. lathe and following that is Milling Machine. That our demand forecast having been worked out for the Plant under different sets of conditions and assumptions and since that assumption gave an idea to the lot of people to expand their capacity, lot of capacity was expanded in Milling Machines and Lathe both in the private and public sectors. All of a

sudden recssion came. Whatever market was there, was shared very competitively between the Public and Private Sector for the lathes and Milling machines. For instance lathes are made by HMT, Kirloskar and other several companies. Milling machine is another item which is produced by Bharat Furnishers Tapti, as also Companies in Ludhiana and Batala. These suffered common setback during recession. During recession we saw what are the items which are continuously imported. We found that Multi Spindles, Single Spindles, Gear shaping machines were not produced by the country and were still being imported. This import during recession period amounted to Rs. 40 crores. We could get the guidelines and we made market study and started manufacturing these machines practically during the period and we took three to five years to introduce new design. It took us some time and today we are in a happy position. During recession whatever machine tools were being imported we could cut down import to the bare minimum. 50 per cent of these are being made here now as against 33 per cent in those days".

- 6.12. The Committee pointed out that during recession period and later on also the demand for lathes and other milling machines shrank and the main reason was that there were so many competitors and all the competitors were from the private sector. They enquired whether it was due to the fact that the Company could not stand the competition with them.
- 6.13. It was stated that "even today we face competition. We compete with the Private Sector. At that time the market had shrunk so much, we even reduced the price to meet the competition."
- 6.14. As regards the production performance during the year 1970-71 and 1971-72 the Chairman, HMT stated during evidence as follows:—
 - "As you can see, the performance of Units I, II and III over these years, is quite reasonably satisfactory. Whereas, in the case of Kalamassery, had terrific labour trouble and it is still persisting. We have about 8 Unions there and they went on strike. There was lock out and go slow towards the end of financial year. We had a strike. There has been no output for the past last three months. As regards HMT V, Hyderabad, there, the market has not picked up. When the market for the products of this factory

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is there, there will be improvement. Unfortunately, eventoday, it so happened that there is a little unutilised capacity in HMT V. But, we are trying to fill up by introducing new lines like the lamp making machinery, for which negotiations are almost in the final stages, with our Hungarian collaborator I should say that in these two years, they have been picking up. 1971-72, particularly was a very good year for us. But, there is the problem of marketing and demand for our machine tools."

6.15. The Committee regret to note that the actual production during 1967-68 to 1971-72 was less than the targets in all the units except for 1971-72 in Unit I & II 1968-69 to 1971-72 in Unit III and 1967-68 and 1971-72 in Unit V. In several years, the targets were fixed much lower than the available capacity. In certain years the targets were even much lower than the developed capacity. More than 50 per cent of the capacity remained unutilised in some years.

6.16. The poor production performance in HMT has been mainly ascribed to the recession in the country during the years 1966-67 to 1969-70. The increase in the capacity of the machine tool units of the company by completion of the new projects already initiated more particularly at a time when domestic demand for machine tools was at a subdued level, accentuated the problem of unutilised capacity and depressed demand prevented fuller exploitation of HMT's potential. It has been stated that the demand for common items such as Lathe and Milling Machines shrank as the demand forecast had been worked out under different sets of conditions and assumptions. Initial production difficulties in respect of new products, technical and manufacturing problems and labour agitations have been cited as some of the other reasons that resulted in shortfall in production.

6.17. The Committee, however, feel that besides these factors the lack of production planning is yet another significant factor that contributed to the loss in production. The Committee have already pointed out that neither any proper category-wise assessment had been made with regard to the requirement of machine tools in the production profile was earmarkcountry nor a proper ed on a scientific basis. The Company went on diversifying their production during the past years as and when it was realised that the products which were already being manufactured by it did not find adequate market. The Committee would, therefore, like to stress that realistic demand projections should be made and the productmix including the diversified items that are to be manufactured by HMT should be decided on the basis of a detailed analytical study. The Committee also recommend that the reasons for shortfall in production should be analysed in creater depth so that remedial measures may be taken and the recurrence of such mistakes avoided in future.

C. Working of Unit IV

- 6.18. Shortfall in Production in Unit IV during 1970-71 and 1971-72 has been stated to be due to reduction in the production of a number of pilot lathes, drum Turrets and low value LT 20 lathes owing to production difficulties and also due to frequent labour agitations (including go-slow tactics) and strike.
- 6.19. The Committee enquired about the nature of production difficulties and whether it had been possible to overcome these. In a written reply the management have stated as under:—
 - "Pilot Lathes and Drum Turret lathes are newly introduced products involving complicated production technology. We did not have full facility to manufacture some of the accessories in our own shops. Delivery of some vital components which were to be imported took long time due to the prolonged delivery quoted by the suppliers. Most of these machines were to be supplied with Toolings which had to be specifically designed, tried and proved to the satisfaction of customers. Due to import restrictions indigenous manufacture of the components and accessories had to be established for which extensive trials had to be made to achieve the required standard of performance of such components and accessories. For many such items out-side sources of supply had to be established. limited facilities available in the country it was a difficult and time consuming process to establish such which could supply required items conforming to the rigid standards of accurate performance.
 - We have been able to overcome most of the difficulties. But production of some items like the Hydraulic Power Pack are still in the process of development in our own factory. We expect to overcome all the difficulties in due course. During the period of recession when inflow of order was getting reduced, there was a tendency among workers to stretch the work in hand in order to avoid the possibility

- of available orders getting exhausted because of the misapprehension that once the orders are exhausted, they may not get any work to do. This adversely affected the production including the production of LT 20 lathes."
- 6.20. The Board of Directors decided in February, 1971 that a study in depth should be made regarding the working of Unit IV—Kalamassery. A Committee was, accordingly, constituted to:
 - (i) examine the existing production facilities and to suggest changes, if any, to achieve the planned production capacity of Rs. 5 crores per annum, keeping in view the changed product mix,
 - (ii) analyse the technological difficulties, if any, which are inhibiting the production capacity of the unit; and
 - (iii) suggest measures for the working of the unit profitably.

The study indicated that:—

- (i) the planned production and sales of Rs. 535 lakhs could be achieved by providing additional facilities to the extent of Rs. 87.90 lakhs.
- (ii) production should be concentrated on products like copying lathes, drum turret lathes etc. so as to make the unit profitable, and
- (iii) Sales Engineering Division be created to examine the enquiries for purposes of designing the necessary tools for trying out of machines and to divisionalise the manufacturing operations on the product concept.
- 6.21. The Board, while according approval to these recommendations in February, 1972, observed that for making any further investments in this Unit, the industrial relations must be improved.
- 6.22. The management have stated that the following steps have been taken for implementing the suggestions of the technical committee:—
 - 1. Price of LT 20 lathes has been increased to Rs. 19,500 -.
- 2. Production is being stepped up gradually. We have budgeted for production of Rs. 489.00 lakhs during 1973-74 and production of Rs. 535.00 lakhs during 1974-75 is expected to be achieved. With the introduction of improved incentive scheme in the shops from June

1971 and in Foundry from May, 1972 there has been an improvement in the overall efficiency of workers. Emphasis is also given to products like Copying lathes and Drum turret lathes and a substantial import substitution has been achieved in these products. The manufacture of first prototype machine for Trans-Pilote with high indigenous content is under progress.

- 3. For supplementing and balancing the production facilities we have already purchased plant and equipment valued at Rs. 14.50 lakhs. Orders for plant and equipment worth Rs. 6.05 lakhs have already been placed and for plant and equipment worth Rs. 31.30 lakhs the matter is under examination for inclusion of the same in capital budget for 1973-74.
- 4. Arrangements have been made for additional cash credit facility of Rs. 25.00 lakhs from the State Bank of Travancore to augment the working capital requirement.
- 5. Selling price of machines have already been increased to the extent possible.
- 6. A sales engineering department for the machine tools division and a separate division for the manufacture of printing machinery have been set up. An industrial engineering department has also been set up.
- 7. Negotiations with the State Government are in progress for the establishment of 12 Ancillary units near the factory. The State Government of Kerala is likely to bear the cost of construction of the Ancillary units on the land to be given by the Company and HMT IV, Kalamassery will be asked to manage these units after construction.
 - 6.23. With regard to Industrial relations it has been stated that:
 - "Due to the existence of Multi Unions and Inter-union rivalry Industrial relations continue to be difficult in HMT IV, Kalamassery. There are at present 8 unions representing different sectional interests and political affiliations. In putting up demands they compete with each other making the issues complicated and an agreement difficult. There was labour trouble in this unit during March—April 1972 resulting in a strike which lasted for 16 days. The Long term Agreement with the unions expired in December, 1972. Labour unions have put up fresh demands some of which are prima facie unreason-

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able involving heavy financial commitments. The demands are being studied now. With several unions in the field, it is hard task to arrive at a settlement smoothly."

- 6.24. The Committee find that during the years 1966-67 to 1971-72, the production performance of unit IV at Kalamassery has been far from satisfactory and the shortfall in production ranged from 30per cent to 58 per cent of the developed capacity at 1.3 inefficiency factor. The shortfall has been stated to be due to reduction in the production of a number of pilot lathes, drum turret and low value LT lathes. The Committee were informed that the Unit did not have the full capacity to manufacture some of the accessories and most of the machines were to be supplied with Tooling which had to be designed etc. The Committee are at a loss to understand how the production programme was determined when adequate were not arranged nor the expertise for them developed in advance of taking them for production. It was only in 1971 that a Committee was constituted and certain suggestions for improving the performance of the unit were made which after approval by the Board in 1972 are being implemented. The Committee take a serious view of this defective and inadequate planning which has resulted in continuous loss, and suggest that this matter should be thoroughly gone into and responsibility fixed.
- 6.25. The Committee hope that with the balancing equipment now added and the measures taken, it should be possible to achieve the targets of production.
- 6.26. The Committee would also stress that steps should be taken early to resolve the problems affecting industrial labour relations so that production in the Unit is improved.

D. Working of Unit V

- 6.27. The Management have given the following reasons for shortfall in production in Unit V:—
 - (i) Orders for Special Purpose Machines and Fay automatics could not be procured in time to enable the unit to produce them as it takes long production cycle.
 - (ii) Lower level of labour efficiency mainly due to longer training period required to handle specialised machines like Special Purpose Machines.
- 6.28. The Committee pointed out that Unit V went into commercial production in 1966-67 i.e. over 5 years. They enquired whether

this period could not be considered as adequate for developing the efficiency and skill required for the manufacture of sophisticated machines and overcoming the initial production problems. In a written reply the management have stated as under:—

- "The period of 5 years will be adequate to a unit producing General Purpose Machines in batch quantities where the jobs are of repetitive nature, but for SPM manufacture, this period is not adequate.
- We had to recruit fresh ITI Certificate Holders from the Institutes as skilled labour was not readily available in the market. The supervisory staff were also not in any way better experienced than the workers, since they also joined us fresh from Polytechnics and Colleges. As Supervisory staff was also not experienced and the jobs are non-repetitive and unit type of production, efficiency and skill could be developed gradually and hence required longer period."
- 6.29. The Committee enquired about the circumstances under which orders for special purpose machines and Fay automatics could not be procured in time. The management have explained the position as under:—
 - "The Special purpose machines and Fay automatics are basically used in mass production applications and the majority of our Sales are to automobile and their ancillaries, Tractors, Diesel Engine, Earth Moving Equipment manufacturers. Some of the factors for the delay in procurement of orders were:
 - recession in engineering industries during the years 1960 to 1969.
 - 2. the fall in demand of Diesel Engines manufacturers.
 - 3. delay in implementation of expansion programmes.
 - 4. credit freeze.
 - 5. general labour unrest in some of the major Industries; and
 - 6. delays in obtaining licences for expansion by the customers."
- 6.30. It has been stated that the demand for such machines depends mostly on the growth of mass production industries like

Automobile Industry. Since rate of growth of automobile industry is low, there is lack of adequate demand for these machines.

- 6.31. It has been stated that due to various difficulties there always an inherent delay in placing the orders by the customers. The Committee enquired about the nature of such difficulties. In a written reply the management have stated as follows:—
 - "Analysing the past data, we summarise the reasons for the delay in finalising the orders by the customer as follows:
 - 1. Delay in execution of expansion new projects by the customers.
 - The initial investment in Special purpose machine is heavy. Many a times due to difficulties in raising finances for these machines, Buyer's decision are often postponed.
 - 3. Delay in obtaining sanctions for the new expansion projects.
 - 4. Delays in getting their collaborator's approval by the customer for the proposals."
- 6.32. With regard to the poor production performance of Unit V of H.M.T. the Ministry have stated as follows:—
- 6.33. HMT-V, Hyderabad could not take full advantage of the agreement with Regie Nationale Des, Renault, France for the manufacture of special purpose machines and had the benefit only for a period of two years. The agreement was approved by the Government vide letter dated 8-3-1961. The agreement came into force with effect from March 16, 1961 and was terminated with effect from March 15, 1968. The manufacture of SPMs commenced in HMT I and II units, Bangalore and were subsequently transferred to HMT V, Hyderabad. The Board of Directors in their meeting held on July 24, 1970 desired that a study in depth be made in respect of the working of HMT V, Hyderabad to ascertain the reasons as to why the Unit was not able to meet the country's demand for Special Purpose Machines. Accordingly a Committee consisting the General Manager, HMT, V, Hyderabad as Chairman and Chief Commercial Manager and the Controller of Finance and Accounts as members was constituted, with the following terms of reference:-
 - (i) to analyse the technological difficulties which limit HMT
 V, Hyderabad from not fully meeting the demand for SPMs in the country; and

- (ii) to suggest measures which enable HMT V, Hyderabad to fully meet the demand for SPMs in the country.
- 6.34. The summary of the Committee's Report was placed before the Board in their meeting held on 11-2-1971. The main recommendations of the Committee were:
 - (i) The capacity for the manufacture of Special Purpose Machines should be limited to Rs. 2 to 2.5 crores per annum based on demand forecasts.
 - (ii) If, any point of time, the demand exceeds Rs. 2 crores, steps should be initiated to develop the capacities in other HMT. Units to supplement the efforts of Unit V.
 - (iii) The plant and machinery which were not giving the desired accuracy should be immediately replaced.
 - (iv) To keep abreast of the technology in the manufacture of special purpose machines, the Company should enter into collaboration agreements for longer period (the present agreement with M|s. Regie Nationale Des Renault, France was reported by the Chairman to the Board of Directors in April, 1972 to be a sort of loose agreement for obtaining their guidance in designing of special purpose machines).
- 6.35. The Directors considered these recommendations and authorised the Company to (i) negotiate the terms and conditions for technical collaboration agreements for manufacture of special purpose machines (ii) replace the plant and machinery valued at Rs. 1 crore which needed replacement, phased over a period of 4 years (iii) to adopt the pricing policy for special purpose machines based on tonnage basis as also to have an escalation clause in the quotations.

Agreement with M|s. Ragie Nationale Des Usines, Renault, France

Some of the deficiencies noticed in working with RNUR are as follows:—

(i) The designing technique followed by RNUR could not be adopted in toto as SPMs are required in India for medium rate of production and have to be tooled up for more number of components.

- (ii) The know-how transferred by RNUR is ideally suitable for manufacture of SPMs for Automobile and Tractors Industries only.
- (iii) No provision has been made for assistance to set up a prototype development section, tool research centre etc.
- 6.36. In a written reply, the Ministry have stated that "Deficiencies mentioned above have arisen mainly due to the need to manufacture SPMs to meet the Indian working conditions and not due to any defects as such in the collaboration agreement".

E-Negotiations with Ms. Cross Company

- 6.37. It has been further stated that "in view of the fact that the customer prefer SPMs of M|s. CROSS Company, the company has negotiated with M|s. Cross Co. USA to enter into a technical collaboration agreement with them for the manufacture and vending of SPMs of their design."
- 6.38. During evidence the Committee enquired whether another agreement with Renault had to be entered into as the original was not proper. The Secretary of the Ministry stated:—
 - "There was not delay at all with regard to the agreement with Renault. What happened was that the agreement with Renault contemplated manufacture of substantial number of special purpose machines designed for automotive use. As the demand for special purpose machines for automotive use did not materialise, we could not fully exploit the agreement with Renault."
- 6.39. The Committee pointed out that the Chairman, HMT had reported to the Board of Directors that the agreement with Renault was a loose agreement. The Secretary of the Ministry stated as under:—
 - "The Chairman was himself concerned with the concluding of this agreement and I do not know why he has given this impression. From one of his officers, I understand that now the demand for automotive use and application is picking up and he is thinking of coming to us and asking for a further renewal of agreement I do not know what made the Chairman to say that the agreement was a loose one."

- 6.40. In regard to the entering into an agreement with M/s. Cross Company, USA, it was stated:—
 - "So far as special purpose machine tools are concerned, it would not be right to depend on only one type of technology. Technology in this regard has been very very rapidly expanding. We did not like that we should depend on only one source for this purpose. There are good points as well as shortcomings in the agreement with Renault. Even the HMT were feeling, that they would like to collaborate with yet another manufacture, namely, States. If HMT is Cross Machine Tools in the United really to become an expert in the production of special purpose machine tools, they would like to have access to the cross Technology. They have been talking about this. They have been talking to the Cross people. At the moment, the terms of payments which are being asked by Cross are very very high. They are trying to see as to whether these payments can be scaled down substantially and whether they can be tied with certain export offers. All these discussion are now taking place."
- 6.41. During the evidence of the representatives of Hindustan Machine Tools Ltd., the Committee enquired whether it was a fact that the special purpose machines being manufactured by HMT were of poor quality or whether these did not compare well with the market requirement. The Chairman HMT stated as follows:
 - "This is a question which is very ticklish in nature. One thing I must admit that we learnt for the first time to manufacture these machines. No body has so far attempted to make them. We had a collaboration with Renaults. As long as that collaboration existed we had the facility of checking our design with the Renaults because they had a design for a similar component available with them. Now, we are having our own design. We do not claim that we are very very supreme in this. We do not claim that we are superior in the world. But by and large our special purpose machines have been very good. Productivity of the people who have been using these machines has considerably improved. The only thing is that our efficiency has to be built. I personally believe this technology takes years. I think we are yet to achieve that standard of superfine efficiency. We need more guidance in this line and the negotiations in this

respect are already in progress. Our prices have not been as good as we estimated. Our people at the shop floor have to learn as to how to make those machines and the period of learning is still going. So you must be really proud of a factory which really exists in this country. We had supplied Rs. ten crores of machines, and if this ten crores of machines were not available to the tractor people, automotive industry, they would not have increased that much of productivity as they are doing now."

6.42. Asked whether the Management proposed to improve the production performance in respect of these machines, it was stated as under:—

"The demand for special purpose machines in the country on average is not going to be more than Rs. 2½ crores to 3 crores whereas we have a capacity in Hyderabad to produce Rs. 5 crores. We have been examining a possibility of tapping up with a foreign collaborator who would improve our technology and also take substantial orders for his international market. The firm is of international repute. They have factories in England, Germany, Japan and their main factory is in America. They are negotiating very big orders from Asiatic countries-Malaysia, Singapore where General Motors and Ford are going to set up a factory. Now, they are looking for a capacity to make these machines somewhere where the labour is comparatively cheap. Negotiations are -on for 5 m dollar order for the special purpose machine to supply to USSR, to the new project coming up in Singapore and Malaysia. I have almost concluded negotiations. If that comes through not only Hyderabad factory will have a full load of special purpose machines but it will have a technological guidance from a world top class manufacturer in special purpose machines."

F. Replacement of Plant and Machinery

6.43. During evidence the Committee enquired as to how machines worth Rs. 1 crore required replacement. Whether it was because of any defect in them or whether these were not capable of giving the required out put. The Joint Secretary of the Ministry stated that "in a Unit which make SPM's; I think, the replacement will be necessary. If the point is whether there was any error in getting the machinery initially that would require investigation. Replacement of machinery worth one crore of rupees is not very substantial."

- 6.44. In a written reply the management have stated that replacement of machinery was found necessary for the following reasons:
 - (i) Due to Foreign exchange limitations, we had purchased 2 (two) Nos. Horizontal boring machines from East Germany and 4 Nos. from Czechoslovakia and these machines are not capable of giving required accuracy.
 - (ii) Three Czech Surface Grinding machines are not giving accuracy and could not be reconditioned.
 - (iii) One Slideway Grinding machine, GSP make purchased by the unit under french Credit was giving trouble from the beginning. The downtime of this machine was high and precision of jobs was greatly effected resulting in severe production bottlenecks.
 - (iv) Some old machines which were surplus in other units of HMT were transferred to Hyderabad unit. Due to continuous usage of these machines over the years, they are not giving the required accuracies and the downtime was also high.

G. Pricing Policy for Special Purpose Machines

- 6.45. During the evidence the Committee pointed out that in 1971 the Board of Directors authorised the company to adopt the pricing policy for special purpose machines based on tonnage basis as also to have an escalation clause in quotations. The Secretary of the Ministry stated as follows:—
 - "The special purpose machines are designed in terms of the requireents of the particular customer. It is not a machine which is susceptible to production on a large scale. Actually, they have to design. The design works take a very long time. The machine has to be fabricated and this has to be seen with reference to the special components which the customer is going to make. It will be sent to the workshop of the customer for trial and it has to be seen whether the components which he is going to make are coming out to specifications. These special purpose machines have very long manufacturing period and it is not possible for the HMT, if the delivery period is 24 to 30 months, to give quotations at the beginning of such a period, without a clause on escalation."

- 6.46. The Committee enquired whether the pricing policy followed by HMT in respect of special purpose machines acts as an inhibiting factor in getting more orders in view of the stiff competition or whether there was lack of demand for such machines it is stated that:—
 - "So far as pricing policy of HMT in respect of special purpose machines is concerned, there are no manufactures in the country except Telco and Telco production is primarily for captive use. So far as special purpose machine is concerned, we find it too difficult to have an index of competition here because every machine is custom built. It depends upon the type of component that is required to be manufactured. It is a question of detailed estimate by the Company and thereafter it is being put to the customer. We had occasion to note that in one or two cases orders were placed for these machines but later on they were cancelled by customers even on penalties payments. With the expected increase in production in the automotive sector we expect to be much better off than in the last few years."
 - 6.47. The Committee suggested that instead of calculating the price of these SPMs on the basis of the cost, they should have it on the basis of the benefit that accrues to the customer. It was explained:—
 - "No customer has complained to use about the higher price. As soon as we receive any complaint, that is properly attended to so far as price is concerned provided this unit is loaded with a reasonable number of orders there could be scope for some reduction. The other suggestion is very important one. So long as there is an economic volume of production it will be much cheaper to operate on a special purpose machine than operating in a number of machines. But it depends upon the size of the factory and also availability of the orders at a particular point of time for economic use of special purpose machines."
 - 6.48. The Committee regret to note that Unit V of HMT which was mainly set up to meet the demand for special purpose machines and Fay Automatics could not get adequate orders for these machines to utilise its capacity. The orders secured could not be executed in time due to lower level of labour efficiency. Even a period of 5 years was considered inadequate for developing the efficiency and

skill required for the manufacture of sophisticated machines and overcoming the initial production problems. The Committee further note that the agreement with M/s. Renault could not be fully exploited as the design techniques formed by RNUR could not be adopted for the requirements of SPM in India. Renault contemplated manufacture of substantial number of special purpose machines designed for automotive use and the demand for special purpose machines for automotive use did not materialise.

- 6.49. The Committee are at a loss to understand as to how the collaboration agreement with Renault was entered into without taking into account the technological requirements of the sophisticated machines in India. They regret to note that this serious matter was not thoroughly investigated and recommend that it should now be gone into and responsibility fixed for such defective agreement with M/s Renault. The Committee would like to be kept informed of the action taken in this regard.
- 6.50. The Committee were informed that HMT are now in the advanced stage of negotiations with an American firm M|s. Cross Company in order to improve their technology and in order to get orders from the international market for special purpose machines.
- 6.51. The Committee recommend that the implications of the proposed agreement with M|s Cross and Company should be carefully examined so that the mistakes in the earlier agreement with Renault are not repeated.
- 6.52. The Committee further note that out of the machines already installed, machines worth Rs. 1 crore needed replacement as they were not capable of giving the required accuracy. Some of them could not even be reconditioned. The Committee fail to understand as to why such machines were accepted without proper examination/verification of their capabilities. The Committee recommend that this matter should be probed into thoroughly and the responsibility for the lapses fixed.
- 6.53. The Committee are unhappy to note that Government Management are not following any fixed pricing policy with regard to the sale of Special Purpose Machines. The Committee feel that HMT with all the technological advantage and the experience should be able to produce the machinery at economic cost. The Committee hope that with the procurement of exoprt orders, it should be possible to increase their production and reduce the cost of production so that price may be competitive.

H. Licences issued to Private Sector Parties for the Manufacture of Special Purpose Machines

6.54. The details of the licences issued to the Private Sector parties for the manufacture of special purpose machines are as follows:—

	Name of the Company	Licence No. & Date	Item of Manufacture	Annual Capacity	Remarks
1.	Ex-Cello-O India Ltd., Bombay	L/9/N-2A/59 dated 29th May, 59	Hydraulic Unit Heads (known as Special Purpose Machines)	50 Nos.	Implemented
2.	Raja Bahadur Motilal Poona Mills Ltd., Bombay	L/9/40/61-MEI dated 5-4-1961	Special Purpose Machines	36 Nos.	Not implemented in so far as SPMs are concerned.
3.	Tata Engg. and Locomotive Co. Bombay	L/9/184/MT-68 dt. 9-2-1968	Unit Construtcion and special pur- pose machines	Work Rs. 100.00 lakhs	Implemented

6.55. The Committee enquired as to how far issue of licences to private parties was ustified when the Public Sector Undertakings viz., HMT were not having enough orders. In a written reply the Ministry explained the position as under:—

"It will be noted that the licences to M|s Ex-Cell-O and M|s Raja Bahadur were issued long before HMT obtained an industrial licence for the manufacture of Special Purpose Machines in 1964. So far as the licence granted to Ms. TELCO for the manufacture of SPMs is concerned the proposal was a diversification in the existing undertaking to introduce a new item of manufacture. In view of the emphasis of increased production of commercial vehicles automobiles, tractors, scooters etc. It was considered that the demand for these Special Purpose Machine Tools would increase substantially. Taking into account merits of the scheme such as availability of workshop and technical capabilities, balancing equipment, high indigenous content, long terms view for varying requirements. introduction of a new type of know-how with reasonable terms of collaboration, the proposal was recommended for approval to the Licensing Committee. With the approval of the Licensing Committee the Company was granted a letter of intent on February 7, 1967 for the manufacture of these Special Purpose Machine Tools for a capacity Rs. 100 lakhs per annum and the letter of intent was converted into an industrial licence on February 9, 1968. It is considered that HMT's position has not in any way been effected by the issue of licences referred to above."

- 6.56. Asked whether TELCO had applied for the expansion of their project for the manufacture of Special Purpose Machines and whether the issue of any further licence for their future expansion was contemplated, it has been stated that—
 - "M/s TELCO have not applied for any substantial expansion of their existing undertaking for the manufacture of SPMs. However, in view of the liberalisation by utilisation of the existing installed capacity announced in early 1972 this Company had also applied for recognition of the existing installed capacity for a total production of Rs. 200 lakhs per anum. This is under consideration."
 - 6.57. During exidence the Ministry have stated as under:-
 - "So far as TELCO is concerned, they had already taken up a machine tool factory by name INVESTA, which was producing a variety of drilling machines. They had already the necessary machine capacity available and they were thus poised for an increase in production and also for exports. Therefore, they made a proposal that they should be allowed to diversify, to manufacture special purpose machine tools without any substantial addition to capital goods. They explained that they would be able to start production with 80 to 85 per cent indigenous content and that the bulk of the production would be required for their captive use. These were the facts for which TELCO was allowed to enter into collaboration for the manufacture of Special Purpose Machines."

I. Import of Shell Manufacturing Machines

- 6.58. During their visit to the Hyderabad Unit of HMT the Committee were informed that in the Defence Department, Shell manufacturing machines were imported when parts of the machines could be manufactured by HMT. The Committee desired to know that details of such imports and asked about the reasons for their import. In a written reply the Ministry have stated as follows:—
 - "Against DGOF tender No.: 14|ID|B-18|OFAJ|572|P|PROJ II dated 10-7-1970 for rough turning 105 mm Shell, HMT V. Hyderabad submitted the proposal for six numbers 16"x33" Fay Automatic Lathes. DGOF expressed their doubt as to whether our machines can sustain the quoted Horse Power of 100 HP. We gave our assurance regarding

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the same. However, clearance for the import of four numbers Hepburn machines was obtained in March, 1971.

In March, 1972, the Ordnance Factory Kanpur, approached DGTD for clearance for importing Becoma machines for Shell Machinings. The matter was referred by DGTD to HMT V. Hyderabad. The Officers of HMT V, Hyderabad visited Ordnance Factory, Kanpur and held discussions on 13th April, 1972. The DGOF proposed that HMT should develop Shell Turning machines on the lines of Hepburn machine and this proposal was agreed to by us. We have also offered for finishing turning operations, our modified Fay Automatic Lathes with Rear Carriage Mounting. Subsequently a meeting was held between HMT DGOF at Kalamassery on 15-11-1972 to decide the type of machines required by DFOF. Another meeting is still required to be held to finalise details of their requirements for Shell Machining."

J. Manufacture of Scooters

6.59. During evidence the Committee pointed out that Government had given clearance to import the entire plant from Itlay for the manufacture of Scooters in India. They enquired whether any proposal had been received from HMT regarding the manufacture of Special Purpose machines for the manufacture of parts for the Scooters and if so, why the same was not accepted.

6.60. The Secretary of Ministry explained as follows:-

"The question relates to the decision of Government to import a complete plant from Itlay for the manufacture scooters. It is true that when this decision was being taken there was communication from HMT suggestiong that for the scooter project HMT will find it possible to design and manufacture the entire plant. But the circumstances in which this decision was taken are as follows:-For a long time there have been a very heavy pent up demand for scooters and on 31st January, 1972 the demand for scooters with various dealers was of the order of 4½ lakhs. Taking note of the difficulty in meeting the growing demand for scooters Government had decided as early as in the middle of 1972 to take up a scooter project in the public sector to meet long pending demand. In fact, I was authorised to enter into certain discussions with people who could furnish the drawings and designs for the manufacture of scooters and know-how for this in order to see whether

we could obtain some reasonable terms. In fact, I had discussions with the Piaggio People who are the people in Italy who manufacture the Vespa scooters, one of the most popular brands of scooters available in this country. In the course of discussion, they demanded a technical know-how fee of the order of Rs. 90 lakhs. In addition they had also suggested that the project would cost about Rs. 16 crores in all. Continued efforts to scale down these payments to be made to them, whether for know-how fees or scope of the project did not yield any results. It was at about that time that one of the private sector units, the Automobile Products of India, brought to our notice that the Innocenti Plant in Italy which had been producing Lambretta scooters for many years was about to wind up, and, therefore, the Automobile Products of India might be allowed to import the entire plant in as-is-where-is condition along with all the technical documentation and the world rights for the licensing of Lambretta scooters.

When this came to us, we examined this and we thought that if Government were to take a major initiative in buying this entire plant and also get all the documentation and also the world rights for the manufacture of these scooters, we would be able to set up scooters manufacture in the public sector much earlier than under any other arrangements. Therefore, it was felt that notwithstanding the fact that the HMT might be in a position to manufacture these machines over a period of time, we should not let that opportunity go, because the terms offered were very attractive.

The terms offered were that for all the machines available inas-is-where-is condition, a total payment of 1.85 million dollars should be made and this was not only for the machines but fo rthe technical documentation and for the entire licensing rights for the entire range of Lambretta scooters throughout the world.

We also felt at that time, which was fully justified by our subsequent investigations, that there was a very good export demand for these scooters and if we were to enter this line of manufacture, we would be able to develop a very good export market within a reasonable period of time.

So far as HMT is concerned, we did not doubt their compe-

tence to produce the machines needed over a period, but the designing of special purpose machines for the manufacture of scooters, which means various components of scooters, takes a long time and even the manufacturing time for the machines needed according to the HMT themselves would take about 30 to 36 months whereas here was a plant readily available and which could immediately go into production which had been approved by an expert team, and we had found that the machinery had a reasonable life left in it. Not only had we investigated the worth and life of the Plant by a high-level technical expert from India, but we had also taken the advice of some independent appraisers in order to see what the value of this machinery would be, and we were advised that 1.85 million dollars which we were finally proposing to pay was a very good deal, and in fact, the value of the machinery with the residual life in it would be substantially higher than payments which we were proposing to make.

In these circumstances, with a view to enter scooter production earlier and meet the long-standing demand both in the domestic and in the export markets, we took this decision consciously at the highest levels in Government."

K. Manufacture of Machines for the manufacture of small cars and Tractors

6.81. The Committee enquired whether any proposal had been received by the Government with regard to the manufacture of machine for small cars and tractors. The Secretary of the Ministry stated as under:—

"From time to time, Government have considered the possibility and the need for the manufacture of a car in the public sector in the country. The latest position is that taking into account the availability of resources and the priorities of various requirements, we feel that the requirements of public transport should take precedence over personalised transport, and, therefore, at the moment the chances of getting a car project finding a place in the Fifth Plan appears extremely remote. But this is not to question the competence of the HMT at all in being able to design and manufacture the machinery needed for car manufacture. In fact, there are a number of automobile units in the private sector some of whom will require replacement machine.

- nery, and some of them have placed orders on the HMT. But to take up a car project in the public sector only to give orders for special purpose machine tools to HMT appears to be very unlikely.
- So far as tractors are concerned, we have been very closely in touch with HMT not only for the purpose of the public sector tractor project which is executed by the HMT themselves, but for all other tractor projects for which licences have been given. In fact, a number of parties which are licensed or are undertaking expansions are placing orders on the HMT in substantial proportions for their requirements, and the HMT is poised, to manufacture the special purpose machines needed for the automobile and tractor industry."
- 6.62. The Committee are surprised to note that on the one hand unit V is suffering due to lack of adequate orders on the other hand licence had been issued t_0 M/s TELCO for the manufacture of SPMs for a capacity of Rs. 100 lakhs per annum as a part of diversification scheme in the existing undertaking to introduce a new item of manufacture. Their application for the recognition of the existing installed capacity for a total production of Rs. 200 lakhs per annum is now under the consideration of Government. The Committee would like the Government to fully examine the implications of allowing further expansion to TELCO keeping in view the unutilised capacity of unit V.
- 6.63. The Committee are informed that Government have decided to import an entire plant from Italy for the manufacture of scooters. The argument advanced for such an import is, however, hardly convincing. It has been admitted that the competence of HMT to produce the machines needed for the manufacture of scooters was beyond any doubt. But the Plant is being purchased in order to meet the pent up demand for scooters. The Committee would, however, like to point out that the demand for scooters has not grown all at once. The existing private manufacturers have not been able to cope with the demand for the past few years. The difficulty regarding idle capacity in unit V of HMT was also being felt since its very inception.
- 6.64. The Committee strongly feel that the decision to take up the manufacture of scooters in the public sector has been unduly delayed. Had the decision to set up such a Project been taken earlier, the advantages would have been three fold. First the manufacture of SPMs in unit V would have enable HMT to utilise its idle

capacity in that unit. Secondly the Public Sector in addition to meet the growing demand for scooters would have provided a fair competition in the sale of scooters. Thirdly it would have helped the country in the acquisition of advanced technology which could have been certainly better than the technology already available in the country about the manufacture of Lambretta scooters.

- 6.65. The Committee regret to note that Government decided to import four Fay automatic lathes required by the Defence Department in March, 1971 without actually examining the capacity of HMT machines to meet the demand in spite of the fact that HMT gave an assurance that lathes of the requisite Horse Power could be manufactured by HMT. The Committee need hardly stress that such imports which involved a huge amount of foreign exchange should have been avoided. The possibility of meeting the further demand of the Defence Department by HMT with regard to the shell manufacturing machines should be fully explored before taking up any decision about their import.
- 6.66. The Committee further recommend that effective steps should be taken to secure orders for the Special Purpose Machines required by the Private Sector for the manufacture of tractors etc. The possibility of getting orders from Mining and Allied Machinery Corporation who are also taking up the manufacture of tractors should also be explored.
- 6.67. The Committee hope that with improved technology and adequate number of orders, the working of unit V of HMT would improve.

L. Manufacture of Electrically Controlled Horizontal and Vertical (Type E2H and V) Milling Machines in Units I & II

- 6.68. Units I & II undertook manufacture between May, 1966 and December, 1968 of 275 numbers of Electrically Controlled Horizontal and Vertical (Type E2H and V) Milling Machines, newly designed and developed, for supply to the Defence Department. A number of these machines which developed some defects in actual operation had to be rectified at the cost of the Company. Apart from an estimated development cost of about Rs. 30 lakhs, this venture resulted in a loss of over Rs. 54 lakhs to the Company.
- 6.69. It was explained by the Management that the order which was for a completely new design to be developed, was taken up within a tight time schedule to meet the urgent defence requirements and to cut the capacity under-utilisation costs. It has further been explained that the execution of the order not only led to the absorption of under-utilisation costs and a foreign exchange saving of

Rs. 150 lakhs but also resulted in the development of the design of a machine which was undergoing further change and development to meet the demands of the internal and export market.

6.70. The Committee enquired as to the actual cost of production of these machines and how it compared with the estimate framed initially.* In a written reply the management have stated as follows:

The details of actual cost of production are as follows:—

	E2H	E ₂ V
	Rs.	Rs.
1966-67 .	70,60	72,328
1967-68 .	97,75	2 99,809
1968-69 .	I,I3,23	9 1,15,297

The estimated cost of production was Rs. 47,598 in case of E2H and Rs. 48,420 in case of E2V.

6.71. Asked as to the basis on which the management had worked out the development cost at Rs. 30 lakhs and foreign exchange saving at Rs. 150 lakhs, it has been stated as under:—

"Details of development cost are as following:-

(a) Cost o	f design hours	•	•	•	•	•		•	•	Rs. 6. 50 lakhs
(b) Cost of pression	of prototype (recoduction of f	present first ba	tating of tch of	liffere mac	nce b	etwee and	n actı selli:	nal co	st rice	Rs. 14: 30 lakhs
(c) Extra fication	cost of manuf ons resulting in	acture variati	due to	desi efficie	ign al	teratio	ons a	nd m	odi-	Rs. 5. 90 lakhs
(d) Other	expenses for	which c	letailed	reco	rds a	re not	read	ily a	/ailat	ole Rs. 3·21 lakhs
										Rs. 30.00 lakhs

6.72. The foreign exchange savings have been worked out after taking into account the cost of importing equivalent machines from the foreign firm abroad. These calculations have been made at pre-Indian Rupee Devaluation rate of exchange. The foreign exchange savings would be much more than Rs. 150 lakhs if the post-Indian Rupee Devaluation rate of exchange is vieinm HHM HMRF RFR

^{*}At the time of factual verification the Audit stated as follows:—
"The Company had not prepared any estimate of cost at the time of submission of the tender. The price quoted was based on the landed cost minus 15% as per pricing policy then existing.

The figures of estimated cost of production given by the Management to the Committee are based on the estimates prepared in May, 1966.

exchange savings at the rupee devaluation rate of exchange are as follows:—

E2H machines (201 numbers) .	 . Rs.100.04 lakhs
E2V machines (110 numbers)	Rs. 51 · 59 lakhs
	Rs. 151.63 lakhs

- 6.73. It has been stated that the manufacture of these machines resulted in reducing the los_S due to under-utilisation of capacity to the extent of Rs. 50.64 lakhs (representing the difference between the selling price and cost of materials utilised in the manufacture of 275 machines).
- 6.74. It was stated by the Company in February, 1971 that these machines had been fully developed and had very good market particularly in the countries abroad. It is, however, understood that the Company produced 12 No.E2 Milling Machines in 1970-71 and that there was no production in 1971-72.

M. Manufacture of Electrically Controlled Milling Machines in Unit

- 6.75. Out of 410 Electrically Controlled Milling Machines (2D3) manufactured in Unit III upto 31-3-1970, the Company had to undertake in 1967-68 to 1969-70 rectification of defects on 192 machines at a cost of Rs. 13.47 lakhs. During 1970-71 and 1971-72. The Company produced 137 machines and 10 machines had to be rectified at a cost of Rs. 6.000.
- 6.76. In this connection, the Management have stated that the need for rectification of 192 machines arose due to the following factors:—
 - (i) These sophisticated machines were taken up for production for the first time in the country and that too in a brand new factory with comparatively younger and less experienced labour.
 - (ii) The time taken for the development of the manufacturing skill.
 - (iii) The operation of these machines by the less skilled operators at the customer's works.
 - (iv) The rectification was carried out to restore the confidence of the customers irrespective of the part played by the customer's operators in the breakdown of those machines.
- 6.77. The Company also stated (March, 1971) that in a large manufactureing organisation the rectification work will have to be

regarded as normal commercial risk and hence is not of any peculiar or unusual nature.

6.78. The Committee enquired about the nature of defects rectified and whether these defects could not be taken care of during the process of manufacture. In a written reply the management stated as follows:—

"Manufacture and assembly of highly sophisticated electrically controlled milling machines was taken up for the first time in the country in a brand new factory like HMT III, Pinjore. The manufacture and assembly of these highly sophisticated machines require the development of certain special manufacturing skills which could be achieved only gradually over a period of time. For these machines, very good scraping was required to be done and initially the scraping was not upto the standard as our scrapers took some time to develop the necessary skills for doing this operation. In this connection we would like to clarify that the scraping is purely a manual operation and hence the requirement of time for development of the operational skills.

This machine called for much more care on the part of the operators, tool setters and maintenance personnel at the customer's works, than required for handling simple general purpose machines. Any carelessness on the part of the operating personnel at the customer's works would seriously affect the performance of these machines. In a majority of cases the breakdown of the machines was attributable to the operation of this complicated machine by less skilled operators at the customer's works. As the rectification work involved would not be carried out at the customer's work for lack of proper facilities and as it was our intention to restore the confidence of our customers in these high peformance machines it was decided to undertake the rectification work at our Pinjore Unit irrespective of the extent of the part played by the customers operators in the breakdown of these machines."

6.79. The Committee enquired if the machines developed defects at customer's works whether those would also be rectified at Company's expenses in future also. It was stated that:

"Most of the machines have already been rectified and if any of the machines produced and sold in the earlier years of establishment of production of these machines come up for rectification the same will have to be undertaken by the Company."

- 6.80. The Committee find that a number of Electrically controlled Horizontal and Vertical Milling Machines manufactured in Units I & II of HMT for the Defence Department developed some defects in actual operation and had to be rectified at the cost of the Company. The manufacture of these machines resulted in a loss of over Rs. 54 lakhs to the Company, apart from an estimated development cost of about Rs. 30 lakhs. The Committee further note that out of 410 Electrically Controlled Milling Machines (2D3) manufactured in Unit III rectification of defects on 202 machines at a cost of Rs. 14 lakhs had to be carried out. The Committee would urge that the reasons for the defects developing in both types of Machines should be carefully gone into and remedial measures taken to avoid such defects developing in future. The Committee regret to note that the Company had not examined the financial implications before accepting the orders which ultimately resulted in a loss to the Company.
- 6.81. The Committee were informed that the need for rectification arose on account of these sophisticated machines being taken up for the first time with new and inexperienced labour. The Committee need hardly point out that the supply of defective machinery to the customer, acts as an inhibiting factor in securing further orders. The Committee feel that there should be a closer quality control and stricter supervision at each stage of production and recommend that the machines should be fully tested at the premises of the factory with regard to their performance before these are despatched. Since the manufacture of these machines is customer oriented the Committee feel that the best form of sales management in such cases should be to provide after sale service to the customers.

M

MACHINE AND LABOUR UTILISATION

A. Machine Utilisation

According to the procedure followed in the Company. machine utilisation is computed on the basis of the available hours (number of machines available for production multiplied by the number of working hours) which exclude the 'machines' removed for major reconditioning except in Unit Y. Unit-wise utilisation factor of the machines during the last three years for which complete figures are available, is given below-

			Unit I & II	11			Unit	111		
ı	89-1961	02-6961 69-8961	02-6961	17-0791	1970-71 1971-72	1967-68	69-8961	07-6961 69-8961 89-7961	16-0/61	1971-72
Percentage of Utilisation	73.7	74.0	2.92	81.3	79.47	9.89	6.89	70.7	0.91	77. \$2
Percentage of idle hours to available hours	26.3	26.0	23.5	18.7	20.23	31.4	31.1	29.3	24.0	22.48
Break-up for idle hours	:	:						:	:	:
Mechanical & Electrical Repairs	6.5	5.5	\$.0	4.3	4:96	0.6	7.3	8.3	5.4	3.80
No Operator	5.1	7.0	7.4	7.5	6.30	10.2	0.11	12.0	11.3	91.11
No Job	13.8	12.3	6.5	5.5	4.70	8.9	8.2	5.0	4.6	4.93
O;her causes	1.5	1.5	6.1	1.7	1.57	3.3	3.7	1.#	2.7	2.59

			Unit IV					Unit	_	
•	89-2961	1968-69	02-6961 69-8961	17-0761	1971-72	1967-68	69-8961	17-0761 07-6961	17-0/61	1971-72
Percentage of utilisation	59.3	\$2.6	57.1	62.3	\$8.75	65.2	54.8	6.69	71.7	71.53
Percentage of idle hours to available hours	40.7	47.4	42.9	37.7	41.25	34.8	45.2	40.1	28.3	28 . 47
Break-up for idle hours	:		:	:	:	:	:	:	:	:
Mechanical & Electrical Repairs.	11.3	13.5	8.6	8.7	8.12	8.9	6.7	5.8	4.6	89.9
No operator	7.3	7.5	9.01	13.5	14.19	2.61	19.7	23.3	6.21	14.48
No Job	14.3	8.61	6.41	11.4	10.47	6.2	1.91	8.5	4.9	4.38
Other causes	7.8	6.9	4.6	4.4	8.47	. 2.6	2.7	2.00	5.6	2.93

- 7.2. It is seen that percentage of idle hours to available hours is substantial in respect of Units III, IV and V. The two major factors responsible for idle hours in respect of these Units were 'no operator' and 'no job'.
- 7.3. In this connection, the Ministry stated (December, 1971) as follows:—
 - "(a) Low order position caused by severe recession was mainly responsible for idle time for want of jobs.
 - (b) Idle hours due to 'No operator' were caused by higher absenteeism. Low order position responsible for very low morale of workers also contributed to absenteeism."
- 7.4. The Committee enquired as to how the Company proposed to eliminate idle machine hours. The Chairman, HMT stated:
 - "By really improving efficiency all round, through (a) ensuring that the machines are kept up in good working condition; (b) by reducing absenteeism; and (c) feeding the machines properly and guiding the workers in time through the Foremen. In fact, we have a performance budget. And the Foremen participate, from all points of view, in that performance."
- 7.5. Keeping the age of the machine in view, the Committee wanted to know the optimum percentage of utilisation. The witness stated:
 - "Plants I and II of HMT have been running for the last 19 to 20 years. The machinery there is getting old, particularly in the foundry. In view of the difficulties with regard to finance etc., we have not had a very large programme of replacement of machine tools; but we have certainly started replacing some of the equipments. Taking these and the old machinery side by side, the machine utilisation would definitely improve."

B. Labour Utilisation

7.6. An analysis of the utilisation of factory labour on the basis of available man hours (excluding loss of man hours due to strikes an 1 similar causes) together with the labour efficiency is given below:

			1 Inits	I loits I & II			Š	Unit III		
						3	07 070-	1060-70	1070-71	1971-72
ratu ulats	89-2961	69-8961	02-6961	16-0261	1971-72	1967-08	1900-09	2/ 6061		
Available hours for utilisation	83.8	83.8	84.6	83.63	82.89	14.2	85.0 15.0	84.1	83.90	13.87
Absence nours Hours for direct jobs (Productive) to net available hours	74.8	76.4	75.7	78.11	80.24	77.2	0.44	75.9	82.09	84.0
Hours for unproductive jobs to net available hours Idle hours to net available hours .		6.2	6.9	5.36	2.50	5.1	5.0	6.0	4·17 13·74	2.84
BREAK UP OF IDLE HOURS TO NET AVAILABLE HOURS	TO NET						,		0	o.
doloN	12.7	13.7	12.5	13.06	13.94	6.11	12.8	10. 4	0.02	10.0
No material	:	:	0.5	0.0	20.0	7 .	2.0	\$ · 0	1.37	1.28
No machine No. tool	1.8	1.3	9.1	1.39	1.24			, 4 4	2.55	2.11
Mechanical & Electrical repairs .	3.0	7.0	2.0	1.65	1.75	5.5	2.1	7.7	61.1	1.46
Others	8.0	62.6	1.1 67.4	0.30 76.92	79.36	64.0	67.4	9.49	74.07	75.75
hours lost	to strike and	l lock out as	shown belo	w are exclu	due to strike and lock out as shown below are excluded from available hours.	ailable hour	S.			
Year			Ċ	Unit I & II	Unit	t 111		Unit IV	Unit	>
							241	241850	450	Q
1967-68				٠	:		1	11250	:	
1968-69			71/1	2	,		:		9/089	9/1
c2-6961			:		:		•			

(Figures in percentages)

			ū	Unit IV			Unit	>		
Particulars	1967-68	1967-68 1968-69	02-6961	17-0761	1971-72	1967-68	1968-69	1969-70	1970-71	1971-72
Available hours for utilisation .	85.6	83.5	83.3	81.95	78.29	82.2	79.8	77.5	83.63	84.26
Absentee hours .	14.4	16.5	16.7	18.05	12.12	17.8	20.2	22.5	16.37	15.74
Hours for direct jobs (productive) to net available hours .	96.0	28.7	9.69	70.73	67.44	72.4	61.2	9.69	75.59	65.38
Hours for unproductive jobs to net available hours	3.0	3.4	3.1	3.53	2.49	8.6	11.8	& &	6.05	18 - 11
Idle hours to net available hours.	41.0	37.9	31.3	25.74	30.07	17.8	27.0	9.12	15.39	22 · 81
BREAK UP OF IDLE HOURS OF IDLE HOURS	TO		•							
No job	.8.4	16.4	1.\$1	11.12	11.21	12.0	9.02	16.7	6.64	16.12
No Material	9.3	12.4	9.6	1.76	7.05	9.0	• •	0.5	0.12	0.12
No machine No. tool	0	•	♦.0	1.47	1.57	9.0	6.0	1.5	0.1	1.09
Mechanical and Electrical repairs	4.3	8.5	4.8	4.08	3.54	8.3	3.6	7.0	3.67	3.80
Others	18.2	5.9	1.4	1.33	6.70	1.4	1.5	1.5	% •	1 · 68
Labour efficiency	27.0	23.0	24.0	57.80	68 -49	44.6	, 53.0	\$5.1	57.14	71.42

- 7.7. According to Management, capacity available for production (after accounting for absenteeism and idle time) was around 70 per cent. during 1967-68, 1968-69 and 1969-70 in Units I, II and III, 50 per cent. to 52 per cent. in 1967-68 and 1968-69 and 57 per cent in 1969-70 in Unit IV and 68 per cent in 1967-68 and 60 per cent. in 1968-69 and 1969-70 in Unit V. It has further been stated that idle time for want of jobs accounted for, on an average, loss of capacity to the extent of 10 per cent.
- 7.8. It will thus be seen that the utilisation of labour was on the low side particularly in respect of Units IV and V. This was mainly attributable to higher percentage of absenteeism and idle time.
- 7.9. In this connection, the Ministry have stated (December, 1971) as follows:—
 - (a) The absenteeism in all the Units was very much higher than the normal limit of 10 per cent. The idle time was also relatively higher for want of jobs which again was the consequence of recession in the engineering industries.
 - (b) The labour efficiency will have to be viewed in the background of diversification and development activities undertaken during this period.
- 7.10. The capacity available for production after accounting for absenteeism and idle time during the years 1970-71 and 1971-72 unitwise was as follows:

					1970-71	: 971-72
HMT I & II, Bangalore					-69.81	68 · 58
HMT III, Pinjore .					72.37	74.81
HMT IV, Kalamassery] .					60·86	54·7 5
HMT V, Hyderabad •		•	•		70:76	65.05

7.11. The Committee pointed out that idle hours on account of 'no material' were the highest in Unit IV during 1967-68 to 1969-70 and on account of 'no job' under unit IV and V in 1968-69 and 1969-70. They enquired about the reasons for the high percentage of idle hours. In a written reply the management have stated as follows:—

"The reasons for high incidence of idle time for want of materials during 1967-68 and 1969-70 in HMT IV unit were as follows:

- 1. Production efficiency imbalances in the production during initial operations.
- 2. Machining rejection of casting which creates problem of no materials and non-availability of basic raw materials like steel.

Due to delayed delivery of steel from indigenous sources and import restrictions, it was at times difficult to get steel to the required specifications. Even after receipt of supplies, it was found in many cases that the material supplied was not of acceptable quality.

As regards high incidence of 'no job' we would like to clarify that this is mainly due to lack of orders and also due to production and efficiency imbalances."

7.12. During evidence the Committee asked the Chairman, HMT to explain the position with regard to the high percentage of idle hours due to 'no job' 'no material' and 'no machine.' The Chairman, HMT stated as under:

"There was recession in these periods. We could not have provided materials, made machines and kept them in stock. There is a little difference of opinion with our audit here. We have to draw the ratios with the gross available hours and not net available hours, after deducting absenteeism, and again working back the percentage. At least, that is what we have been doing. If you take that way, the ratio would appear a little better. My difficulty in those periods has been that there was some sword hanging on every average worker there that they would be retrenched and they were agitated about this sort of atmosphere. On the one side, stocks were pilling up and market was not available. We had the question of finance to provide material to feed the men and machines. With the result, there was a sort of demoralising effect all-round in those three years particularly and you can see that these ratios for subsequent years have been considerably improved. If you want to go Unit by Unit, 'No job' seems to be the highest. 'No job' varies from 12 per cent to 20 per cent. So that means, we have to keep the machines idle because we had no money to buy raw materials and if at all we produce these machines, they would have gone into stock. Then 'no material' was of every high incidence. Mechanical repairs were within control. But you can see that labour

efficiency is very very poor and in the HMT units IV and V, it is deplorable because of labour troubles in HMT IV towards the end of these years, and in HMT V, of course, we had just started. We started in 1966-67. This was the second year of running. Labour efficiency was very poor. But it is continuously improving and it has improved. 1971-72, labour efficiency has improved to 80 per cent in HMT I and II. That means, they are 80 per cent efficient. In the case of HMT III, we are 76 per cent efficient. HMT IV, the improvement is 69 per cent and in HMT V. the improvement is 71.5 per cent. There is an all-round improvement in the labour efficiency in all the Units for the year 1971-72. Apart from this, we are continuously struggling to pull up the efficiency by various methods like incentives and all that. I was hoping that this year would be better. But, there are no signs so far."

7.13. The Committee enquired about the steps taken to reduce the idle hours on account of avoidable factors and step up the labour efficiency. The management have stated as follows:

"Utilisation statistics are made available to the operating personnel every month with a view to enable them to take remedial action for reducing the idle hours. We are also motivating labour to give better production and productivities through the incentive schemes. We are also taking advance action for materials planning and procurement. Preventive maintenance and repair systems have been introduced to avoid and/or minimise machine breakdown. Balancing equipment are being provided wherever necessary. However, a certain amount of idleness is inevitable for several reasons, such as production imbalances, efficiency variations in the various processes and stages of operation etc."

C. Fuller utilisation of capacity and improving productivity and increasing production in unit IV.

7.14. In a written reply the management informed the Committee as follows:

"As part of the celebration of the Silver Jubilee Year of India's Independence during the year commencing from 15th August, 1972, the theme for 'fuller utilisation of capacity and improving productivity and increasing production' has been adopted in HMT IV, Kalamassery. With a view

to implementing the aforesaid theme, a special Group Plan has been instituted in HMT IV, Kalamassery. Under this Plan, the direct workers in the Unit are divided into 8 main groups and the individual worker achieving the highest standard hour output over a period of three months in each of the groups, subject to a minimum achievement, will be awarded a 'hmt' watch at a special function every quarter held in front of workers' families. Since the Plan envisages conferment of personal distinction for efficiency of the workers it is expected to bring in a sense of competition amongst them and improve productivity."

7.15. With regard to the new bonus scheme introduced in Unit IV, the Chairman stated during evidence as follows:—

"So far, the results have been good in Kalamassery with this new incentive bonus and also additional incentives announced in view of India's 25th Year of Independence. But during the past three months, they have raised another issue. They want now added dearness allowances and revision of wage structure which agreement has expired on 31st December. On the one side, we have been asked by the Government that wage revision has to be done very carefully and on other side, labour is now demanding that we should revise the wage scales. Anyway, negotiations are going on in HMT IV and we have appealed to them also. I have made a personal appeal to the 8 Unions and I have asked them some time. I think something will be settled."

7.16. The Committee find that utilisation of machines and labour was not satisfactory in all the units of HMT, particularly in Units III, IV & V. The percentage of idle hours to available hours in respect of machines varied from 18.7 to 26.3 in Units I & II, 22.48 to 31.4 in Unit III, 37.7 to 47.4 in Unit IV and 28.3 to 45.2 in Unit V. The percentage of idle hours to net available hours in respect of labour varied from 16.53 to 17.4 per cent in Units I & II, 13.14 to 18.0 in Unit III, 25.74 to 41.0 in Unit IV and 15.39 to 27.0 in Unit V. As a result of non-utilisation of machines and labour there was enormous idle capacity in the Units. The idle capacity was around 30 per cent in Units I, II & III, 40 to 50 per cent in Unit IV and 30 to 40 per cent in Un it V. Labour efficiency in all the units was also not impressive. It was only about 62 to 79 per cent in Units I & II, 64 to 75 per cent in Unit III, 53 to 68 per cent in Unit IV and 44 to 71 percent in Unit V.

- 7.17. The main reason for all these maladies was stated to be low order position caused by severe recession. Idle machine hours due to 'no operators' were on account of absenteeism. Low order position responsible for very low morale of workers also contributed to absenteeism. The absenteeism in all the units was very much higher than the normal limit of 10 per cent. The idle time was also relatively higher for want of jobs. This gave rise to paradoxical situations. On the one hand, the machines remained idle for want of operators, on the other hand the labour remained idle for want of jobs, materials etc. Again on the one hand there was dearth of orders to fully utilise the capacity, on the other hand the orders in hand could not be executed for want of operators, materials, mechanical and electrical repair of machinery etc. As a result of these, the production performance remained unsatisfactory in all the units of HMT, particularly in Units III, IV & V.
- 7.18. The Committee find that the Company are now taking a number of steps to eliminate idle hours and improve productivity. Diversification of production in order to secure adequate orders, supply of requisite quantity and quality of materials, reduction of absenteeism, introduction of preventive maintenance and repair systems in order to minimise machine breakdown, and introduction of incentive schemes are the steps in the right direction. The Committee, therefore, recommend that all these measures should be pursued vigorously in order to increase productivity and production.
- 7.19. The Committee were informed that the machinery in Units I & II of HMT are getting old. They, therefore, recommend that the programme of gradual replacement and provision of balancing equipment, wherever necessary, should be finalised in time and steps should be taken to ensure smooth running of the plant as a whole, that the requisite machinery and equipment become available as per scheduled programme.

D. Staff Requirement

7.20. The standard force requirements for all the units of the Company have been approved by the Board of Directors from time to time. The standard force, actual personnel employed and the

percentage of actual personnel to standard force in each Unit have been indicated in the table below:—

Particulars	Units I & II	Unit III	Unit IV	Unit V
Standard force for 2 shift working	5205	2431	2431	2714
1966-67 Actuals	5187	2253	2081	r 1479
Percentage of actuals to standard force	100	93	86	55
1967-68				
Actuals	5083	2275	2131	1607
Percentage of actuals to standard force	90	94	80	59
1968-69				
Actuals	4970	2225	2106	1725
Percentage of actuals to standard force	96	92	87	64
1969-7 0				
Actuals	4960	2270	2107	1825
Percentage of actuals to standard force	95	93	87	67

7.21. Standard force for 2 full shift working, actual personnel employed and percentage of actual personnel to standard force in each of the units for the years 1970-71 and 1971-72 is indicated below:—

Particulars, year	HMT I & II	HMT III	HMT IV	HMT V
1970-71				
Standard Force	5,405	2,456	2,435	2,707
Actuals	4,955	2,403	2,261	1,97:
Percentage of actuals to standard force	90.34	97.84	92.8	7,284
1971-72				
Standard Force	5,515	2,450	2,470	2,747
Actuals	4,954	2,375	2,265	2,023
Percentage of actuals to standard force	89 · 82	96·62	91.70	7,664

7.22. The Sub-Committee of Directors had assessed (in September, 1968) that in the context of decline in overall production and sale performance over the last three years (1965-66 to 1967-68).

surplus staff in Units I, II and IV during the subsequent three years (1968-69 to 1970-71) would be of the following order:—

			 	1968-69	1969-70	1970-71
Units I & II				677	839	848
Unit IV	•	•		416	323	243
		TOTAL .		1093	1162	1091

- 7.23. In financial terms the above surplus labour was assessed at Rs. 110 lakhs.
- 7.24. The Company has, however, stated (March, 1971) that at present there is no surplus labour in any of the units of the Company.
- 7.25. The Ministry have stated (December, 1971) that the question of surplus labour estimated in the midst of recession had to be revised in the light of:
 - (a) difficulty in getting the trained and skilled workmen:
 - (b) the need to retain the services of trained and skilled workmen for the manufacture of sophisticated machine tools being introduced into production involving lower efficiency in the initial years; and
 - (c) the requirement of personnel for the new projects like Tractors, Printing Machines, Heavy Duty Presses etc., which were being considered at that time.
- 7.26. The standard force for the new projects has been determined after examining the requirements and the standard force requirement as indicated in the DPRs are as follows:

Tractor Project		•	•	•	2,708
Heavy duty Press Proj	ect				504
Printing machinery Pr	oject		•		816
	injecti	ion	Mould	ing	
machines Project.	•	•		•	225

- 7.27. The Committee enquired whether any exercise had been undertaken by the management for determining the staff requirements on a scientific basis. It has been stated that the standard force for the various units of the Company were fixed initially after considering the various requirements.
- 7.28. Standard force for HMT I & II Bangalore was revised after adding of HMT II. There has been no revision in the standard force in respect of HMT III, Pinjore, HMT IV, Kalamassery and HMT V, Hyderabad.

- 7.29. The Committee pointed out that the standard force requirements as worked out by the Management was intended to cater to the production requirements of rated capacity. They enquired that as the actual production had been less than the rated capacity whether it meant that standard force requirements would need augmentation for attaining the rated capacity. Conversely, whether it was the contention of the Management that it would be possible to attain the rated capacity with the present standard force on attaining the requisite degree of efficiency and skill. In the latter case whether it was not necessary to reassess the standard force requirements.
 - 7.30. The management have in a written reply stated as under:-
 - "It was necessary for Company to restrict the recruitment more particularly during the recession years with a view to avoid further under utilisation of capacity during that period. In this connection we would like to clarify that it would be more appropriate to assess the performance of the company with reference to the developed capacity which takes into account availability of men, machines efficiency factors, etc., rather than making any comparison with reference to rated capacity. During the years 1970-71 and 1971-72 HMT I & II, HMT III and HMT V had practically achieved production performance upto developed capacity calculated with reference to actual inefficiency. HMT I & II, Bangalore and HMT III Pinjore had even achieved practically the developed capacity calculated with reference to 1.3 inefficiency.
 - We would undertake the exercise of reviewing the standard force if it is found at a later date that a major revision is necessary to attain the targeted production consistent with market demands."
- 7.31. The Committee are surprised to note that Government/Management have not made any analysis of the requirement of staff in relation to the available/developed capacity in all the units of HMT. The standard force was initially fixed on the basis of working of the units at full installed capacity. The Committee have already pointed out that in the past the actual production was far less than the installed capacity. In financial terms the loss due to surplus labour during the years 1968-69 to 1970-71 has been assessed at Rs. 118 lakhs.
- 7.32. The Committee feel that the employment of staff far in excess of the actual requirement not only means payment of excessive wages and salaries but results in low productivity, labour troubles affecting the cost of production and lowering of morale generally. The Committee therefore recommend that a review of the standard force taking into account the expansion programmes launched by the

Company and the actual strength should be undertaken without any delay so that the staff may be usefully and economically deployed.

E. Training of Workers

7.33. As regards the training of workers the management have stated in a written reply as under:—

"Our training programme covers technical training and supervisory development.

For all technical posts candidates are recruited as trainees for the following categories:

- (i) Operator Trainee (for Watch factory only)
- (ii) Trade Apprentices
- (iii) Craftsman Trainee
- (iv) Technician Trainee
- (v) Engineer Trainee
- (vi) Specialist Trainee.

Industrial Training Institute, Polytechnics and Engineering College provide the basic technical training, which is supplemented by adequate job oriented training in the well-equipped training centres established in all our units. This is followed by sufficient in plant training before an employee is given independent charge. Further, workers' Education Unit Level Classes sponsored by the Director of Workers' Education, Government of India are also being conducted.

As regards supervisory development, the Central Organisational Development Unit caters to the development programme for various management tiers. A number of middle management development programmes and PERT application programmes have been conducted in the Company's various units from time to time with a view to fostering supervisory development.

Over and above these, advantage has been taken of the course offered by Institutions like the Indian Institute of Management, Calcutta and Ahmedabad and National Institute for Training in Industrial Engineering in Bombay. The organisational Development unit, with the help of aforesaid institutions has also conducted sensitivity training programme for senior and top management personnel."

7.34. The Committee enquired about the steps taken to check the trend of an out-go of qualified and experienced personnel from HMT.

The management have stated:

"Our personnel recruitment and promotion policies are so formulated as to induce the men in position to continue in the services of the company. But, retention of staff who have been trained and brought up by the company to man managerial posts, in the face of severe competition including higher emoluments offered by the Private Sector for trained personnel, continues to pose a problem to the Company."

7.35. During the visit of the Committee to the HMT Plant at Hyderabad, on 8-7-1972, they were informed that a period of two years was prescribed for training. Thereafter about 50 per cent were observed in HMT while 50 per cent of the trainees go to other companies.

7.36. In this connection the management have now stated that all technical trainees are required to give a service bond to serve the company for a period of 3—5 years on successful completion of their training. There is, however, no such bond taken in respect of Trade Apprentices and depending upon their suitability and the vacancy position they are absorbed in the services of the Company after successful completion of the training. In the process, about 50 per cent of such trainees taken, in Hyderabad as required under the Apprentices Act, would have to find job opportunities elsewhere. The expenditure outlaid on the training of the Trade Apprentices who are not absorbed by the Company is unavoidable as the training of these persons is obligatory under the Apprentices Act.

- 7.37. The Committee view with concern that there is a large scale out-go of trained personnel from the HMT. It has been stated that "retention of staff who have been trained and brought up by the Company to man managerial posts, in the face of severe competition including higher emolument offered by the private sector for trained personnel, continues to pose a problem to the Company."
- 7.38. The Committee feel that the recruitment, training and promotion policy should be so devised as to encourage persons of merit to get themselves absorbed with an assurance for further advancement.
- 7.39. The Committee consider that for improving work-efficiency, welfare schemes, within and outside the establishments should be introduced. In this connection the Committee would like to invite the attention of the Govt./Management to their recommendations contained in Chapter XI of their Seventeenth Report (Fifth Lok Sabha) on Personnel Policies and Labour Management Relations in Public Undertakings."

CHAPTER VIII

SALES MANAGEMENT

A. Sales and Marketing Organisation

- 8.1. The sales department of the company was set up in 1957 with a standard force of 20. In 1960, it was revised to 34. The force, in view of the sellers market which then existed primarily catered to the execution of the orders rather than their procurement.
- 8.2. As the new Units came into production, this strength was again found inadequate and was increased to 66 in 1966. This was again revised to 176 in 1968-69 with a view to:—
 - (a) have effective marketing and selling organisation to retain the company's position in the face of severe competition from other machine tool manufacturers;
 - (b) have proper sales staff to market the diversified range of machines including highly sophisticated machines;
 - (c) have a cadre of sales engineers required for selling engineering and methods rather than the machines;
 - (d) build up the export market;
 - (e) have a proper market survey and market survey research department; and
 - (f) strengthen the branch sales offices in the country, etc.
- 8.3. The Standard force of the Sales Department as on 31-3-1972 was 212. The Company is in the process of recruiting the required qualified personnel for handling the sale of new products such as Tractors, Printing Machinery etc.
- 8.4. The Company has developed its own selling organisation to replace the Sales Agency Agreement entered into with M|s. Voltas Limited for sale of Multi spindle Automatics and Drum Turret Lathes and with M|s. Mahindra & Mahindra for sale of FAY automatics. The selling agency agreements with these two firms which expired on 18-7-1972 and 2-4-1972 respectively have not been renewed. Market Research Department
- 8.5. The Company has set up a Market Research Department to study market trends and make demand surveys.

Sales Engineering Department

8.6. It has been contended by the Company that with the establishment of the Sales Engineering Department, it has been possible to secure upto 31st March, 1972 orders aggregating to Rs. 884.50 lakhs for tooled up machines.

B. Sales Promotion Efforts

- (i) Total Plant Engineering Service
- 8.7. In the Annual Report of the HMT for the year 1971-72 it has been stated that:—
 - "In its drive to expand sales the company is always on the look. out for new marketing techniques and innovations. total Plant Engineering Service which was introduced increasingly popular among the small and medium scale entrepreneurs in the engineering industries. Under the total plant engineering scheme, the Company does not sell the machine tool without ascertaining the purpose for which the customer needs a particular type machine. Through the Project Engineering Department, the requirement of most of the customers are processed and proper advice is rendered on what types of machine tools they should buy and what special tools and accessories should be supplied to them along with the machine tools to perform a given job at a specified rate and accuracy."
 - (ii) Integrated approach to the requirement of machine tool customer
- 8.8. Apart from the above technique, during 1971-72 the Company has introduced another marketing method viz an integrated approach to the requirements of the machine tool customer. The Company handles, if required, the total needs of machine tools of a customer, for producing a certain product at a given rate, specifications and accuracy standard. The Company suggests suitable types and sizes of different machine tools and tool up machines for the customer. This in short means not merely selling machine tools but selling the most efficient production processes to the customer. The Scheme is becoming popular among industrialists particularly in the automobile and scooter industries.

(iii) Promotional Sales Schemes

8.9. In order to promote sales, the Company had introduced the Deferred Payment Sales Scheme (1966-67). Instalment Scheme and Hire Purchase Scheme (1968-69). The turnover under these schemes achieved by Units I & II and III is given below:—

(Rs. in lakhs)

Year	Deferred payment sales scheme	Hire Purchase sales scheme	Instalme nt scheme
1966-67 .	10. 18		
1967-68 .	74.84		••
1968 -69 .	108.58	2 · 89	2. 20,
1969-70 .	230.39	29.64	1.37
1970-71	. 214.99	16.39	2·29
1971-72 .	206.99	12.85	7.46

8.10. The Committee enquired about the steps taken to bring about improvement in the Promotional Sales Schemes. In a written reply the Management have stated as under:—

"We have mechanised the system of Deferred Payment and Instalment Schemes by printing the necessary proforma and distributing them to the prospective customers in Fairs, Exhibitions etc. We have also made arrangements with the Bankers and Regional Offices to get the documents executed without any delay. The Hire Purchase Scheme has been withdrawn. The sales under these schemes depend largely on the customers requirements and also their ability to furnish the requisite Bank Guarantees. We are also taking advantage of credit available to our customers under the RBI Bill Market Scheme to promote the sale of our machines."

(iv) Demonstrations in Show-rooms

8.11. During the year 1970-71 the Company held special demonstration at their show-room, at Bombay, Calcutta, Madras and Delhi when potential buyers were invited. The Committee enquired

about the firm orders received as a result of such demonstrations. In a written reply the Management have stated as follows:—

"The main results expected out of such demonstrations were to make the quality and performance of the Company's products known to the various machine tool using customers in those areas. This purpose has been adequately served in as much as a number of enquiries were received or being received after the demonstrations. demonstrations would continue to have a long standing and enduring effect in the minds of prospective customers about the quality and performance of HMT's products demonstrated. The sales promotional effects of such demonstrations should not, therefore, be guaged with reference to orders booked during the demonstrations and it will not strictly be possible to assess the direct result of the demonstrations in terms of orders received. However, as a result of these special demonstrations firm orders for supply of machine tools as detailed below were received and the same have since been executed.

Bombay .						. Rs. 12.00 lakhs (Approximat)
Calcutta .						. Rs. 5.00 lakhs "	
Madras .		•		•	•	. Rs. 6. 00 lakhs ,,	
Delhi	•	•	•		:	. Rs. 22.00 lakhs ,,	

- 8.12. During the year 1971-72 the Company held a demonstration of its products at Ludhiana and Batala in Punjab. It has been stated that the industrialists in this region were impressed by the high quality and versatility of the Company's machine tools. They showed keen interest in Turret Lathes, Grinders, Mini Chuckers and Gear Shapers.
- 8.13. The Company also participated in the exhibition in Madras sponsored by the Tamil Nadu Industrial Estates Association and Federation of Small Scale Industries Associations of India.
- 8.14. The Company also participated in the Indian Machine Tool Manufacturers Exhibition held in Bombay. The Company exhibited amongst other machine tools, an 'Electronic Digital Read Out' on Centre Lathe A24 at this exhibition.

(v) International Fairs and Exhibitions

8.15. In order to project a better image of HMT products in the World Market, the Company exhibited its machine tools in the

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International Trade Fairs and Exhibitions Year-wise detail of expenditure incurred on fairs and exhibitions in which HMT participated from 1969 to 1972 are as follows:—

1969-70 .	•		٠	Rs. 1.28 lakh:
1970-71	•	•		Rs. 6. 79 lakh:
1971-72 .				Rs. 2. 19 lakhs

Orders received during the Fairs are indicated in Appendix IV.

8.16. In regard to the orders secured by the Company, the Management have stated that "the effect of participation in the exhibitions cannot be gauged only by the orders booked during the exhibitions as participation in these exhibitions is also intended to create a very high impression about the high quality of our products in the minds of machine tool users who visit these exhibitions."

8.17. The amount spent on export promotion tours are as follows:—

1968-69 .	•	Rs. 0.85 lak	hs
1969-70 .		Rs. 0.20 lak	hs
1970-71 .		Rs. 0.51 lak	hs
1971-72 .		Rs. 0.61 laki	h۹

8.18. Asked about the results achieved as a result of such tours the management have stated as under:—

"We were able to assess the market potential, locate suitable Agents, create interest in HMT Products and understand the problems of existing agents in marketing HMT Products. We were also able to come to understandings with leading firms like M|s. American Tool Works, Marwins and Hermann only as a result of such export promotion tours. Such export promotion tours were also necessary to attend to various problems connected with the setting up of Branch Offices at Australia, Luxembourg etc. As a result of these tours HMT was able to finalise technical co-operation Agreement with leading firms abroad to develop products required for future."

(vi) Export Offices

8.19. The Company has opened export offices in Melbourne for Australia and New Zealand, in Luxembourg for Europe and New York and Los Angeles for America.

- 8.20. It has been stated that the Office in New York has since been closed.
- 8.21. HMT was registered as a foreign company in Australia on 10th August, 1971 and the branch commenced its operation in November, 1971. During 1971-72 the expenditure on this branch amounted to Rs. 1.34 lakhs. The branch booked orders to the extent of over Rs. 40 lakhs during this year. The export sales done through the branch in the region (Australia and New Zealand) during the year amounted to Rs. 27 lakhs.
- 8.22. The Company has also terminated the agency agreement with M|s. Blyth Greene Jourdain Pty. Ltd., Melbourne, Australia and it has since started 'Direct Selling' of machine tools in Australia through its own branch office with a view to improve the sales performance in that country.
- 8.23. The Management have stated that at present the Company is operating in Europe through Agents and has sold over 400 machines to various customers in Europe. The Company's image and standing has become strong enough for embarking on a campaign for direct sales in Europe. The products which the company is planning to market in Europe need various types of controls, including numerical control, specialised accessories, tooling and attachments, etc. With this idea, the company is planning to set up a base in Luxembourg to receive machine tools from India and to market them in Europe after adding the required accessories and controls (including numercial controls) and also to tool up the machines to suit the customer's requirements.
- 8.24. The year-wise selling expenses incurred for the maintenance of HMT's Offices abroad are as follows:—

Year					Expenditure incurred (in Rs. lakhs)
1967-68 .	•	•			5.92
1968-69			•	•	7.07
1969-70 .			•	•	11.37
1970-71 .	•				10.94
1971-72 .					14.95

(vii) Consultancy Services

8.25. The Company provided consultancy service to Ceylon.

As per the agreement HMT has to render technical assistance to

M|s. Ceylon Steel Corporation for the manufacture of the following machines in their works.

- 1. Centre Lathe LB Type—Simplified, Swing 340 mm admit between Centres 700 mm and 1000 mm.
- 2. Double ended Pedestal Grinder, Wheel dia, 250 mm.
- 3. Shaping machine, Stoke-630 mm.
- 4. Bench Drill with single speed motor-capacity-13 mm.
- 5. Bench Drill with two speed motor capacity—13 mm.
- 6. Power Hacksaw, Capacity-200 mm.
- 7. Centre Lathe, Swing—400 mm Admit between Centres—100 mm.
- 8. Bench Drill, Capacity-20 mm.
- 9. Pillar Drill, Capacity-20 mm.
- 10. Ram Turret Type Milling Machine, Table size 225 mm x 1000 mm.
- 11. Centre Lathe, Swing—500 mm. between Centres 1000 mm and 1500 mm.

For the various services rendered by HMT M|s. Ceylon Steel Corporation is required to pay HMT a lumpsum amounting to Rs. 5 lakhs. As a result of this Agreement HMT also finalised an Agency Agreement with M|s. Ceylon Steel Corporation for marketing HMT products in Ceylon. The value of exports to Ceylon upto 31-3-72 is Rs. 63.34 lakhs.

8.26. HMT has entered into a Memorandum of Understanding with M|s. Sigma Engineering Company in Philippines for manufacturing HMT LT 20 lathes (presently manufactured in HMT IV Kalamassery). The party in Philippines are forming a separate company by name Machine Tool Manufacturing Co., of the Philippines Inc. registered with the Board of Development in Philippines. Detailed terms and conditions have to be negotiated. If this project materialises, HMT expect orders for HMT machines valued at Rs. 33.5 lakhs. This will also open the doors for marketing HMT products in Philippines.

(viii) Appointment of Agents

8.27. The list of Company's Agents is given in Appendix V.

The year-wise value of exports through different Agents is given in Appendix VI.

Commission paid to Agents are as follows:-

Ms. Ceylon Steel Corporation:

Payable on machines supplied, i.e. commission accrued.

		Rs. 271,548·76
1971-72 .		Rs. 264·00
1970-71 .		Rs. 26,480.07
1969-70 .	•	. Rs. 123,747 · 81
1968-69 .		. Rs. 121,056·88

Other Agents in Africa

(1) Batimbhoy Gulamali, Adis Ababa 1969-70			Rs. 4,991 · 25
(2) M. Siddik, Khortum, Sudan 1970-71	•		5,201 · 52
(3) H.Y. Matloub, Baghdad 1971-72 .		•	757:40
(4) Blyth Greene, Jourdain, Australia 1968-69 .			7,989 .00
1970-71	_		120.748 00

- 8.28. Most of the Agency Agreements with Foreign Offices do not involve any payment of commission since the export business between HMT and these Agents is conducted on a principal to principal basis on the basis of agreed prices.
- 8.29. The Committee find that while the strength of the Sales Organisation has increased by more than 3 times i.e., from 66 in 1966 to 212 as on 31-3-1972. The value of sales has increased only by 100 per cent i.e., from Rs. 1222.74 lakhs in 1966-67 to Rs. 2444.46 lakhs in 1971-72. The Committee are informed that the Management are in the process of recruiting more personnel for sale of Tractors, Printing Presses etc.
- 8.30. The Committee need hardly stress that the Sales Organisation should not be unduly multiplied simply with the addition of new products. They recommend that the cost of sales organisation should be Commensurate with the sales turnover.
- 8.31. The Committee note that HMT have set up a Market Research Department in order to study market trends and make demand surveys. The Committee have already stressed the need for making a thorough study about the item-wise demand for the machine tools in the country so that the future production programme is planned on a realistic basis. The Committee hope that with the setting up of this Department, the demand survey with regard to machine tools would be expedited. The Committee recommend that the Company/Market Research Department should

make a special study about the requirements of the small scale sectoras they feel that HMT has an important role to play in the growth and in the modernisation of machinery and equipment in the small scale industries.

- 8.32. The Committee also note that the Company has introduced new techniques of marketing. The Committee hope that the 'Total Plant Engineering Service' and the 'integrated approach to the requirement of machine tool customer' will pay dividends as the schemes intended to help the customers to purchase the right type of machines with full guidance about the production process.
- 8.33 The Committee would, however, stress that in order to sustain the confidence of the customers in the products of HMT the best form of sales management especially in sale of machinery would be in having an efficient after-sales service and providing aiready response to the difficulties of customers in the maintenance of machinery. The Committee also suggest that the sales marketing organisation should develop a system of feed back of information to the management regarding the types, and pattern of machine tools needed by the customers so that the programme of production is reoriented to the latest market trends consistent with the needs of customers.
- 8.34. The Committee also note that in order to project a better image of HMT products, the company have held a number of demonstrations of their machine tools in the country and have also participated in a number of International Fairs and Exhibitions. The Committee however, find that in most of the Inter-Exhibitions the Company could not secure national Fairs and even a single order. In this connection the Management have stated that the effect of participation in the exhibition cannot be gauged only by the orders booked during the exhibition as the participation in these exhibitions is also intended to create a very high impression about the high quality of products in the minds of machine tools users who visit these exhibitions. The Committee, however, feel that the Company should be able to clearly state the end results of such participation in monetary terms so as to justify the huge expenditure incurred on such exhibitions. As far as possible the results achieved in procurement of orders should be commensurate with the expenditure incurred by the Company on foreign tours and on participation in exhibitions.

(C) Agreement with M/s. R. G. Gardner Machinery Company and M/s. Vernick Machinery Company U.S.A.

- 8.35. The Company entered into an agreement with M/s R. G. Gardner, Machinery Company in April, 1969 for a period of five years. This agreement came to an end in December, 1970, as the firm terminated the agreement in October, 1970 and the Company in turn had to terminate the same in December, 1970 as the firm did not fulfil a number of contractual obligations. The agreement entered into in May, 1969 with another firm M|s. Vernick Machinery Company for a period of 3 years was also terminated in September, 1969 as the firm gave up all lives of machine tool distribution. The final settlement in terms of the agreement, is, however, pending with these firms.
- 8.36. During evidence the Chairman, H.M.T. explained the position with regard to these two agreements as follows:—
 - "M/s. R. G. Gardner Machinery Co. was an agent for us in Canada. He did fairly well in Canada and in year 1968 we had no agent in America. So we extended his agency to cover the East Coast of America. Within one year he sold only one or two machines. I think that too on instalment basis in America. We were not happy with his agency and with his permission we started negotiating with AMTW (Ms. America Machine Tool Works) in America who gave us an order immediately. They said we will give the order of 400,000 dollars. Taking him into confidence we negotiated. It was agreed that would participate with AMTW to come to certain terms. What happened after I left is that in between them and the AMTW they could not come to an agreed solution s he fell out with our Agent. In the meanwhile, our negotiations with these people were almost finalised but did not want to enter into an agreement with AMTW until I got a clearance from Gardner Co. But what Gardner did was that he himself terminated our agency; so we had no other alternative except to accept this termination and appoint AMTW as our Agents.
 - In the case of Vernick Machinery Company for the West Coast of America, he simply disbanded the agency, he did not want to countinue. So now our agents in America are the AMTW people."

8.37. The Committee enquired whether the agreement with M|s. Gardner Machinery and Co. was entered into through the Indian Embassy. The Chairman, H.M.T. stated as under:—

"Now our Trade organisations are more effecient, I should say. But, in the initial stage, we found that it was our job to locate an agent. So we went to scout an agent ourselves and in the short period of time at our disposal it was not possible to locate a reliable agent. Then we started having our Branch offices in some countries. We had branch offices in Frankfurt. Melbourne and New York. Our branch offices at New York and Frankfurt started functioning and then, in the meanwhile Gardner himself came. We checked up with the Embassies and with the Banks—the banks always give references—to see whether he is reliable and so on. After checking all this and talking personally to the man, we appointed him."

8.38. As regards the claims and counter claims of the HMT and the above two firms, the management have, in a written reply, stated as follows:—

"The case is still pending in the Supreme Court of Toronto. M/s. R. G. Gardner Machinery Company have claimed as damages from the Company \$6.5 millions representing estimated loss of profits which they claim they have suffered due to termination of the contract. All the calims of this firm have been repudiated by the Company and the Company in turn has made a counter claim as per the details given below:

(Rs. in lakhs)

1. Amount due to the company in respect of sale proceeds of machines sold by M/s R.G. Gardner from out of the consignment stock

Damages for bench of contract
Damages for negligent misrepresentation
Damages for breach of trust
2.50

5. Cost of legal action

.6. Such further and other relief as court may deem fit

"M|s. Vernick Machinery Co., have executed promissory Notes in favour of HMT for U.S. \$11,983.81 in respect of sales proceeds of 3 machines sold by them during the currency of the agreement. The question of recovery of this amount is being persued by our Sales office in USA."

- 8.39. The Committee find that the Company appointed M|s. R. G. Gardner Machinery Co., in April, 1969 as their agents for the sale of Company's products in the Western Hemisphere but the same was terminated in December, 1970 as the foreign firm did not fulfil a number of contractual obligations'. The agreement entered into in May, 1969 with another firm M/s. Vernick Machinery for the Western Territory of USA was also terminated in September, 1969 as the firm gave up all lines of machines tool distribution.
- 8.40. The Committee were informed that M|s. R. G. Gardner Machinery Company claimed damages of the order of \$ 6.5 million from the Company representing estimated loss of profits which they claimed they have suffered due to termination of the contract. HMT had also preferred counter-claim of Rs. 32.50 lakhs plus the sale proceeds of machines sold by the agent, cost of legal action etc., and the case regarding claims and counter claims is stated to be pending in the Supreme Court of Toronto. M|s. Vernik Machinery Co., had executed promissory notes in favour of HMT for \$ 11,983.81 in respect of sale proceeds of 3 machines sold by them during the currency of the agreement. The question of recovery of the amount was being pursued by the Sales Office of HMT in U.S.A.
- 8.41. The Committee, therefore, recommend that the circumstances in which the agreements were entered into should be thoroughly investigated and responsibility for the lapse in the process of fixing up the agencies should be fixed. The Committee would like to be kept informed of the settlement of the claims preferred by the Company. The Committee also urge that Government/Company should evolve an effective procedure for selection of and entering into agreements with agents/foreign firms so as to avoid recurrence of such mistakes in future. The Committee suggest that such agreements should be finalised with the help of Indian Missions abroad only after full knowledge about the firms concerned.

(D) Agreement with M/s. American Machine Tools Works

8.42. The Company entered into an agreement with Mis. American Machine Tools Works in February, 1971. The American firm placed a blanket purchase order for 304 machines valued at \$1.475 millions and detailed firm purchase orders for machines valued at \$3,88,100. The present position of orders received and despatches made in as follows:—

"Orders received 109 machines valued at \$549290. Orders executed—77 machines valued at \$382795. Machines

awaiting despatch in the Port-5 machines valued at \$ 22925.

8.43. The Committee enquired whether the Company had been able to adhere to the delivery schedules prescribed against the firm purchase order and whether the reasons for non-receipt of further orders have been analysed. In a written reply the management have stated as follows:—

"We were not able to adhere to the delivery schedule as required by them for the following reasons:—

Many modifications had to be carried out on our existing products to suit to the American Market.

Unavoidable delay in development of a new variant in case of A24UP lathes required for their market.

Unavoidable delays in modification of tail stock and development of new taper turning attachment required by them to suit the American Market.

It has, however, been stated that: "there was no cancellation of orders as a result of these unavoidable delays in production."

The Management have further stated that as per the Agreement AMTW receives the machines from HMT without electricals and finish painting. AMTW on their part after receipt of the machines arrange for electricals to be assembled test the machines, finish paint them and then sell to their customers. Initially this took longer cycle time to co-ordinate at their works. The testing procedure followed in Indian and in American were slightly different. Certain items procured locally and supplied along with the machines were not acceptable as per American Practices. (For example flexible and conduits and Sheet Metal work). AMTW had to specially procure and change these items at their end. This resulted in unexpected delays in delivery of machines by AMTW to their dealers and customers. Hence introduction of HMT machines in American Market was delayed and hence AMTW could not release further orders for all the Variants. As a result of mutual consultations these difficulties have since been overcome to a great extent. After release of the first order of 76 machines AMTW have released fur-

٠.

ther orders for 33 machines. We do not anticipate any difficulty in getting further orders from AMTW."

- 8.44. The Committee note that whereas the Company appointed M/s. American Machine Tool Works as their agents for the sale of the Company's product in the Western Hemisphere consisting of North, South and Central America in February. 1971 and the American firm placed a blanket purchase order for 304 machines valued at \$ 1,475 millions, only 109 firm orders had been received by HMT and out of these only 77 have been executed so far. HMT could not adhere to the delivery schedule as many modifications had to be carried out in the existing products. Certain items procured locally and supplied along with the machines were not acceptable as per American practice. The foreign firm had to specially procure and change these items at their end which resulted in delays in delivery of machines by the firm to their dealers and customers. the introduction of HMT machines in American Market was delayed, M/s, American Machine Tool Works could not release further orders.
- 8.45. The Committee feel that complete manufacturing details and specifications should have been settled in advance before the orders had been accepted for execution to as to obviate the difficulties in acceptance of the products by the customers at the time of delivery. The Committee would also urge that once the orders are accepted the Company should ensure timely delivery of the machines and honour the commitments.

(E) REVIEW OF ENQUIRIES RECEIVED

- 8.46. The Company maintains detailed Statistics of the enquiries received in respect of special purpose machines and tooled up machines. No such detailed statistics are, however, maintained in respect of enquiries received for standard general purpose machines. In these cases, enquiries received are attended to by Sales Engineers and the Divisional Sales Engineers and the Divisional Sales Offices and Central Sales Offices. The follow up action taken by Sales Engineers and Divisional Sales Engineers are indicated in the sales call reports submitted to the Central Sales Office from time to time. The Company stated (March, 1971) that a computer system has now been evolved to have an effective control over Machines (including Fine boring machines) and Fay Automatics:
- 8.47. The Committee enquired whether the Company have been able to exercise an effective control over the follow up action on the

quotations submitted by the Company for standard General Purpose machines with the introduction of a Computor system. In a written reply the management have stated as follows:—

"The categories of machines marketed by the Company are the following:—

- 1. Standard General Purpose machines.
- 2. Special Purpose machines.
- 3. Tooled up machines.

In the case of Special purpose machines the customer's enquiry is always specific as to the requirements and hence it will be possible to maintain the detailed statistics of such enquiries, quotations and proposals submitted, etc. In the case of standard general purpose machines, the customer's enquiries broadly fall into two categories as follows:—

- (i) Some of the customer's enquiries received are specific as to their requirements.
- (ii) In a number of cases, enquiries received are quite vague and merely call for catelogues and price lists of our products. These enquiries do not indicate the exact requirements. As and when such enquiries are answered the copies of enquiries are sent to Sales Engineers/Divisional Sales Managers for further follow up action.
- Quotations are submitted both by Central Sales Office at Bangalore and also by Divisional Sales Offices. Copies of quotations submitted through Central Sales Office are again sent to the concerned sales Engineers/Divisional Sales Managers for further follow up action. The follow up action taken by Sales Engineers and Divisional Sales Managers are indicated in sales call Office from time to time. The Divisional Sales Managers conduct weekly meetings with their sales engineers to review the position of enquiries and follow up action taken and reports submitted to Central Sales or to be taken thereon.

Though we computerised the whole system we have found that it would not be of any use to keep statistics of enquiries received which as stated earlier do not reveal the accurate position of requirements inasmuch as many of the enquiries are vague. We have also found by experience that maintenance of elaborate system for collecting

data in respect of non specific and vague enquiries may not serve any useful purpose. Further computerisation has been found to be effective and useful for reviewing the periodical follow up action taken through the sales calls report.

As the company has an effective system to control the follow up action in respect of quotations submitted by the company through the sales call reports, we feel that the purpose is adequately served by the present system. Further it is also ensured that all enquiries received by the various offices of the company are adequately replied and followed up."

The following table indicates the statistics relating to enquiries processed by HMT V, Hyderabad during the years 1970-71 and 1971-72:—

	As on 31 for the ye			As on 31 for the ye		-72
	SPMs (in clusive of		H.B.	SPMs (in clusive of		н.в.
r. No. of enquiries received .	285	24	104	440	30	223
t. (a) Enquiries for which no quotations were sub- mitted as the manufac- ture was found un- economical	2 1	2		40	7	
(b) Quotations pending submission	12	2	5	15	9	4
Quotations submitted by the company	252	20	99	385 + 12	*14+2	*2 19+5
Quotations waiting custo- mer's decision	42	5	28	162- 5*	. 9	45+3 *
Quotation dropped/rejected by customers	200	14	64	207 + 7*	2 - 2 +	157-+-2
Quotations confirmed as firm orders	41	13	7	51	8	I,

NOTE: *Indicates the figures carried forward from the year 1970-71.

The percentage of quotations confirmed as orders to the quotations submitted during 1970-71 and 1971-72 is as follows:—

				1970-71	1971-72
SPM			•	18.3%	12.8
FAY	•	•	•	65· 0 %	50·0%
HBs				7.1%	7.6%

The Management stated (March, 1971) as follows:---

- "Even according to our collaborators, if 20 per cent of quotations materialise into orders, the same should be considered as very satisfactory for the Special Purpose Machines"
- 4.48. The Committee note that against 440 enquiries received in 1971-72 quotations were submitted only in respect of 385. Even out of this only 51 orders could be confirmed. The Committee are surprised to note that only 12.8 per cent of the quotations submitted by the Company for special purpose machines were confirmed as orders during 1971-72. The Committee are not satisfied with the explanations offered by the Management that "even if 20 per cent of quotations materialise into orders, the same should be considered as very satisfactory for special purpose machines". Even on the basis of this statement the position is unsatisfactory. The Committee therefore recommend that the exact reasons for rejection of enquiries by customers should be carefully analysed in depth so that the company can take adequate steps to satisfy the customers with regard to prices and working of the special purpose machines etc. The Committee also recommend that a complete record of orders received should be maintained so that further information is available to the management for taking appropriate action at the appropriate time.
 - 8.49. In view of the idle capacity in Unit V due to low order position, the Committee recommend that HMT should take special steps including convassing and advertising in order to attract more buyers. The customers should be offered special payment terms and after sale service should be guaranteed.
 - 8.50. The Committee hope that with the introduction of computer system an effective control would be exercised over the follow up action on the quotations submitted by the Company.

¥,066

1,356

1,401

2,243

2,465 (122) 3,003 (129)

3,599 (335) 3,829 (386)

1,418

1,047

1,302

(169) 2,401 (229)

8

(166) 1,428 (157)

(63) 1,608

1,886

2,459 (216)

1,117

1,370

1971-72

8

(170)

<u>§</u>

(53)

2,297 (138)

(8I)

2,1 2,∞ 4

P. Order Position

8.51. The following table indicates the position of orders received and executed by the Company (as reported to the Board of Directors) during

F1966-67 to 1971-72.	cuted Pending Orders	Value No. Value	1,035 1,289 876	738 579 390	836 794 512	1,105 1,403 1,032		
	(Value	Orders executed	No. Va	2,505	1,591	1,757	2,312	
e) finedimo		cı .	Value	116'1	1,128	1,348	2,123	
med by the		Total Orders	° N	3,794	2,170	2,551	3,715	
בת שוער בעברו		eived e year	Value	1,152	553	766	1,521	
ותכוז וברכזא		Orders received cluring the year	No.	2,276	1,141	1,973	2,814	
		alance	Value	759,	. 575	351	602	
c maranes me p		Opening balance	No.	1,518	1.029	878	8	
951. The following 400 366-67 to 1971-72.		Year		. 29-9961	1967-68	1968-69	02-6961	

OTES: I. Includes consignment orders shown in brackets, wherever available.

The pending orders and value at the close of the year do not agree with the opening balances of the subsequent years. It has been explained by the Company that it had been the practices to adjust the cancellation of letters of intent and also of firm orders both inland and export received during the previous year to the opening balances as at the beginning of the next year and to show the net balances only as opening balances of the pending orders. ų

3. The figures in the table do not include the data relating to accessories.

- 8.52. It is seen that the value of orders received by the Company during the years 1967-68 to 1971-72 was very much below the developed capacity in the various machine tools unit of the company. The value of pending orders was also below the developed capacity. The drop in the order position has been attributed to the recession.
- 8.53. During evidence the Committee enquired about the steps being taken to utilise optimally/fully the capacity in the different units of HMT. The Secretary of the Ministry stated as follows:—
 - "So far the Government is concerned, besides thinking of new lines of production, it has also been our effort to see that whichever material HMT can produce is not allowed to be imported. As a matter of fact, the application for import of capital goods is scrutinised very strictly by us from the point of view of indigenous manufacturers and availability of the same with particular reference to the capability of public sector units and in the process even if the deliveries of the indigenous products by the local units are somewhat longer and the prices are marginally higher, we see that indigenous availability is fully made use of and imports are not allowed. So far as the Government is concerned, we try our very best to ensure that the indigenous capability is fully utilised not only of HMT but indigenous capability as machine sector as a whole, with particular reference to the HMT and so far as HMT itself is concerned, the steps that we have taken are to diversify the new lines of production, to optimise the capacity, to improve the performance of the HMT."

G. Product-wise order position

- 8.54. The product-wise analysis of orders received, executed and pending vis-a-vis closing stock for the years 1966-67 to 1969-70 indicates that there was accumulation of stock with reference to the pending orders in the case of LB Lathes, Grinders, Radial Drills, Milling Machines (M2 and M3) Gear shapers and L—22 in Units I & II during 1967-68 and 1968-69 and that of Milling Machine, F3|4, M2 & M2P in Unit III during 1968-69 and 1969-70. The accumulation of stock has been attributed to the prevalence of recession in the engineering industries during these periods.
- 8.55. In the case of new products (e.g. SSA, MSA, Gear Hobbers, Mini-Chuckers, Broaching Machines, Drum Turret Lathes), although the pending orders were more than the machines in stock in all the years, it was noticed that in respect of orders received for 52 such

machines (Mini-Chuckers, SSA, Grinders and Gear Hobbers) received before the first half of 1969-70 and earlier and for which the promised date of delivery also fell within 1969-70, the Company had not executed the orders.

- 8.56. The Company stated (March, 1971) that the manufacture of Special Purpose Machines and Sophisticated Machines involves more technical and production problems than in the case of General Purpose Machines (e.g. Lathes, Radial Drills, Milling Machines, Grinders, etc.) and takes a longer production cycle and that most of the orders were received only in the 3rd and 4th quarters of the financial year and hence did not provide the required lead time for procurement of materials and for completing production.
- 8.57. The product wise analysis of orders received executed and pending vis-a-vis closing stock for the years 1970-71 and 1971-72 indicates that while there was an accumulation of stocks with reference to pending orders in respect of established products, the pending orders in the case of new products were, by and large, more than the closing stock. Accumulation of stock in respect of established products has been stated to be due to drop in order position. The above phenomenon is indicative of the fact that, while the company was short of orders in respect of established products, there was no dearth of orders for other products.
- 8.58. The Committee enquired about the steps taken to improve the order position in respect of established products. In a written reply the management have stated as under:—
 - "The company is undertaking very possible step towards aggressive sales promotion to book as many orders as possible by means of participation in exhibitions, by conducting demonstrations of machine tools, by improving the after sales servicing facilities, by sale of spare parts at showrooms, aggressive advertisement campaign, etc., by conducting frequent sales staff orientation programmes, etc. We have also introduced a Sales Incentive Scheme to motivate the sales Engineers to put in more vigorous efforts for procurement of orders. There was an improvement in the order position during 1971-72. The value of orders received upto 31-12-1972 amounts to Rs. 1394 lakhs."
- 8.59. As regards the steps to improve the production performance in respect of sophisticated machines it has been stated that a number of initial production difficulties in the manufacture of the sophisticated machines have been solved. Action has also been

taken to increase the indigenous content in these machines. The production of these high value machines, however, depends on the demand for the same which in turn would depend on several socio-economic conditions."

8.60. The Committee find that there has been an accumulation of stocks in regard to established products such as lathes, grinders, radial drills, milling machines etc. During the years 1967-68 to 1969-70 such an accumulation has been attributed to recession and during 1970-71 and 1971-72 it has been stated to be "due to drop in the order position." The Committee also note that whereas the Company was short of orders for the established machines, they could not execute the orders for sophisticated machines within the prescribed dates of delivery as according to the Company the manufacture of such machines involved more technical and production problems then in the case of General Purpose Machines (eg. lathes, radial drills, milling machines, etc.).

8.61. The Committee were informed that a number of initial production difficulties in the manufacture of sophisticated machines have now been solved and action has also been taken to increase the indigenous content in these machines. The Committee would also like that the reasons as to why the Company went on manufacturing standard machines without any orders therefor should be investigated. It has also been stated that a number of steps towards sales promotion by means of participation in exhibitions, by conducting demonstration in showrooms, by improving the after sale servicing facilities are now being taken in order to improve the order position in respect of established products. The Committee hope that as a result of such steps the orders position both in regard to established products and sophisticated machines would improve.

H. Delay in the Execution of Orders

8.62. The age-wise details of the pending orders exclusive of consignment orders as on 31st March, 1970 were as follows:—

(Value in lakhs of Rs.) Year Inland Export Total Value No. No. Value No. Value 1967-68 6.15 100 10 6.15 . . 1968-69 94 180.28 2 0.74 96 181.02 1969-70 885 784.72 201 44.18 1,086 828.90 979 965.00 213 51:07 1,192

[@] Orders for these machines were subsequently cancelled by the foreign buyers.

8.63. Out of the pending orders for 1205 machines (excluding consignment orders) at the end of March, 1970 the number of orders not executed although the promised dates of delivery had expired, was 293 as indicated below:—

								(Rs	. in lal	kha)
Year of delivery							Inland	Orders	Export Orders	
							No.	Value	No.	Value
1968-69							10	11.54		
1969-70			•	•	•	•	280	162.74	3	

- 8.64. In this connection, the Ministry have stated (December, 1971) as follows:—
 - (a) Out of the orders for 293 machines, almost half of the quantity related to new products.
 - (b) In a large manufacturing organisation catering to the production and marketing of diversified products, it may not always be possible to adhere to the time schedule very strictly and certain relaxations will have to be made to take care of several unanticipated problems which may crop up in the course of production and execution of orders. Out of the machines due for delivery prior to 31st March, 1970 about 180 machines were due for delivery during the period January to March, 1970. In this case also, bulk of the orders have been executed in the subsequent months of 1970-71."
- 8.65. The Management have now informed the Committee that all the 293 orders mentioned above have since been executed fully.
- 8.66. The age-wise details of pending orders exclusive of consignment orders as on 31-3-1972 were as follows:—

(value Re. in lakha)

		(1 TO: 11 MONO)							
Year	Inlen	d	Expo	ort	Total				
	No.	Value	No.	Value	No.	Value			
1969-70	41	55.89		• •	41	55.89			
1970-71	206	183.87	••	••	206	183.87			
1971-721	891	1038 · 25	147	51.46	1038	1089.71			
	1138	1278.01	147	51-46	1285	1329.47			

8.67. Out of the pending orders (excluding consignment orders) as on 31-3-1972, the number of orders which could not be executed prior to 31-3-1972 although the promised delivery dates were prior to 31-3-1972 was 340 as per details indicated below:

Year	In	nland	Ex	port	Total	
	No.	Value	No.	Value	No.	Value
	14.0			(v	alue Rs. in	lakhs)
1969-70	I	0.12			1	0.12
1970-71	18	2·49			18	2.49
1971-72	320	147.99	Ţ	0.30	321	148-29
	339	150.60	I	0.30	340	150.90

8.68. It has been stated that as on 1-1-1973 out of the above, 106 orders valued at Rs. 43.99 lakhs were pending execution.

It has been further stated that-

Out of the Inland orders valued at Rs. 150.60 lakhs which could not be delivered prior to 31-3-1972 only 2 orders valued at Rs. 89,000/- related to HMT I & II units and 45 machines valued at Rs. 21.79 lakhs related to HMT III, Pinjore. The bulk of the machines i.e. 292 machines valued at Rs. 127.92 lakhs related to HMT IV, Kalamassery unit. This unit had to face the labour problems in the form of agitations, go slow tactics and strike during 1971-72 which had seriously affected the production and delivery schedules.

8.69. The Committee enquired whether the delivery period quoted in respect of new products did not take into account the various problems connected with the development and production of new products. It has been stated that—

"While delivery dates are quoted generally after taking into account the various factors more particularly in respect of new products, which involved initial production difficulties and also need tooling up it is not always possible to adhere to the delivery dates very meticulously. The customers also contribute to delays in regard to approval of tool designs, supply of trial components, etc. The dates will have to be modified after negotiating with customers after these details are furnished by them."

8.70. During evidence the Committee enquired whether the Company kept the Government informed about the delay in the execution of important orders and if so, the manner in which the Government helped the Company in adhering to the delivery schedule. The Secretary of the Ministry stated as under:—

"They sent us a report about delays in execution of orders. We have requested the Government Directors in the Board to review from time to time the order position and the extent to which deliveries are kept up. Whenever any assistance is needed from Government we extend the necessary assistance when for reasons beyond the control of HMT, they are not able to adhere to some orders and there are risks of certain penalties being levied. HMT does bring such cases to our notice. All such cases are discussed in the Board from time to time."

8.71. Asked whether the Ministry got any report from the Undertakings from time to time, it was stated:—

"There are quarterly reports. If there are any problems in regard to labour, availability of raw material etc. a detailed report does come. But individual orders and their position, the Board reviews these matters in each of their meetings."

I. Cancellation of Orders

8.72. The table below indicates the details of the orders cancelled together with their value during 1966-67 to 1971-72:—

Units I & II Unit III Unit IV Unit V Total No. No. No. No. Value 1966-67 4 13 24 11.81 1967-68 146 54 **5**I 55 306 318.04 8 1968-69 54 91 50.97 88 1969-70 47 27 14 ٠. 35.42 42 205 21 3 155.54 1970-71 139 Nil 200 22 39 114.53 1971-72 139 167 58 914 686-31 157 532

(Rs. in lakhs)

- 8.73. It will be seen that the value of orders cancelled during 1967-68 was the highest. The cancellation of orders has been attributed by the Company to the followings—
 - (a) Change in customer's requirement subsequent to placement of the orders (Rs. 235 lakhs).
 - (b) Financial difficulties faced by the customers (Rs. 102.57 lakhs).
 - (c) Difficulties experienced by the customers in getting the Projects sanctioned from Government (Rs. 101.84 lakhs).
 - (d) Cancellation of letters of intent earlier booked as orders but later on removed as orders could not materialise for several reasons (Rs. 194.18 lakhs).
 - (e) Delay in delivery of machines (Rs. 52.72 lakhs).
- 8.74. During evidence the Committee enquired about the reasons for such abnormal cancellation of orders. The Chairman, HMT stated that during the recession period there was no money and the customer's cancelled orders. It was a little abnormal cancellation.
- 8.75. The Committee pointed out that the value of orders cancelled due to delay in delivery of machines in 1970-71 and 1971-72 aggregated to Rs. 40.65 lakhs as against Rs. 12.07 lakhs during the years 1966-67 to 1969-70. It was stated that "This is mostly in very small scale sector. These are for standard machines and not for special purpose machines. We accepted the cancellations because we were late in supplying those machines. These mahines can always be supplied to some other customer."
- 8.76. The Committee desired to know the financial implications of the cancellation of orders and enquired whether there was any penalty damages clause for cancelling the orders by the customers subsequently. In a written reply the Company have stated as follows:—
 - "In any business organisation it is not always possible nor practicable to expect that every order booked will be ultimately executed. Cancellation of orders, therefore, is inevitable in any business organisation. In respect of standard general purpose machines, which are manufactured to standard designs of the company and not to suit any particular customer requirement, the machines can always be reallotted from one customer to another and hence cancellation will not have any financial implica-

tion. The company also receives advances against orders without involving any interest liability. In view of these factors and also in view of the necessity to maintain good customer relationship which is of permanent importance for running the business organisation like ours, the question of any financial liability on the part of the customer does not arise in such cases. However, where cancellation of orders involves machines built specifically for customer requirement the company usually forfeits the advance received against the order. In this connection we would also like to further clarify that each and every case of cancellation is examined in detail on its merits and decision is taken only after such detailed examination."

8.77. The Committee find that out of the pending orders for 1285 machines (excluding consignment orders) as at the end of March, 1972, 340 orders could not be executed although the promised delivery dates had expired. As on 1st January 1973, 106 orders valued at Rs. 43.99 lakhs were still pending execution. The Committee also find that orders worth Rs. 52.72 lakhs were cancelled as the Company could not supply the machines on the due date of delivery.

8.78. The delay in the execution of orders in respect of new products was stated to be mainly due to the initial production difficulties.

The Committee need hardly stress that the delay in the execution of orders acts as an inhibiting factor in securing further orders as well as in the cancellation of orders already secured. They recommend that effective steps should be taken by the Company to ensure that the delivery dates are adhered to.

8.79. The Committee note that during 1966-67 to 1971-72 orders worth Rs. 686.31 lakhs were cancelled. Besides delay in the delivery of machines, the orders were cancelled due to change in customer's requirement subsequent to placement of orders, financial difficulties faced by the customer, difficulties experienced by the customers in getting the projects sanctioned from Government, cancellation of letters of intent earlier booked as orders but later on removed as orders could not materialise for several reasons. The Committee feel that many of the problems quoted above could however solved if the Government/Management had taken suitable steps at the appropriate time. Financial difficulties faced by customers due to delay in getting loans or difficulties experienced by the customers in getting the projects sanctioned from Government can be solved by the Ministries

concerned. The Committee recommend that appropriate steps to help the customers to lift the machines should be taken as soon as such difficulties come to the notice of Government/Management.

J. Machines in Stock

8.80. Against orders pending for 1,271 machines (excluding consignment orders) as on 31-3-1972 the company held in stock 1,075 machines valued at Rs. 644,00 lakhs as per details given below:—

No.	Value (Rs. lakhs)
20	10.00
285	115.00
337	274.00
433	245.00
1075	644.00
	285 337 433

- 8.81. During evidence the Committee enquired as to the reasons for so much stock of machines lying with the company. The Chairman, H.M.T. stated—
 - "My stock can be split up into stocks held abroad and stock in India. I have to keep abroad stock worth Rs. 1-1|2 crores because when an order is received from abroad, I will not get enough time to despatch it from here. Then, we are facing a peculiar situation where the customer refuses to lift the machines even though he has placed the order. I have got a customer for whom I am holding machines worth Rs. 40 lakhs for the last one year."
- 8.52. He added that "HMT has been asked to do the job of supplying machinery to the major parties in the private sector. I supply very sophisticated automobile and tractor machines to the private sector. They have got their own difficulties in receiving finance."
- 8.83. The Committee enquired whether the programme of manufacture was also undertaken by the company to bring down underutilisation cost in anticipation of orders. In a written reply it has been stated that—
 - "The bulk of machines carried in stock without orders relate to products manufactured in HMT III, i.e. 194 machines valued at Rs. 125.00 lakhs. The accumulation of stock in this unit is partly accounted for by the fact that under-

taking production of machines to optimise the available capacity to the extent practicable."

8.84. In a written reply the Management have stated that the value of machines which could not be lifted by customers due to financial difficulty was as follows:—

					(Rs. in	
	нмт і	II	нмт ч	V	HMT I &II	
	No.	Value	No.	Value	No.	Value
1969-70	4	265	• •	• •	57	40.40
1970-71			9	41.60		
1971-72			2	8.50	2	7.00
1972-73			26	49.00		
	4	265	37	99. 10	59	47.40

- 8.85. The major customers are: -
 - 1. M|s. K. S. Diessels, Bombay.
 - 2. M/s. Escorts, Delhi.
 - 3. M|s. Primier Automobiles, Bombay.
 - 4. M|s. Bharat Fritzerner, Bangalore
 - 5. MIs. Bimetal Bearings, Madras.
 - 6. M|s. Ashok Paper Mills, Shillong.
 - 7. M|s. Kirlosker Oil Engines, Poona.
 - 8. NSIC, Delhi.
 - 9. M|s. Fuel Injection, Bombay.
 - 10. Ms. Mahabir Imports & Exports.
 - 11. M|s. Divgi Metal Works.
 - 12. M|s. Sound Zwarad, Gwalior.
- 8.86. During evidence the Secretary of the Ministry explained that in case of certain special purpose machines though the advance was paid by the customers but the machines were not lifted because the customers could not finalise their arrangements with the financial institutions with regard to the credits on the basis of which they could lift the machines. The Committee suggested that there should be a

penalty clause for parties like Mahindra & Mahindra, Birla concern etc. The Secretary to the Ministry stated as follows:—

"In some cases where the financial position of a customer has deteriorated he has even allowed the advance to be forfeited rather than trying to find the money to take delivery of the goods ordered. So far as the general purpose tools are concerned, one can find alternative customers because these are machines used for general purpose. When the initial customer does not take machines ordered it does pose a problem. Of course, we have discussed this with the HMT whether penalty for failure of taking delivery could not be made stiffer, but this is a matter of customersupplier relationship and HMT has been feeling that if they take too stiff a line, it may create problems for them in booking fresh orders. Where HMT is the only manufacturer in a particular line they can insist on stiff penalties for not lifting the goods ordered. But where there is more than one supplier, especially in regard to tractors. there is an obvious reluctance on the part of the HMT to take a stiff line in this regard. The effort has always been to persuade and try to sell the goods as far as possible."

8.87. The Committee are surprised to note that as on 31st March, 1972 the Company had in stock 1075 machines valued at Rs. 644 lakhs. Out of these 433 machines valued at Rs. 245 lakhs were without orders. It has been stated that 194 machines valued at Rs. 125 lakhs were manufactured in Unit III merely to utilise the idle capacity in that Unit. One hundred machines valued at Rs. 411.50 lakhs were not lifted by the customers during 1969-70 to 1971-72 due to financial difficulties. Among these customers mentioned by the management are the reputed firms with sound financial position. The Committee fail to understand as to how the Company could not evolve a rational machinery for guarantee of payment from such customers. The Committee would like that the manufacture of 433 machines without a firm order for them should be investigated as the machines remaining unsold only block the Capital.

8.88. The Committee recommend that effective procedure should be evolved for ensuring prompt payment by sustomers who have placed firm orders. The question of imposition of penalty should be considered in the light of past experience. The Committee also recommend that the orders for the machines which were manufactured in anticipation of orders should be secured without delay so that undue accumulation of stock is avoided.

K. Sales Performance

. 8.89. The sales budgets are framed on the basis of the sales forecast made by the Company. The table below compares the actual sales unit-wise with the budgeted sales during the years 1966-67 to 1971-72:—

					(Rs. in lakhs)					
Particulars			Unit I & I		t Uni IV	t Uni V	t otal			
. 1				2	3	4	5	6		
1966—67										
Original budget		•	•	963.95	353.00	322.00	160.00	1,798 · 95		
Revised budget				754 · 62	145.64	269.00	66 · 71	1,235 97		
Actuals ·				726.04	136.68	305.45	54· 57	1,222 · 74		
Excess/Shortfall revised budget	over			()28 · 58	()8 · 96	(+)36·45	(—)12·14	()13·23		
1967—68										
Original budget		•	•	717.78	391 · 65	241.00	200.00	1,550-43		
Revised budget	•			513.00	227.00	231.00	231 · 17	1,202 · 17		
Actuals	•	•	•	515.33	236.53	212.22	219.34	1,183.42		
Excess/Shortfall revised budget	over	•		(·├) 2·33	(十)9·53	(—)18·78	()11 · 83	()18·75		
1968-69										
Original budget			•	635.00	225.00	251.00	182.00	1,293.0		
Revised Budget	•		•	619.00	231.20	182.00	178-44	1,210 '94		
Actuals	•	•	•	568 · 87	250. 57	196.97	175.27	1,191 · 68		
Excess/shortfall o budget	ver re	vis e c	i .	()50.13	(+)19.07	(+)14·97	() 3·17	()19·26		
1969—70										
Original budget			•	760·0 0	352.00	283.00	247.00	1,642 · 00		
Revised budget	•	•	•	625.00	243.00	198.00	140.36	1,206 · 38		
Actuals				646 · 35	258 · 76	207 · 46	151.26	1,263 · 83		
Excess/shortfall of budget	ver re	vised	i	(-⊦)2 1·3 5	(·+)15·76	(+) 9 ·46	(· +)10·88	(+)57·45		

I	2	3	4	5	6
1970-71					
Original budget	1,000.00	371.00	337.00	398 · 97	2,106.97
Revised budget	770.00	286 · 74	234.00	283 · 31	1,574.05
Actual	718.92	354 · 28	253 · 13	277 · 05	1,603 · 38
Excess/shortfall over revised budget	(-)51·08 (+)67·54	(+)19·13	(—) 6 ·26	(+)29·33
1971-72					
Original budget	1073.00	525.00	2;6:70	478 · 16	2,372 · 86
Revised budget	951.00	593 · 25	301.06	594 · 12	2,439 · 37
Actual	972.02	649 · 22	227 · 11	596-11	2, 444· 46
Excess/shortfall over revised budget	(+)21.02 ((+)55197	()73·89	(+) 1·9 9	(+)5.09

NOTE: (—) Shortfall (+) Excess (including exports), sundry jobs and miscellaneous sales but exclude packing cases and transfer to plants.

- 8.90. The figures under HMT I & II, Bangalore include sale of Die Casting & Plastic Injection Moulding machines during 1971-72. The figures relating to HMT III, Pinjore include sale of Tractors for the year 1971-72. The figures relating to HMT V, Hyderabad are inclusive of sale of presses for the years 1970-71 and 1971-72.
- 8.91. It is seen that, although the actual sales, by and large, conformed to the revised estimates, these have been generally lower than the original estimates except in respect of Unit V for 1967-68 and Unit III for 1968-69. The Management stated (March, 1971 that the sales budgets had to be revised keeping in view the order position and other relevant factors. It may be mentioned that shortfall in actual sales with reference to original estimates in 1968-69 and 1969-70 was also partially due to non-materialisation of export targets.
- 8.92. The Company stated (December, 1971) that shortfall in actual sales with reference to original estimates was also owing to the fact that the Company at the beginning of the financial year has to make somewhat enhanced sales budget to fix the targets for the sales field staff.
- 8.93. The actual sales in 1970-71 were also less than the original budgets in all the Units. In 1971-72 actual sales were less than the original budgets in respect of Units I, II and IV and higher than the original budgets in respect of Unit III and V. The shortfall in sales has been attributed to:—
 - (a) Drop in order position for milling machines, turret lathes and H. Family machines, minichucker Single Spindle Automatics.

- (b) Delay in the receipt of essential components for Gear Hobbers, Multispindle, Automatics, Drillings and Bearing Machines.
- (c) Go slow tactics of the labour in Unit IV.
- 8.94. The Committee enquired whether the sales budget were not prepared taking into account of the order position and other relevant factors. In a written reply the Management have stated as under:—
 - "The sales budgets are generally formulated after taking into account the projected sales forecast for the year. It is, therefore, not always possible to adhere to the original sales budget and it is necessary to revise the sales budget also as in the case of other budgets depending on market conditions, demand position, etc. Some of the other reasons which necessitate revision are as follows:—
 - (i) delay in receipt of orders which does not provide adequate production cycle time.
 - (ii) delay in execution of new expansion schemes by prospective customers.

(Rs. in lakhs)

(iii) Cancellation of new expansion projects, etc.

L. Export Performance

8.95. The export performance of the Company with reference to the budgetary estimates for the last six years is indicated below:—

Year Estimates Revised Actuals Shortfall Percentage with refer- of short-Original ence to fall with original reference estimates to original estimates 31.20 1966-67 11:45 1967-68 70.74 46.65 63:35 110.00 57.6 1968-69 7.35 87.00 92.72 180.07 51.5 1069-70 101 - 71 ; 6·ca 11 - 67 1970-71 217:59 51 96:33 106.33 27.92 1971-72 134.26 21

- 8.96. As regards the shortfall in export targets, the Management stated (March, 1971) as follows:—
 - (i) Penetration into the export market where the company's products have to face severe competition is not an easy task and involves pains-taking and strenuous efforts spread over a period of years.
 - (ii) The customer's requirements of machine tools in the world market are of varied type with vital technical changes necessary to be built in to make our machines acceptable.
 - (iii) Existence of competition in the world market from estab-
- 8.97. It has further been stated (December, 1971) that the efforts of the Company's sales offices abroad in locating suitable agents were not very successful in America till the appointment of a firm in February, 1971.
- 8.98. The shortfall in export performance during 1970-71 and 1971-72 has been attributed due to the following reasons:—
 - (i) General recessionary trend in the world market and that too especially in Australia and Newzealand.
 - (ii) In view of the unexpected Indo-Pakistan war, a ban was imposed on export of machine tools from India. We had to take immediate measures to divert some of the machine tools planned for export to inland customers and also took measures to go slow in production of export machines so that the stocks in the factories did not unnecessarily increase.
 - (iii) Though the war with Pakistan lasted for only 2 weeks, machines could not be shipped for 2 months due to:—
 - (a) No regular sailings:
 - (b) Heavy insurance rate for War and SRCC Risks.
 - (c) Imposition of additional surcharge on ocean freight.

M. Customer Composition

8.99. The table below indicates the customer composition of the Company during the year 1966-67 to 1971-72.

Name of the	Jame of the Unit/Year										(Rs. in lakhs) Govt. Private Tota Parties parties including and exports Public Sector under- takings			
1	[-				2	3	4	
Units I & II														
1966-67		•		•	•	•					456-97	281.75	738-7	
1967-68		•		•	•	•			•		372 · 49	149 · 86	528 · 35	
1968-69	٠	•		•	•	•		•	•		198 · 29	376 · 59	574.88	
1969-70	•	•	-1	•	•			•			138 · 82	518.55	657.37	
1970-71		•		•	•	•			•		227 · 58	499.93	727 51	
1971-72	•	•	•					•	•		385.17	601.83	987.00	
											1779:32	2428-51	4207 · 83	
Unit III														
1966-67	•	•			.•			•	•		96 ·18	54.93	151-11	
1967 -68	•	•	•	•	•	.•		•	•		169 · 62	69·9 8	239 · 60	
1968-69	•	•		•	•	•		•	•		86.90	165.35	252.45	
1969-70	•							•	•		30.11	173.30	263 · 41	
.1970-71	•			•	•	••		•	•		144.89	215.15	360· 04	
.1971-72	•			•		•		•	•		383 · 52	276 · 89	660-41	
											971 · 22	955-80	1927 · 02	
Unit IV														
1966-67						•			•	•	225.48	86 · 10	311 · 58	
1967-68		•	•	٠.	,	•	•	٠.		•	173 · 15	41.24	214·69	
1968-69		•		•		•	•	•		•	139.36	59.95	199-31	
1969-70				•		•	•		•	•	87 · 84	126.74	214.20	
1970-71		•	•							•	151.05	187·94	258·9 9	
1971-72		•	•	•		•	•			•	126-34	112.10	238-44	
											903 · 22	534:37	1437.59	

I							2	3	4
Unit V				 			······································		
1966-67	•			•	•		0.59	54.68	55 · 27
1967-68	•					•	149 · 24	70.28	219 82
1968 -69						•	112.87	63 · 15	176.02
1969-70	•		•			•	74·91	81 · 86	156.77
1970-71							146 · 54	143 · 36	289.90
1971-72		•				•	427 · 14	171 · 23	598 · 37
							911-29	584 · 86	1496 · 15

8.100. The Committee pointed out that the value of sales from Government parties including public sector undertakings went down during 1969-70 under Units I & II, IV and V and during 1968-69 and 1969-70 under Unit III. They enquired about the special reasons for the same. In a written reply the management stated as follows:—

"Relatively higher percentage of sales to the Government parties including Public Sector Undertakings during the period 1967-68 and 1968-69 in HMT I and II, HMT IV and HMT V is attributable mainly to the execution of bulk orders from defence organisations BEML for Single Spindle automatics, Multi Spindle automatics, Copying lathes, Fay Automatics and Horizontal boring machines. The drop in the order position from the Government parties including the Public Sector Undertakings is attributable to the Industrial recession and consequential delay and/or postponement of expansion/new projects in the Government sector. The position of sales to Government parties including public sector undertakings during 1970-71 and 1971-72 has generally shown an upward improvement."

8.101. The Committee find that throughout the past years (except in respect of Unit V for 1967-68 and 1971-72 and Unit III for 1968-69 and 1971-72) the actual sales were far less than the budget fr med by the Company on the basis of the sales forecast. In Units III and V the sales performance was not even 50 per cent in 1966-67 of the sale budgets. It has been stated that the Sales budgets had to be revised keeping in view the order position and other

relevant factors. It has also been stated that the shortfall in actual sales with reference to original estimates was also owing to the fact that the Company at the beginning of the financial year had to make somewhat enhanced sale budgets to fix the targets for the sales field staff.

8.102. The Committee are not convinced with the argument put forward by the Management with regard to fixing the sale budgets on the high side. They would like that realistic targets should be fixed keeping in view the order position and other relevant factors and the reasons for the non-achievement of targets should be analysed every year so as to improve the system of sales. Likewise export targets should also be fixed as realistically as possible keeping in view the sales prospects and the order position after a careful study of the export market. The Committee have already stressed the need to step up exports in order to fully utilise the capacity of the units of HMT and in order to bring about techological improvements in the machine tool industry in the country. The Committee would also stress that the prices of machines for export should be competitive and delivery schedule of machines should be adhered to-

8.103. The Committee recommend that the Management/Government should keep themselves in touch with the other public sector undertakings in order to find out their perspective demand so as to ensure that orders are secured for HMT well in advance as it takes a lot of time in designing and in the development of skill for a job which is not already within the production profile of HMT. This will also to a great extent avoid such imports which are resorted to only in view of urgency.

CHAPTER IX

PRICING POLICY, COSTING SYSTEM AND ANALYSES OF COSTS

A. Pricing Policy

- 9.1. For the purpose of pricing the products of the Company fall into the following three broad categories:—
 - (i) Established machines;

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- (ii) Machines manufactured out of Company's own designs; and
- (iii) Sophisticated and tooled up machines under development.
- 9.2. The domestic selling prices of the established machines are generally fixed with reference to cost of production and landed cost of equivalent imported machines of the Company's collaborators' make subject to the constraint of what the market can bear. In fixing the prices of the machines manufactured out of Company's own design which cannot be related to the landed cost, the cost of production inclusive of venture allowance and margin of profit are taken into account, subject again to the constraint of what the market can bear. Venture allowances is added to the estimated cost at fixed percentage to cover the venture risk. This is not added in working out selling prices, which are determined keeping in view among other aspects, competition, market demand, customer reaction, etc.
- 9.3. In respect of sophisticated and tooled up machines under development, the prices are fixed after taking into account the landed cost of the equivalent imported machines of the Company's collaborators' make and or the cost of production, subject to the constraint of what the market can bear.
- 9.4. During evidence the Joint Secretary of the Ministry explained the position with regard to Pricing Policy as follows:—
 - "the principles have been laid down by the Bureau of Public Enterprises i.e., 10 per cent over the price of any equip-

ment should not exceed the landed cost. As regards the special purpose machines the prices cannot be standardised and have to be quoted on the basis of the job that has to be done. There are certain categories of machines which have been designed by the HMT entirely on its own. They have been offered design entirely or the variations have been designed by the HMT. Modifications have been designed by them. So far as these are concerned the pricing policy of the HMT has always been on the cost plus method system i.e. cost plus a reasonable percentage of return not exceeding 12 per cent on the capital employed. This method has been accepted firmly whether it is Tariff Commission or Bureau of Industrial Enterprises. This has been a reasonable basis for pricing products which have been entirely indigenously developed. So far as the pricing of HMT products are concerned the principles which have been laid down have been consistenly followed. There have been no deviations with regard to pricing."

- 9.5. Asked about the pricing policy being followed in respect of Printing Presses and Heavy Duty Presses it was stated that:—
 - "So far as printing presses are concerned we have assembled one machine. So far as heavy duty presses are concerned, what has so far been done is at different stages of assembly. We do not consider that we have really gone to a stage of manufacture unless indigenous component reaches 55 to 66 per cent. Unless the production is stabilised and the indigenous content in these machines has come to a stage where it would lend itself to any pricing, it will be premature for us to say on what basis pricing of these two have been done. At the moment there is the component pricing and nothing further is being done at this stage. It is only after regular manufacture that proper pricing can be done."
- 9.6. The Committee note that the selling prices are fixed in respect of (a) established machines with reference to cost of production and landed cost of equivalent imported machines; (b) machines manufactured out of Company's own design with reference to cost of production including venture allowance at a fixed percentage; and

(c) sophisticated and tooled up machines with reference to cost of production or landed cost of equivalent imported machines and in all these cases, the prices are subject to the constraint of what the market can bear. The Committee have found that in regard to sophisticated machines, the selling prices have in several cases did not cover even the factory cost of production and have thus, resulted in loss. The Committee feel that with the experience now gained and the expertise acquired over a period of years, it should not be difficult for the Company to effect economies in working, improve efficiency and reduce the cost of production, so as to obviate the necessity of selling its products at loss than the cost price on the plea of "what the market can bear", and incur losses in the transactions.

B. Costing System

- 9.7. The Company has introduced standard costing system in all the units. The standard costs are worked out in advance for each year in respect of the established products (e.g., Lathes, Grinders, Milling Machines, Radial Drills, etc.)
- 9.8. The table below indicates the range of the increase (in terms of percentage) in standard costs during 1967-68 to 1969-70 over the standard costs for 1966-67 to 1968-69:—

	Name of the machine										Increase in terms of percentag				
											1967-68 over 1966-67	1968-69 over 1967-68	over		
La	thes	:													
	LB	17									23	13	14		
	LB	20		•						•	23 to 24	14 to 15	17		
	L	22								•	Not pro-	(—)16	11 to 13		
Gı	rindi	ng N	(ach	ines :							daced				
•	G	13	•			•				١.	25 to 38	5 to 7	7 to 10		
	G	17		•							26 to 40	3 to 11	10 to 14		
	G	22									1	2 to 3	10		
	Rad	lial I	Drille		•	•			•		21 to 28	11 to 12	4 to 8		

^{9.9.} During the years 1970-71 and 1971-72 the standard costs in respect of a number of new products such as Gear Shapers, Single

Spindle Automatics, Surface Grinders, Grinding machines type G9, Heavy Duty lathes type L45, Grinding machines type K130, Milling machines type M2P, EM3, Milling machines type FN2/FT2, Broaching machines, Copying lathes, Drum turret lathes, etc., have been fixed.

9.10. The table below indicates the range of variation in terms of percentage in standard costs during the years 1970-71 and 1971-72 over the standard costs for 1969-70 and 1970-71 respectively.

Name of the Machine/Unit	Increase in t	erms of % age in
	1970-71 over 1969-70	1971-72 over 1970-71
I	2	3
HMT I & II Bangalore		
LB 17 700	()0·4	1.68
1000	()o·3	2.18
LB 20 1000	()0 · 82	N.P.
1500	(—)0·74	N.P.
L 22 TP	21.93	()o·89
UP	26.35	0.65
G 13 300 U	15.21	
300 P	13.58	
300 PL	16.75	
500 U	14.82	N.P.
500 P	13.64	
. 800 Ü	14.75	
800 P	13.65	
G 17 500 U	23·26	(—)I · 60
500 P	18.78	()1·90
800 U	14.96	() 0·20
800 P	11.11	()0 · 58
G 17 1200 U	14.03	No change
1200 P	13.43	N.P.
G 22 2000 U	••	9.93
2000 P	13.96	5.69

I	2	3
RM 60	15.26	(—)12·03
61	23.05	(—)8·85
62	22.86	()9·41
63	22.58	(-)0·20
65	17.95	(—)8·05
HMT III, Pinjore		
M2	7:33	No change
M2P	••	
EM 3		••
MITR	2.14	• •
HMT IV, Kalamassery		
H	26.39	16.08.
LB	30.77	31.98
LT	32.75	12.57
Copying lathes	_	3.93
Turret lathes	• •	3.89

Note: N.P.-Not Produced.

C. Actual Costs

- 9.11. In Units I & II, III, IV and V actual costs are collected under batch work orders except in the case of the special purpose machines where individual job orders are opened. In Units I & II batch orders are not closed till the end of the financial year when the cost of all batch orders in the same family during the year is ascertained collectively. The total cost is then distributed to each machine pro rata. In this connection, the Company has stated (March, 1971) as follows:—
- "As the Company was passing through a period of recession, it was not possible always to take up the assembly of machines in economic batch quantities. Hence, it was considered desirable to ascertain the cost of machines produced under several batch orders at the end of the year as otherwise the costs would have shown unrealistically wide fluctuations."
- 9.12. During evidence the Committee enquired whether the method followed by HMT for ascertaining the costs of each machine

on the basis of the collective cost ascertained at the end of the year for all batch orders in the same family in Units I & II was scientific. The Secretary of the Ministry explained the position as follows:—

"We find that typing to cost a particular machine on the basis of one batch cost is likely to lead to results which may not be quite correct. What has been suggested in that suppose in a given year we produce 50 machines in 10 batches of 5, we should cost 50 machines Generally, prices are fixed on yearly basis. We take the run for the whole complete year of the batches together and then arrive at costing for the entire year and, therefore, it is not quite clear to us in the first place what benefit we would get by fragmenting the cost in batches of production because several other conditions will vary from batch to batch and it may not be quite possible to arrive at costing of a particular product unless we have the experience of whole run if production for one year. In our submission the present method of costing for the whole year may be allowed to be retained."

9.13. Asked whether the system was scientific, it was stated that

"I would not say that it is scientific but nothing is really very scientific—it is being done all along. What I would say is that in view of the fact that unless we would like to have our experience of cost of certain type of machines over a period of time, it would be difficult to cost each batch of production. We would not be able to derive any inference from that which will help us in either pricing the commodity nor we would be able to take any decision with regard to raw material or inventory."

9.14. Asked whether it would be possible to localise inefficiency by that method, it was explained:

"The conclusions which may flow batch costing may not really be correct and the action which we may take or

the basis of this inference may not really prove to be correct. In the context of our experience, even in a highly efficient organisation, in an ideal situation, the batch costing is not possible, as it is almost concurrent costing. I would submit that batch costing is not likely to help us very much at this stage."

9.15. With regard to the method of ascertaining the costs, the Management have stated in a reply as follows:—

"We do not find anything particularly wrong with the system followed for ascertaining the historical cost of production on an yearly basis. In fact, in our opinion, this system bring about uniformity and consistency in annual cost for the purpose of cost comparison from year to year. this connection would also like to point out that in view of the variations in sizes of batch, non-standard working conditions etc. the ascertainment of cost on batch batch basis may not really indicate the correct position of historical cost and hence may not serve the purpose effectively. In this connection it may be pointed out that the 'historical cost of production cannot be taken as the sole guide either for determining the selling prices or for exercising the cost control." It was added that "steps are being taken from time to time to improve the production performances on the basis of facts and figures recorded in the monthly labour activity statement, machine utilisation statement, efficiency trends, non-conformity reports for rejections of components etc. The performance trends as indicated by these periodical statements are discussed in the unit-level management meeting periodically, action is taken wherever practicable to improve the performance and reduce the cost. In fact this service purpose of cost control more effectively. In these circumstances a change in the existing practice which may not serve the purpose more effectively than the present system is not considered necessary."

D. Batch-wise Variations in the cost

9.16. In Unit III, it was noticed that the factory cost of the same type of machine varied widely from batch to batch as would be evi-

dent from the illustrative cases given below:-

Type and year	of produ	iction	ı		Increase (+)/decrease () in ter of percentage over act cost					
					Material cost	Manufactu- ring cost	Total Factory cost			
1968-69										
Milling Machin	nes									
Batch A					(+)100	·4 (—)57·1	()79·9			
Batch B	•					.3 (+)300.5				
M2P Milling M	Aachines									
Batch A	•		•		(+)211	·8 (+)115·o	(+)160.8			
Batch B	•	•			(+)172	.3 (+)143.4	(+)157·1			
1969-70										
M2P Milling N	Machines	į.								
Batch A					()91	·1 (+)162·5	(+)121.3			
Batch B						·8 (-)50·1				
F3 Milling Ma	chines				-					
Batch A	•				(+)145	·1 (+)279·8	(+)196·3			
Batch B	•		•		(—)76	·8 (-) 60·9	(—)70·8			
Batch C	•		•	•	(+)250	·8 (+)206·9	(+)234.1			

- 9.17. In this connection, the Management have stated (March, 1971) as follows:—
 - (a) Additional materials are issued for the manufacture of extra components to take care of rejections in the manufacturing and assembly stages and surplus components left over are transferred to finished part stores for being made available for use in subsequent batch production.
 - (b) Manufacturing costs are subject to fluctuations depending upon the varying levels of efficiency of workers from batch to batch for various reasons and also due to variations in batch quantities, machine variants and working conditions.
 - (c) Most of the components which are commonly used for more than one type of machine like M2, M2P, etc. are manufactured under one work order but are subsequently transferred to various batch work orders where such common components are required.

- 9.18. The Ministry have stated (December, 1971) that variations were also due to the following factors:—
 - (a) Use of non-standard materials due to scarcity/non-availability of number of essential raw materials.
 - (b) Manufacture of machines for the export market also contributed to the higher cost of production and variation in batch costs.
- 9.19. The Committee enquired whether the Company considered that the present system of not affording the credit for surplus components to the relevant batch order was scientific. Similarly whether the loading of cost of commonly used components to one work order was justifiable. If not, what steps had been taken to rectify these deficiencies.

They also enquired whether any detailed investigation had been conducted to find out the reasons for such violent fluctuations in the factory cost from batch to batch.

In a written reply it has been stated that

- "it would not be correct to make any batch to batch comparison when costs incurred in each batch are no comparable strictly on like-to-like basis and that any comparison would at best be made only with reference to only cost of production.
- As the average cost for each product was worked out at the end of the year the necessity for giving credit for surplus and transfers from batch to batch was not considered necessary. In this connection we would like to inform you that batch costing system was discontinued in HMT III, Pinjore from 1970-71."

E. Increase in Actual Costs over Standard Cost

- 9.20. The details of the increase in terms of the increase (in term of percentage) in actual costs over the standard cost for the last six years where standard costs have been fixed by the Company are given in Appendix VII.
- 9.21. It is seen that notwithstanding the fact that standard costs had been increased annually, the overall costs were higher than the standard costs in all the years in respect of all the items.

- 9.22. In this connection, the Management have stated as follows:—
 - (a) The Machine Tool Units were not able to utilise to the fullest extent the available capacity during the previous years. Consequently, capacity variance costs had to be included in the actual cost of production.
 - (b) Extra costs are incurred due to non-standard working conditions like low-batch production, non-availability of right type of raw materials, special quality to be maintained for export markets, etc.
 - (c) Standard costs are worked out for a standard production, whereas actual cost of production includes extra variant costs an also built-in accessories charged at extra selling prices.
 - (d) Interest on cash credit is not included in standard costs whereas actual cost of production is inclusive of this charge.
 - (e) There will be variations in efficiency in actual production of machines for various reasons.
- 9.23. The Ministry have further supplemented (December, 1971) the above reasons as follows:—
 - Increase in the actual costs was also due to unsteady prices for the raw materials and scarcity or non-availability of raw materials from the direct sources.
 - (2) Increase in the cost of production of Lathes was mainly due to increase in material costs and wages and operating costs, rejections and batch quantity variance etc.
 - (3) The higher cost of production of the Grinders in 1968-69 was attributable to higher percentage of rejections, manufacture of replacement components in small batch quantities, fighter quality control measures and production of lesser number of machines.
 - 9.24. The Committee enquired about the steps taken by the Management to control contain costs, especially by stepping up efficiency in the uses of men and material and reduction in percentage of rejections. The Management have in a written reply stated as under:—
 - "Periodical study is conducted of the various aspects of the working of the factory by the unit level management to control the cost to the extent practicable. During 1970-71, 1971-72 there has been an overall improvement in the utilisation of men and machines. There has also been signi-

ficant improvement in the overall efficiency of workers. There has also been an improvement in the cost of production in a number of cases and percentage of rejection has also shown an improvement in a number of cases.

Apart from controlling rejections to bring about reduction in material consumption it may also be pointed out that attempts are being made to reduce the cost of production, more particularly the material cost by adopting the value of engineering techniques. Secondly action is also taken by the Company to place orders directly on the manufacturers in time to bring down the cost of procurement.

Further in view of the raising trend in the cost of raw materials both imported and indigenous for several reasons beyond control of the company the inevitable increases in cost of procurement cannot altogether be avoided."

F. Actual Hours vs Standard Hours for the manufacture of Machines

9.25. Details of standard/planned time and the actual hours there against in respect of developmental machines for 1970-71 and 1971-72 are as follows:

Standard & Actual Hours for the years 1970-71 and 1971-72

Type of Machine						Std/Est.hrs.	Actual Hours		
							1970-71 & - 1971-72	1970-71	1971-72
I							2	3	4
HMT I & II—	Banea	lore				•			
L-45 · ·	•	•			•		4,200	5,460	5,166
SG		•	•		•		2,386	3,245	3,030
GS			٠	•	•		1,588	2,239	2,064
SSA .		•	•	•			2,686	3,868	3,465
MSA .				•		, .	2,100	3,003	2,814
GH					•	٠.	1,010	1,263	1,263
MC					•	•	942	1,187	1,083
G9		•			•	•	788	1,087	961
HMT III—Pin	jore								
MiTR .	•						497	830	755
R₩5		•					514	997	961
RISZ 16×1250							900	1,908	1,422
" 16×1600	,	•		•			1,350	2,862	2 133
" 25×1600	•,						1,350	2,862	2,133

ī	2	3	4
HMT IV—Kalamussery			•
Copying Lathes .	1,754	3,253	2,891
Drum Turret Lathes	1,500	2,680	2,620

- 9.26. It has been stated that the variations between the standard and actual timings are mainly due to the following reasons:
 - (i) Fluctuations in inefficinecy during the initial stages of establishment of new products.
 - (ii) Batch size variations.
 - (iii) Non-standard working conditions.
 - (iv) Non-availability of special tools, jigs and fixtures.
- 9.27. The Committee enquired whether any improvement had been made in the framing of estimates for standard/planned time in the light of experience gained so far. It has been stated that
 - "The estimated time for the various operations are periodically reviewed by our Planning Department. Whenever a change in the standard/planned time is warranted by justifiable circumstances, the same is revised and the revised timings are indicated in the operation layouts released for the manufacture of various components making up the total machine. Corrective action is also taken wherever found necessary."
- 9.28. The Committee note that the Company is following standard costing system in all units. The Committee find that the standard costs are varied from year to year even in established porducts like lathes, grinding machines, drills etc. Even then the over-all costs are higher than standard costs due to under utilisation of capacity, low batch production, variation in efficiency etc.
- 9.29. In regard to actual costs, the Committee find that these are collected under batch work orders except in the case of SPMs in Unit V where they are based on job orders. The job orders in Units I & II are closed annually, costs ascertained collectively and distributed pro-rata to each machine. In Unit III, the Factory costs for some type of machines vary from batch to batch. The Committee would like that the reasons for the various situations should be care-

fully analysed and suitable remedial measures taken to put the costing on scientific lines.

9.30. The Committee feel that as standard/planned time estimates are based on technical exercises conducted in detail by competent technical personnel, there should not be wide fluctuations. The Committee feel that present system of not affording credit compociency of men and machinery fixing norms for consumption of matecomponents to one work order is not on scientific lines.

The Committee also recommend that the Company should take suitable measures to effect economies in costs by improving the efficiency of men and machinery fixing norms for consumption of materials and bringing down the precentage of rejections.

G. Loss on the Manufacture of Special Purpose Machines

- 9.31. It was noticed that, out of 152 Special Purpose Machines manufactured in Unit V upto 1969-70 the Company incurred losses aggregate Rs. 61.86 lakhs in respect of 106 machines. In 39 cases, the Company could not even recover factory cost and the difference between the factory cost and the selling prices amounted to Rs. 14.15 lakhs. The special cost and administrative cost on these machines amounted to Rs. 32.74 lakhs. The Management attributed the following reasons for the losses incurred in Unit V:—
 - (a) Each and every SPM has to be designed and manufactured separately to suit the individual customer's requirements in each and every case involving designing and manufacturing toolings individually to suit customer requirements.
 - (b) Designing and Engineering expertise for the manufacture of SPMs take at least a minimum period of 7 years.
 - (c) Manufacture and assembly inefficiency due to labour force recruited being quite new and hence the operating level of efficiency was also very low and further the efficiency is bound to be comparatively low as special purpose machines do not admit themselves fully to the mass production technique.
 - (d) Capacity variance cost due to non-utilisation of the full available capacity due to appearance of recession almost from the year when the factory was ready to commence production. If the capacity under utilisation cost is excluded, the cumulative position would reveal a loss of Rs. 62,000 only.

- 9.32. The Committee enquired whether the estimates framed by the Company for undertaking manufacture of 106 machines envisaged loss and whether these estimates were framed after taking into account the prevailing level of efficiency and designing and engineering difficulties, capacity variation costs, etc.
 - 9.33. In a written reply the Management have stated as under:-
 - "No loss was envisaged at the time of the preparation of estimates. As the manufacture of SPMs was taken up for the first time in the country by HMT, we did not have the necessary data to prepare the estimates in conventional way showing the material cost, workshop cost etc., separately. We have adopted the method of block estimation as was being done by our collaborators.
 - The actual losses were investigated with reference to the estimates perpared earlier and corrective action was taken to the extent possible while submitting the future quotation.
- 9.34. Asked whether the Management expected that preparation of estimates on comparable basis would be practicable so that it acts as an effective tool of Managerial Control. It has been stated that:
 - "Base on the actual cost data collected in respect of machines manufactured so far we are compiling comparable cost data group-wise to form basis for preparation of estimates and submission of quotations for similar groups. In addition we are also making every effort to increase the standardised content of SPMs to have better cost control. The estimates comparable with the actual cost data can be prepared when a high degree of standardisation is achieved.
- 9.35. As regards the losses incurred by the Company in the manufacture of special Purpose Machines in 1970-71 and 1971-72 it has been stated that:
 - "Out of 45 Special purpose machines (excluding SPMs manufactured for Company's own use) manufactured during 1970-71, 12 machines resulted in a loss of Rs. 5.12 lakhs. Similarly out of 53 Special Purpose machines manufactured during 1971-72 (including one prototype), 5 machines (including one prototype) resulted in a loss of Rs. 4.05 lakhs. Out of the special purpose machines manufactured during 1970-71 and 1971-72 the company could not recover

cost in respect of 11 machines and the difference between factory cost and the selling price was Rs. 4.29 lakhs."

9.36. The Committee regret to note that out of 250 SPMs manufactured in the Unit V upto 1971-72, the Company incurred leases aggregating Rs. 71 lakhs in respect of 123 machines (about 50 per cent of the total) and in 50 cases the Company could not even recoverthe factory costs and the loss on this account alone amounted to Bs. 18.44 lakks... The Committee find that the losses were mainly due to estimates not being realistic taking into account the actual inefficiency, designing and engineering difficulties etc. The Committee suggest that the reasons for the lesses should be more critically analysed and suitable remedial measures taken to effect economies in cost of production by improving efficiency and maximising out put. The Committee also, suggest that preparation of estimates and system of costing should be on scientific lines and on realistic basis so that a comparison of actual cost with estimates is always possible to locate the areas of deficiencies and to enable the management to take timely corrective action.

CHAPTER X

MATERIAL MANAGEMENT AND INVENTORY CONTROL

A. Inventory Holdings

10.1. The following table indicates the comparative position of the inventory and its distribution at the close of the last six years:—

					(Rs. in	lakhe)
	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
Raw materials and components .	166.59	204 87	175 · 85	275 · 56	353 · 11	439.21
Stores and spare	139.96	142.79	134 66	149-42	203-99	223.43
Tools and instru- ments	152.80	162.43	151.06	132.65	147-22	153.04
Works-in-progress .	318.08	518-14	378·76	413.38	523 69	526 · 69
Finished goods:						
Machine tools	222.53	292.71	308.09	395.08	523.55	728-49
Wrist watches	2.99	5.43	4.67	2.65	2.41	2.17
	1,002.95	1,326.37	1,153.09	1,368.74	1,753.97	2,073.03

10.2. The following table gives position with regard to inventory holdings, work in progress and stock of finished goods:—

Year		and o and s	k of raw materials components, stores pares and tools natruments in terms assumption require-	Work in Progress in terms of value of Production			Stocks of finished goods in terms of value of sale.		
1966-67	•		7.31	nonth's consumption requirement.	2.4	month's value of Production		month's value of sale.	
1967-68			6.9	,,	3.4))	2.4	,,	
1968-69			10	,,	3· I	"	2.4	,,	
1569-70			9.5	9 9	2.7	,,	2.9	×	
1970-71			9	29	2 · 8	33	3· 1	**	
1971-72	•		6.3	22	2.0	,,	3.0	"	

Finished goods as on 31-3-1972 was inclusive of 26 machines value at Rs. 10.51 lakhs which had been lying in stock for more than 3 years as per details given below:—

	Nos.	Value (Rs. lakhs)
HMT I&II, Bangalore .	23	9·48
HMT III, Pinjore	3	1.03
	 26	10:51

10.3. In a written reply the Management have informed the Committee as follows:—

"There has been increase in inventory holdings of finished machines. The value of machines held without orders as on 31-3-1972 amounted to Rs. 245 lakhs representing about 8.3 per cent of total turn-over. With the exception of the finished stock, the inventory holdings are considered reasonable keeping in view not merely the current production programme but also the projected production programmes and the need to maintain buffer stock of critical raw materials.

The closing stock of machines is slightly on the higher side. We are making all out efforts to reduce the inventory of finished stock of machines to a level of Rs. 5 crores by the end of 31st March, 1973."

10.4. The Committee enquired about the steps being taken to sell the 26 machines which were more than 3 years old. It has been stated that:

"Out of 26 machines, 4 machines value at Rs. 1.50 lakhs were actually held in showrooms for exhibition purposes and hence they cannot be considered as available for outright sale. As regards balance machines, the sales department is making every effort to dispose off the same as expeditiously as possible. All the machines held in stock for over 3 years are general purpose machines only."

10.5. The Committee note that while HMT have brought down the stock of raw materials and components, stores, spares etc. from 7.3 months' consumption in 1966-67 to 6.3 months' consumption in 1971-72, the stock of finished goods in terms of value of sale has increased from 1.8 month's in 1966-67 to 3 months' in 1971-72. The increase has

been appreciable from Rs. 523 lakhs in 1970-71 to Rs. 728 lakhs in 1971-72. As administed by the Management, the closing stock machines is slightly on the higher side and the value of machines held without orders as on 31-3-1972 amounted to Rs. 245 lakhs. The Committee were informed that efforts were being made to reduce the inventory of finished goods to Rs. 5 crores by 31-3-1973. The Committee also find that 26 machines worth Rs. 10.51 lakhs are lying in stock for more than 3 years. The Committee are at a loss to understand as to why machines worth more than Rs. 2 crores were manufactured without any orders therefor and why 26 machines are lying in stock for over 3 years. The Committee recommend that this matter should be thoroughly investigated. The Committee are convinced as earlier observed in this Report that the production of the machines has not been related to the demand projections with the result that the Company has been accumulating stock for years unnecessarily loading the inventory. The Committee hope that the company would ensure that at least, in future, production of machinery would be related to the actual demands and assured off-take. The Committee recommend that the company should take suitable steps to clear the existing stock of finished goods as early as possible.

B. Slow Moving and Non-Moving Stores

10.6. According to the Company, items of stores which have not moved for more than a year are classified as 'slow-moving' and those items which have not moved for over 3 years are classified as 'non-moving'.

10.7. The following table shows the value of slow-moving and non-moving items of stores for the last six years for all the Units of the Company.

(Value in lakes of Puness)

		 -		(Value	IN BRUS OF K	upecs:
Year		Total inventory holdings	Value of slow- moving stores	Percentage to inventory holdings	Value of non- moving stores (included in Col. 3)	Percentage to total inventory holdings
1966-67	•	459.35	23. 10	11.6	9.30	2.0
1967-68	•	510.09	68 · 30	13.4	16.26	3 · 2
1968-69		461.57	69.09	14.9	22.34	4.8
1969-70		557.63	65 · 38	11.7	21.43	3.8
1970-71		704 · 32	56.48	8.01	27.05	3.8
1971-72		815.68	45.26	5. 54	26.23	3.2

- 10.8. The Ministry have stated that bulk of the slow/non—moving items were represented by tools and instruments, which, by their nature, have to be slow moving, more particularly in respect of imported and indigenous tools involving a long delivery period.
- 10.9. The Committee note that the value of slow-moving and non-moving stores as on 31,3.72 is of the order of Rs.45.26 lakhs out of which stores of the value of Rs. 26.23 lakhs have not moved for over 3 years. The Committee are of the view that this situaion would not have arisen only purchase of stores had been made on the basis of actual requirements of production. The Committee recommend that the stores should be reviewed and items really surplus to requirements should be identified and disposed of in the best interests of the Company, as accummulation of these stores is only blocking the capital. The Committee recommend that a through review of all the slow moving/ non-moving stores should be undertaken immediately, reasons for slow/non-moving analysed and suitable remedial measures taken to prevent recurrence of the same. The Committee also recommend that stores-ready surplus to requirements should also be identified and action taken to transfer them to other public undertaking where they may be useful.

WATCH FACTORIES

A. Watch factory—I, Bangalore

- 11.1. The Government of India entered into a Technical collaboration agreement on 25th March, 1960 with M/s Citizen Watch Company Limited of Japan for the manufacture of wrist watches in India. The agreement was subsequently assigned to M/s. Hindustan Machine Tools Ltd. for implementation with effect from 2nd January, 1961. Under the agreement the watch factory is to produce two types of wrist watches viz. type 'D' for Gents and type 'R' for ladies. The factory went into commercial production from the year 1963-64 i.e., 1st April, 1963.
- 11.2. The construction of the factory was taken up in January, 1961 and was completed during October, 1962. There was a delay of 9 months in the construction of the factory as a result of an unforeseen defect in the title to the land originally selected for the factory. In order to avoid further delay the Company acquired land at a new location.

B. Expansion Project-Watch Factories II & III

- 11.3. For meeting the growing demand, Government desired in 1966 to set up another Watch Factory in the Kashmir Valley. As the Government could not get either a foreign collaborator or any private enterprise to undertake the job, it was decided in May, 1968 to entrust this project to Hindustan Machine Tools Limited. A feasibility report prepared by the Company in March, 1969 and submitted to Government envisaged that:
 - (i) an integrated watch factory covering both manufacture and assembly be set up in Kashmir with a capacity of 3,00,000 watches per year and
 - (ii) the Bangalore factory be expanded to manufacture an additional 2,00,000 sets of watch components per year for automatic and calendar type of watches.
- 11.4. As on date the construction of watch factory II building in Bangalore is almost complete and the installation of Plant and machinery is going on as per schedule.

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- 11.5. The assembly of automatic day and date watches has commenced during 1972-73.
- 11.6. During evidence the Chairman, HMT stated that about 3,000 persons were already wearing these watches and by approaching these persons individually it has been found that time-keeping was excellent.

C. Production Performance-Watch Factory-I

11.7. The table below indicates the estimated production as per collaboration agreement, original and revised budget estimates and actual production during the years 1966-67 to 1971-72:—

Figures in Nos.

Year	Estimated production	Budget prod	Actual production	
	as per collaboration agreement	Original	Revised	· 41
966-67	2,40,000	2,40,000	2,40,000	2,40,100
967-68 .	2,40,000	2,40,000	2,50,000	2,50,000
968-69	3,60,000	3,00,000	3,01,000	3,00,000
969-70	3,60,000	3,60,000	3,30,000	3,30,000
970-71	3,60,000	3,60,000	3,44,000	3,45,000
971-72	3,60,000	3,60,000	3,75,000	3,78,000

Notes:—(i) The Technical Collaboration agreement envisages manufacture of 240.000 watches on single shift basis and 3,60,000 watches on multiple shifts basis per year.

- 11.8. In order to utilise the available manpower and the plant capacity to the maximum extent possible, the factory explored the possibility of obtaining orders from the Defence Services as well as diversify the manufacture of watches, with the result, the factory was able to manufacture certain Defence Stores (value Rs. 22.86 lakhs during 1966-67 to 1969-70) and a few new types of watches with new designs/modifications not envisaged in the Technical Collaboration agreement.
- 11.9. During the year 1971-72 the watch factory manufactured certain defence items valued at Rs. 4.34 lakhs during 1970-71 and Rs. 9.59 lakhs during 1971-72 respectively.

⁽ii) Certain manufacturing shops work in two shifts to achieve balancing production and assembly works in one shift.

11.10. In regard to the non-achievement of full rated capacity of 3,60,000 watches upto 1969-70 the management stated (July, 1970) as follows:—

"The targets fixed in the agreements were based on the desirability of employing more women employees in the manufacture of watch parts and assembly thereof on account of high dexterity required for the work. However, under the prevailing conditions of labour laws etc. in the country it was not possible to employ girl operators during the multiple shifts and adjustments had to be made in the output of operations wherever it was considered advantageous to employ girl operators. Besides, on account of the decreasing efficiency in the night shifts prevailing in the country. the collaborators had advised not to go in for more multiple shifts but to resort to single shift operation on only in certain shops where the target of 30,000 watches per month could be obtained by the addition of a few balancing machines and equipment (estimated to cost Rs. 6 lakhs). There has been delay in the release of foreign exchange for this purpose."

D. Delay in the Release of Foreign Exchange

11.11. With regard to the delay in the release of foreign exchange by Government the management have stated as follows:

"From April, 1965 onwards, and upto 1967 the factory had to face a serious situation with regard to foreign exchange releases for maintenance imports itself. Due to difficult foreign exchange position, the factory had to restrict the production just to keep it going, with the result, in 1965-66, it produced only 1,96,110 watches against the target of 2,40,000 watches. Even during 1966-67 and the 1967-68 the targets laid down in the collaboration agreement were achieved mainly on account of our arranging the release of foreign exchange for maintenance items under barter deal of Ores through MMTC.

Due to such uncertainties he Company could not plan its future and was mainly stopped from doing its planned recruitment and training and this has disturbed and dislocated our steady production activities."

11.12. Asked as to when the necessity for the addition of a few balancing machines and equipment estimated to cost Rs. 6 lakhs to

attain the target of 3,60,000 watches per year was felt by the management and what action had been taken to get the foreign exchange released the management have stated as under:—

- "The balancing machines and equipment were required for achieving the full plant capacity of 3,60,000 watches per year from 1968-69. Action for procuring the balancing machines and equipment was taken during April 1966 as a future plan to achieve the production targets from 1968-69 in single shift operations and to avoid multiple shifts in some of the shops.
- The action for release of foreign exchange for the above were initiated during April, 1966 and December, 1967 against which foreign exchange releases were made between September, 1966 and January, 1970."
- 11.13. The details of the machines required to be imported by way of additional balancing equipments for the watch factory are given in Appendix VIII which furnish the dates of applications as well as the date of import licences.
- 11.14. The Committee enquired about the present requirement of foreign exchange by the Company and whether any difficulty was being experienced even now. It has been stated that:—
 - "Presently the requirement for our first watch factory alone works out to about Rs. 55.00 lakhs of foreign exchange for the production of 3,60,000 watches per year i.e., to achieve the full plant capacity.
 - Since some years, the Factory has been getting bulk of the foreign exchange requirement from Japanese Yen Credits. This time the factory has experienced difficulty in getting the foreign exchange release under the Yen Credit since the full requirement of foreign exchange for the production in 1973-74 has not been released by the Government so far."
- 11.15. The Committee enquired from the Ministry about the reasons for dalay in sanctioning the foreign exchange and about the production loss in terms of number of watches on account of this factor. In a written reply the Ministry have stated as follows:—
 - "It is not possible to correlate precisely the quantum of loss, if any on account of reported delay in the processing of applications or in the release of foreign exchange,

- It is, however, pointed out, in this connection, that HMT applies for foreign exchange release and import licences for components, raw materials, consumable items spare parts one year in advance of the actual production period, i.e. during the licensing period 1972-73, they apply for release of foreign exchange and import licence for their production programme in 1973-74. Watch Industry is a non-priority industry as per Import Licensing Policy in force prior to 1971-72. The non-priority industries were being issued six monthly import licences; but, to assist HMT in planning their production properly relaxation of this Rule was made and HMT are always being granted import licences on annual basis, Further, according to the procedure in force, import entitlements of firms are worked out after adjusting stocks and expected arrivals excess on 12 months' requirements. In the case of HMT a waiver was granted in view of the very long lead time of HMT's planning, ordering and import procedure."
- 11.16. With regard to solving the problem of foreign exhange the Chairman, HMT stated during evidence as follows:—
 - "We are struggling for want of foreign exchange; we require a lot of it. I will be leaving abroad in February to get additional know-how on para-stock, hair-spring, mainspring and escapement. This is the new project, in collaboration with the citizen of Tokyo. If we have that, it will reduce our foreign exchange requirement. We have now become a little more confident. We are now negotiating with them; and if we succeed in getting that collaboration, we would be reducing the foreign exchange content."

E. Indigenisation

- 11.17. The Collaboration agreement envisaged a percentage of indigenous components to be attained by the Company from 1966-67 onwards at 84 per cent (based on standard rates). The actual percentage at standard rates ranged from 82.19 per cent to 84.29 per cent during this period. This percentage with reference to the actual cost of total production and indigenous content, however, ranged from 71,50 per cent to 73.39 per cent.
- 11.18. With regard to the manufacture of watches indigenously the management have stated as follows:
 - "The import content in the ordinary wrist watches manufactured by HMT at present as well as that envisages in the

collaboration agreement with Messrs Citizen Watch Co. Ltd., Japan is 16 per cent. The indigenous content in physical terms has been fully achieved as per the collaboration agreement. There is no plan in the said collaboration agreement to manufacture the complete watch indigenously. Attempts are underway to manufacture some of the balance of parts indigenously with the help of outside technical assistance. Since the balance parts of 16 per cent is of highly complicated nature and very vital to the accuracy of the watch the same perhaps were not included in the Agreement. The manufacture of such critical components requires highest skills which could only be attained after very long experience in the manufacture of other horological components."

F. Increase in Demand for Watches

11.19. During evidence the Committee suggested that the Company should produce more watches. The Chairman, HMT explained as follows:—

"We will be making a million watches in a matter of three years. There is a demand of three to four million watches in the country as we estimate and it is going to increase as the standard of the people is increasing. Various States have also been approaching for establishing a factory. We do not want the management of those factories. give them the plants, we give them the know-how they have to manage the factory. On this basis I am writing to the States. For every watch we require Rs. 16/- of foreign exchange because we do not make stainless steel. We do not make springs, we do not make jewels, we do not make escapement. So all these are the hindrances and again the watch industry has given the lowest priority in granting foreign exchange. To give you an example, factory producting 30,000 of watches require four to five crores of investment and out of that Rs. 21 crores are imported equipment. This is a problem with the Government of India. HMT has started making some machines. So if we have that, our reliance on imports will be minimised."

11.20. The Committee regret to note that HMT could not achieve the targets in regard to the manufacture of watches mainly due to delay on the part of Government in releasing the requisite foreign exchange. It has been stated that "due to difficult foreign exchange

position the factory had to restrict the production just to keep it going. With the result that in 1965-66 it produced only 1,96,110 watches against the targets of 2,40,000 watches. Though the necessity for the addition of a few balancing machines and equipment estimated to cost Rs. 6 lakhs to attain the target of 3,60,000 watches per year from 1968-69 onwards was felt by the Management in 1966, foreign exchange for them was released by Government only between September, 1966 to January, 1970; with the result that HMT could produce only 3,00,000, 3,30,000 and 3,45,000 watches during 1968-69, 1969-70 and 1970-71 respectively against the target of 3,60,000 watches per year. The Committee are given to understand that the present requirement of foreign exchange for the first watch factory for the production of 3,60,000 watches per year is of the order of Rs. 55 lakhs, and that the Company are still experiencing difficulty in getting the foreign exchange.

- 11.21. The Committee feel that the needs of foreign exchange for HMT for production of watches should be not on a priority basis in order to enable HMT to work to full capacity and meet the growing and pent up demand for watches in the country.
- 11.22. The Committee are glad to note that in order to reduce the foreign exchange content the company are now making efforts to enter into a collaboration agreement with M/s. Citizen Watch Co. Ltd., Japan in order to get additional know-how on para-shock, hairspring, main-spring and escapement etc. The Committee recommend that the process of indigenisation in the manufacture of watches should be accelerated so that HMT may become self reliant in the manufacture of watches.

G. Construction and commissioning of Watch Factory III

11.23. As regards the Construction and Commissioning of the Watch Factory at Srinagar the Management have stated as follows:

Factory Buildings

11.24. Factory buildings have been completed to the extent of about 40 per cent the delay being mainly due to adverse climatic conditions resulting in total stoppage of construction during severe winter months. A certain amount of delay has also occurred due to non-availability of our entire requirement of constructional steels at controlled price. However, a part of the buildings which have been completed are being commissioned and plant and machinery installed

therein. Assembly of watches out of components supplied from Bangalore Factory has also been commenced in January, 1973.

Plant and Machinery

11.25. Plant and machinery for the first and second phase of manufacture of components have already arrived at site and are being installed.

Power Supply

11.26. Although State Government have completed arrangements for power supply, the voltage is below the normal ratings. As against 11KV required, the resulting voltage at present is only 8.5 KV. This matter is being pursued with the State Government.

Water Supply

11.27. One Bore well yielding about 10,000 gallons per hour has been completed by the State Government but the water is not yet treated to meet our requirement. It is understood that the State Government have taken steps to instal the Treatment Plant.

Residential Buildings

- 11.28. Tenders have been invited and contracts are under finalisation.
- 11.29. In regard to the delay in construction of the factory it has been stated that it is mainly due to severe climatic conditions and no special steps are possible to accelerate the construction work. As regards our requirement of construction steel, major quantities have been procured from HSL and Bokaro. Efforts are being continued to procure balance quantity also from these sources at controlled price. In case they are not available, we may consider buying these items from the open market.
- 11.30. During evidence the Committee enquired about the progress made so far in setting up the watch factory in Kashmir. The Secretary of the Ministry stated that:
 - "So far as the Kashmir Watch Factory is concerned, we are quite satisfied about the progress of this project, though it is not completely on schedule. The reasons for this are that during the hostility period near about the end of 1971, the work was at a standstill here for quite a few

months and even after that there have been some problems in regard to availability of steel, cement and some other building materials. Whenever these difficulties were brought to the Ministry's notice we have been taking steps to solve them. In fact the factory buildings are complete and assembly in a very small way has already been taken up in the Kashmir Watch factory."

- 11 31. During their visit to the Hindustan Machine Tools Factory, Srinagar in October, 1972, the Committee were informed that the completion of the factory was being delayed as the management was not getting the cooperation of the State Government in regard to the acquisition of land, approach road, water supply, drainage system and electricity. It was also stated that the State Government agreed to set up a Review Committee. The Committee enquired whether the Review Committee has since been formed and what progress had been made in resolving the various difficulties with the State Government. In a written reply the management have stated as under:—
 - "The review Committee was constituted in December, 1971 by the State Government with the Commissioner of Planning and Development as its Chairman. The Committee has met only three times so far and the last meeting was held in April, 1972. Various problems discussed in this meeting are being followed regularly at appropriate levels. Yet the following points are still outstanding:—
 - (1) Finalisation of the Lease Deed in respect of land.
 - (2) Approach road to the Factory Site from the National High Way.
 - (3) Perennial Water Supply.
 - (4) Drainage and sewerage disposal (this work has recently been taken up by the State Government).
- 11.32. With regard to the land lease the Secretary of the Ministry stated during evidence that "though it was necessary to have the necessary title with regard to the land, it was hoped that it would not present any serious problem. As there was special land tenancy system in Kashmir, they had not been able to sort out the problem completely yet."

- 11.33. During evidence the Chairman, HMT stated that-
 - "In Kashmir, they were having lot of troubles. One was about electricity and other was that there was no road connecting the factory. He added that he had approached the Minister of Industrial Development and also the Industries Minister of Jammu and Kashmir. He had also also met the Chief Secretary. The Chairman of the Review Committee was taking interest and had called meetings. They made promises but had not implemented them. A new Committee had been set up. The main trouble in Kashmir was getting Kashmiri boys. The Company had advertised but they did not apply."
- 11.34. During the evidence of the representatives of Ministry of Industrial Development the Committee pointed out that management had stated that skilled labour was not available and the local people did not try to learn. The Secretary of the Ministry state:—
 - "I think that is an over-statement because the efficiency of the Management will lie in getting the cooperation of the local people, in recruiting suitable local people and in training them. The purpose of the Government in putting up a factory at Kashmir largely to provide local employment

I would judge the efficiency of the General Manager to the extent to which he is able to recruit suitable local people. The difficulties have to be squarely faced.

- 11.35. The Committee find that the construction and commissioning of the watch factory III at Srinagar has been delayed mainly on account of avoidable factors such as non-availability of constructional steel, cement, and some other building material. There have also been delay in regard to the acquisition of land, approach road, water supply, drainage system and electricity. Although a Review Committee was set up in December, 1971 by the State Government with the commissioner of Planning and Development as its Chairman, no significant progress has been made in regard to the finalisation of outstanding matters. According to the Chairman, HMT "they made promises but had not implemented them."
 - 11.36. The Committee recommend that Government should take positive and effective steps to resolve the outstanding issues with the State Government. The Committee also recommend that Government should give priority for allotment of commodities like steel and cement etc. to public sector undertaking so as to avoid delays in the

construction and commissioning of Plants. In view of the growing demand for watches in the country, the factory at Srinagar should be completed without any further delay. Production programme should be chalked out on a realistic basis and concerted efforts should be made to adhere to the targets.

11.37. The Committee would like the undertaking to determine on a realistic and scientific basis the requirements for personnel keeping in view the production programme for the new watch factory so as not to repeat the mistake of over-staffing which occurred in other factories of HMT.

11.38. The Committee need hardly stress that arrangement should be made in time to provide adequate training to the recruits so that they can take up their production role in right earnest and achieve a high degree of efficiency.

H. Project Cost

Watch Factory I, Bangalore:

11.39. No detailed Project Report was prepared for the Watch Factory. The following table indicates the original estimates revised estimates and actual expenditure upto March, 1971:—

Sl. No.	Details	Original estimates August, 1960	Revised estimates April, 1966	Revised estimates February, 1967	Actuals as on 31st March, 1972	
1.	Land, building, Water Supply etc	30.00	66.31	66·32	65. 14	
2.	Machinery & Equipment	80 '36	} 127.16	158.99	}	
3.	Die Sets, Jigs, Tools and fixtures	1.06	J 127·16	1.10	152.93	
4.	Purchase of drawings	3.20	} 17.38	3.20]	
5•	Technical Assistance Fee	14.18	} 17.38	20.94	} 21.87	
6.	Development and commissioning expenditure	71.20	59.24	59·24	55.10	
7.	Working capital	50.00		• •		
8.	Colony buildings .	• •	38.71	38.71	. 38.30	
	TOTAL .	250 .80	308,00	348 .20	333 '34	

11.40. The details of cost increase of Rs. 108.80 lakhs (excluding working capital) in the revised estimates of April, 1966 over the original estimates are as follows:—

	Extent of excess over original estimates	
	(Rs. in lakhs)	
(i) Change in the location of site etc.	36.31	
(ii) Extra expenditure on the purchase of plant and machinery equipment due to increase in customs duty and additions of interest on Yen Credit etc.	45 [.] 74	
(iii) Provision for township requirement not completed in the original estimates	38.71	
Less Deduction in control blanc under Development and Commiss	120.76	
Less Reduction in expenditure under Development and Commissioning expenditure (approved by Ministry).	11.96	
	108.80	

- 11.41. The increase in the estimates of February, 1967 was mainly due to devaluation of Rupee (Rs. 29.31 lakhs) and further increase in the customs duty viz., Rs. 3.63 lakhs.
- 11.42. It was stated by the Management in November, 1971 that Government was not approached for approval of revised estimates as the additional cost was met from the internal sources of the Unit.
- 11.43. According to the instructions issued in Ministry of Finance, Department of Expenditure (Bureau of Public Enterprises) O.M. No. 9(1)-F|61 dated 22-9-1967 referred to in the Ministry's D.O. letter No. BPE|3(4)|Adv (F)69 dated 30-8-1969, revised project estimates would require the approval of the Government in case any of the component cost exceeds by 10 per cent.
- 11.44. The Committee enquired whether the management were not aware of these instructions. In a written reply the management have stated as follows—

"The Project cost was revised in February, 1967 mainly due to devaluation of rupee and small increase in payment of customs duty on imported plant and machinery and increase in cost due to devaluation of rupee in respect of balance amount outstanding for payment for procurement of machinery and equipment for the project under Yen Credit. The revision in project cost was thus due to value readjustment for the reasons beyond the control of the

company and not due to increase in physical content of the project. The rupee content is also affected due to devaluation of Pound and recent revaluation of Yen the effect of which on the deferred credit instalment of payments in respect of plant and machinery imported for Watch Factory I are fluctuating and hence uncertain.

- In our opinion, since the increase in the project cost is for the reasons for effects of which are universal and also beyond the control of the company, the same may not require any specific approval of the Government. Besides the additional cost was also met by the internal resources of the Unit. We, have, therefore, not approached the Government for the specific approval.
- 11.45. During evidence of the representatives of the Ministry of Industrial Development the Committee pointed out that the management did not approach the Government for approval of the revised estimates in respect of the watch factory. The Secretary of the Ministry stated as follows:—
 - "This position is correct. The estimates have gone up for more than 10 per cent. The Company should have approached the Government for sanction. This is a slip on the part of the Company. If it is more than 10 per cent, Government approval is required."
- 11.46. The Committee find that the original estimates of Rs. 250 lakhs approved by the Government in August, 1960 for the Watch Factory I at Bangalore had to be increased by Rs. 108.80 lakhs in April, 1966 due to change in location, extra expenditure on the purchase of Plant machinery/equipment due to increase in custom duty, additional interest on yen credit and due to provision for township requirement not contemplated in the original estimates. The estimates were again revised in February, 1967 and the increase of Rs. 39.70 lakhs was mainly due to devaluation of rupee and further increase in custom duty. As on 31st March, 1972 an expenditure of Rs. 333.34 lakhs had been booked.
- 11.47. The Committee are surprised to note that although the increase in estimates in 1967 was more than 10 per cent of the original estimate the management have not approached the Government for according the necessary sanction as required in the instructions of the Bureau of Public Enterprise in this regard. The Committee are not convinced about the justification for not obtaining the approval of Government. The Committee are doubtful whether this

matter was taken cognisance of by the Board and if so why sanction of Government was not insisted on. The Ministry have stated that "this is a slip on the part of the company".

- 11.48. The Committee need hardly stress that approval of the revised estimates should be obtained from the competent authority irrespective of the reasons for such excess or the source from which such excess can be met.
- 11.49. The Committee recommend that the correct position should be clarified to the Company and strict instructions should be issued to avoid a recurrence of such lapses.

I. Project Cost

Watch, Factory II, Bangalore and Watch Factory III, Srinagar

- 11.50. The detailed Project Report prepared by the Company in January, 1970 and approved by Government in June, 1970 contemplates a capital investment of Rs. 475 lakhs for the Kashmir Unit and Rs. 416 lakhs (since revised to Rs. 421 lakhs) for the Bangalore Unit.
- 11.51. As per the Detailed Project Report the operating cost of the Kashmir Unit would be higher by 30 per cent as compared with that of Bangalore Unit due to:—
 - (a) Higher cost of land and development.
 - (b) Higher construction cost due to site being in seismic belt.
 - (c) Installation of emergency diesel power generating unit.
 - (d) Central heating of Factory and Township.
 - (e) Higher salaries to employees due to climatic reasons and due to their coming from outside.
- 11.52. As regards the Bangalore Watch Factory Expansion it has now been stated that the revised cost estimates of Rs. 371.00 lakhs (excluding the working capital of Rs. 50 lakhs) are likely to increase by about Rs. 23.00 lakhs due to additional cost to be incurred in respect of plant and machinery and payments towards licence rights, based on the current exchange parity rates and customs duty. The above increase in the cost estimates is due to revaluation of Japanese and Swiss currencies and due to additional levy of regulatory duty on imports of plant and machinery. The remaining balance of expenditure is expected to be incurred within the revised estimates subject to there being no furthr statutory varia-

tions. The details of the revised project cost and expenditure incurrent so far upto 31st December, 1972 are as follows:—

Particulars	Approved cost estimates	cost	Actual expenditure as on 31st December, 1972.
		(Rs. in la	khs)
Land, Building & Water supply, etc	23.30	23 · 30	17.17
2. Machinery & Equipment Die sets jigs, tools & fixtures etc	302 · 70	320.40	236·70
3, Purchase of drawings, techincal Assistance fee .	27.00	32.30	6.44
4. Dev. & Commissioning expenditure.	13.00	3.00	5.55
5. Colony buildings	5.00	5.00	4.24
	*371.00	394.00	270 · 10

11.53. The details of project cost and actual expenditure as on 31-12-1972 relating to the Srinagar Watch factory are as follows:—

Particulars		Project cos	t	Actuals
		 Original	Revised	upto 31-12-72
		(Rs. in lak	ths)	
Land and land development .		19.00	19.07	2 · 39
Buildings		90.00	96.00	51 · 52
Plant, machinery & equipment	•	220 · 50	256· 0 0	160.09
Others		36·50	36·50	18.40
		366.00	407 · 50	232 · 40
Township		40.00	40 · 00	1 · 40
		406.00	447 : 50	233 · 80
Development & Comm. Ependiture		10.00	22 · 50	15.09
TOTAL .		*425.00	470.00	248 · 89

^{*}excludes working capital of Rs. 50 lakhs.

It has been stated that the reasons for revision of project cost are as follows:—

⁽i) Statutory increase in prices for construction steels,

- (ii) Increase in Customs duty.
- (iii) Revaluation of currency by Japan and Switzerland,
- (iv) Unforeseen inland costs for transportation, local taxes and duties, etc.
- (v) Certain unforeseen items of expenditure as a result of the recent war.
- 11.54. The Committee find that according to the Detailed Project Report as approved by Government in June, 1970, the Watch Factory II at Bangalore was to cost Rs. 416 lakhs. This was later revised to Rs. 421 lakhs. It has now been stated that the estimates are again likely to increase by Rs. 23 lakhs due to additional cost to be incurred in respect of Plant and machinery and payments towards licence rights based on the current exchange parity rates and customs duty.
- 11.55. The original estimates of Rs. 425 lakhs in respect of Watch Factory III at Srinagar has been revised to Rs. 470 lakhs. The increase in estimates is due to statutory increase in prices for construction steels, increase in custom duty, revaluation of currency hy Japan and Switzerland,unforeseen inland costs for transportation, local taxes, duties and certain unforeseen items of expenditure as a result of the recent war. . .
- 11.56. The Committee feel that delay in the construction and commissioning of the projects is a major factor contributing to the increase in the original estimates. The Committee would like Government to ensure that the estimates are prepared accurately in the first instance and that the completion of the Projects are not delayed as it results in substantial increase in the expenditure and ultimately effects the profitability.

Rejections

11.57. The components rejected on the assembly line of watches are redrawn on separate Indents which are valued. The following

table shows the watch components consumed for assembly of watches as compared to standard requirements:—

Year	r				Consumption of componen at standard requirements	n Actual its consumption	Variance n	% of standards
1966-67					Rs. 67,32,417	Rs. 67,89,440	Rs. 57,023	o·85
1967-68			•		79,49,534	80,35,638	86,104	1.08
1968-69					96,40,502	97,24,961	84,459	o 88
1969-70		•			1,07,30,402	1,08,66,329	1,35,927	1 · 27
1970-71					1,23,72,503	1,25,27,369	1,54,866	1 · 25
1971-72			•		1,37,75,569	1,38,71,120	95,551	0.69

^{11.58.} It is seen that the rejection was highest in 1969-70.

11.59. In regard to rejections the Management have stated in a written reply as under:—

"Due to the special nature of the components some losses at the time of assembly of watches are unavoidable. Further, the components are inspected based on sampling method while taking into stock and are liable for rejection in bulk for maintaining quality. The average rejections which have been varying around 1 per cent during these years, also, in our opinion are negligible and are well within the limits."

Servicing and repairs

11.60. During evidence the Chairman, HMT informed the Committee that entire history of each watch was kept by the company. So far they had supplied 2 million watches. From the monthly statements regarding the watches which come for repairs it has been found that 2 per cent of production come back for repairs. The Company were having their own service centres in principal cities but it was very inadequate. So they were thinking of their service centres.

11.61. The Committee regret to note that the service facilities with regard to the repair of HMT watches are very inadequate and the process of getting the defective watches repaired is quite tedious and time consuming as more often then not the watch has to be sent

to Bangalore for a thorough check up. The Committee feel that with the gradual increase in the sale of watches, provision of adequate service facilities on decentralised basis is an imperative necessity. The Watch Factory I at Bangalore is at present producing more than 3,60,000 watches per year. Watch Factory III in Kashmir is likely to produce about 3,00,000 watches within the next two or three years. The Watch Factory II at Bangalore has already started production of automatic watches and is likely to produce 2,00,000 automatic calendar type watches per year.

11.62. The Committee, therefore, recommend that in order to attract customers and in order to improve the image of HMT, repair and service facilities should be arranged in all the principal cities of India so as to ensure prompt service to the customers.

Efficiency and Productivity

11.63. The following table shows the productivity of the labour for the past six years:—

	1966-6	57 1967- 6	8 1968-69	1969-70	1970-71	1971-72
Standard Force	•	1518 15	18 152	3 1588	2564	2628
Total number of employees as a March end .	=	61 12	:04 127	9 1344	1412	1483
Total production watches .	n . 2401	00 2500	000 30000	330000	345000	378000
Per capita productio	on 206·	80 207	64 234·5	6 245.54	244 · 33	254 ·88

^{11.64.} It will be seen that the productivity of labour has shown an upward trend.

^{11.65.} In this connection it has been stated that the standard force under reference includes the standard force requirement for Watch Factory expansion also and hence the upward trend.

Cost of Production

11.66. The following table indicates variations over the standard costs fixed for the year 1966-67 onwards:-

Type of Watch	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
Citizen	(+)11	(+)11	()3	(+)1	Not	Not
Janata ·	(+)10	(+)15	()2	(+) r	produced (+)1	roduced (+)3
Janata (luminous) .	(⊣∙)8	(+)14	()2	(+)1	(+)1	(+)3
Jawan	_	(+)14	()2	(+)1	Not produced	Not produced
Sujata (Non- Parashock)	(+)12	(+)12	()3	(+)2		
Sujata(Parashock) .	_	-	_	(+)2	1(+)	(+)3
Pilot	(+)8	(+)14	()2	(+)1	(+·)r	(+)3
Sona .	_	_	()3	(+)1	(+) 1	(+)3
Tareeq S.S.	_	-	()6	(+)2	(+)0.:	24 (+)2
Tareeq G.P	_		()6	(+)1	(+)0.	16 (+)2
Tarun			()2	(+) r	(+) 1	(+)3
Nutan	-	_	()3	(+)1	1(+)	(+)
Jawahar W. D.		_	_	-	Not pro	- +)3
Jawahar B.D	•	_	_	_	duced. (+)0·12	(+-)3

Percentage decrease over standard cost (-)

11.68. It has been stated that the increase in the actual costs over standard costs during 1971-72 can be attributed mainly to the increase in the cost of materials due to variations in the rate of exchange and also due to increase in the rate of customs duty.

Pricing Policy

11.69. The selling prices for the watches were first fixed at Rs. 89, Rs. 94 and Rs. 99 respectively for Janata, Citizen and Sujata types of watches when the production of CKD components commenced in

^{11.67.} It will be seen that actual costs during the years 1966-67 and 1967-68 were higher than the standard costs of these years. The actual costs for the year 1968-69, were however, lower than the standard costs in all cases and those in 1969-70 were almost equal to standard costs of that year.

the year 1961-62. There were three revisions in prices subsequently made effective from 1-8-1966, 1-2-1970 and 18-2-1971. The upward revision of the prices by Rs. 13 per watch made from August, 1966 was stated to be due to increase in the cost of production on account of devaluation. These were further revised by Rs. 5 per watch with effect from 1-2-1970 and 18-2-1971 on each occasion.

- 11.70. The overall actual cost of production in 1966-67 was much lower than the actual cost of production in 1963-64, 1964-65 and 1965-66. During 1967-68, 1968-69 and 1969-70, the overall actual cost of production increased marginally over the figure for 1966-67 but was still significantly lower than the figures for 1963-64, 1964-65 and 1965-66
- 11.71. The Committee enquired about the reasons for increase in the actual cost of production in 1970-71 and 1971-72 as compared to the figures for 1969-70 notwithstanding the fact that production of watches was more than that obtained in 1969-70. In a written reply the management have stated as follows:—
- 11.72. "The reasons for increase in the actual cost of production during 1970-71 and 1971-72 are mainly due to the upward revision of wage structure of all employees effective from 1st January, 1969 and due to payment of enhanced rate of incentive bonus and increased cost of transportation charges incurred on employees."

11.73. The comparative statement indicating the element wise cost of production per watch for the years 1963-64 to 1971-72 is as follows:—

	Year						Imported indigenor watch component	Assembly us expenses	Other expenses
		 	 			F			Percentage
1963-64							72 · 76	15.33	14.91
1964-65				•	•	•	79 · 76	10.98	9.26
1965-66		•					75.98	12.26	11.76
1966-67	•		•		•	•	73 · 32	12 · 16	14.52
1967-68		•			•		72 61	12.80	14.59
1968-69							69 · 30	12.15	18.55
1 969-70						•	70.25	13.47	16.28
1970-71							70.61	12.84	16.55
1971-72							70·76	13.79	15.45

Working Results

11.74. The following table shows the working results of the watch factory for the year 1966-67 to 1971-72:—

(Rs. in lakhs)

Year	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
Profit	99.47	116.85	147.83	171.50	190 23	227.17

11.75. The cumulative profits earned upto 31-3-1972 would work out to Rs. 11.23 crores inclusive of the profits earned by watch factory during 1961-62 and 1962-63 as per details given below:

	(Rs. in crores)
Figures upto 31-3-1970 as per Review	6 90
1970-71 .	1.90
1971-72	2 · 27
Profits of 1961-62 and 1962-63	0.16
	II·23

- 11.76. The Committee find that the selling prices for the watches manufactured by HMT were originally fixed at Rs. 89, Rs. 94 and Rs. 99 respectively for Janata, Citizen and Sujata types of watches. There have been an upward revision in prices on three occasions and the price of each category of watch is Rs. 23 more than the original price.
- 11.77. The Committee recommend that concerted efforts should be made to reduce/contain the cost of production so that there is no occasion to increase the prices further.

FINANCIAL MATTERS

A. Capital Structure

12.1. The position of paid up capital and long term loans as on 31st March, 1972 was as follows:-

Authorised capital . Rs. 25 crores

Paid up capital Rs. 16.92 crores (including *Rs. 4.92 crores on account of

advance received for share capital)

3

j

Long term loans from G.I. . Rs. 14.47 crores

*includes loan of Rs. 347 lakhs converted into equity.

- 12.2. The debt-equity ratio inclusive of Deferred credits stood Rs. 1.41:1. However, excluding Foreign Deferred credits, the debt equity ratio as on that date stood at 1:1.17 (i.e. Government of India Loans—Rs. 14.44 crores: Share Capital including Share Capital Advance—Rs. 16.92 crores).
- 12.3. The Management stated in March, 1971 that the question of correcting debt-equity ratio to the accepted norm of 1:1 had been taken up with the Government of India. The Committee enquired about the present position and about the reasons for delay.
 - 12.4. In a written reply the management have stated as follows:—

"The matter regarding correction of debt equity was taken up with the Government of India initially in June, 1969. In view of the capital intensive nature of the industry, we requested the Government for a debt-equity ratio of 1:2. The matter was under correspondence with the Government. The Government also require time in such important matters which have to be scrutinised by several agencies like the Administrative Ministry, Ministry of Finance, Bureau of Public Enterprises, etc. The Ministry of Industrial Development in their office Memorandum No. 11-1|70-MT dated May, 1970 agreed to maintain the debt equity ratio of 1:1. The B.P.E., also issued a CirÍ

cular in November, 1970 wherein it was provided that the entire township cost should be met by equity capital and the balance investment should be apportioned between debt and equity in the ratio of 1:1. In view of this Circular the matter was again taken up by the Company with the Government of India in January, 1971 for correction of the debt ratio on the basis of the B.P.E. circular. The Government sanction for conversion of loans amounting Rs. 347.00 lakhs to equity capital was issued on 29th March. 1972.

The amount of Rs. 347.00 lakhs represents the capital expenditure incurred on township. The conversion of these leans into equity was carried out by book adjustments, without involving any cash transaction."

12.5. The Ministry have explained the position as under:-

"Since 1961. Government had accepted a norm of 1:1 as debt equity ratio for public sector undertakings. In April, 1969, it was agreed that rigidity may be avoided in applying the ratio 1:1 and in cases where the undertakings made out a strong case for a different ratio, due consideration has to be given. HMT in their letter of June 6, 1969 brought out that the debt equity ratio as on 31-3-1968 stood at 1.34:1 and stated that this was most unfavourable to the organisation. They, therefore, asked for a revision in the debt equity ratio as 1:2 stating that the loan and interest burden of the Company will thereby get reduced and the capitalisation of investment would, therefore, balanced. HMT were informed in our letter of 14, 1969 that the approval of the Board of Directors may be obtained for this purpose to facilitate further action in the Ministry.

In their letter of August 13, 1970 HMT approached the Government for raising the authorised share capital to Rs. 25 crores, from the existing capital of Rs. 12 crores which was fully paid up by 1966, after obtaining the approval of the Board of Directors therefor. This proposal was examined in consultation with the Ministry of Finance and a decision was communicated to the Company on May 17, 1971 conveying the approval of the Government to the raising of the share capital from Rs. 12 crores to Rs. 25 crores. As regards the conversion of Rs. 347 lakhs repre-

senting the expenditure on township into equity, they were advised that the matter was being further considered by the Government.

The orders for conversion of the loan of Rs. 347 lakhs into equity were issued on March, 29, 1972 after making a provision in the revised estimates for 1971-72 with the concurrence of the Ministry of Finance and also after obtaining the clearance of the Department of Company Law Affairs."

- 12.6. The Committee note that against the accepted norm of 1:1 for debt equity ratio for public undertakings, the debt equity ratio in respect of Hindustan Machine Tools Ltd., excluding of deferred credits has been 1:1.17 as on 31-3-1972. The Bureau of Public Enterprises issued a Circular in November, 1970, wherein it was provided that the entire township cost should be met by equity capital and the balance investment should be apportioned between debt and equity in the ratio of 1:1. The sanction of Government for conversion of loans amounting to Rs. 347.00 lakhs (which represented the capital expenditure incurred on township was however conveyed on the 29th March, 1972.
- 12.7. The Committee hope that by the time a decision is taken about the organisational structure of the company, the imbalance in the debt equity ratio will also be set right after examining the financial implications.

B. Project Estimates

12.8. As per the original agreement with M|s. Oerlikons executed in March, 1949, the factory was to be constructed for the manufacture of machine tools in five stages to be completed within a period of six years. M|s. Oerlikons drew up detailed estimates for the first and second stage of the project and according to these estimates, the cost of the project came to Rs. 30 crores (Rs. 16 crores for the factory proper including apprentice training school and Rs. 14 crores for residential settlement). Government, however, decided on account of financial stringency, to reduce the scope of the project comprising the first two stages of the project. The estimated cost of the scheme was Rs. 8.37 crores excluding the working capital requirements of Rs. 1.20 crores and this was approved by the Government in December, 1950. In respect of the new machine tool units set up by the Company during 1961-64 viz., II, III and IV it was estimated that

each of the Units capable of producing 1,000 machines per annum could be built for Rs. 5 crores approximately (exclusive of cost of township and other amenities).

12.9. The following table indicates the original and revised estimates of all the Units and the actual expenditure incurred thereagainst up to March, 1972:—

(Rs. in lakhs)

Machine Tools Units	Original Estimates	Revised Esti- mates	Actuals as on 31-3-1972
I. Bangalore II. Bangalore	3000·00 280·87	837.00 \ Not revised \	1,115.30
III. Pinjore	750.00	Do.	742.08
IV. Kalamassery .	750·00	840·16 (March, 1968)	802.81
V. Hyderabad	775.00	858·00 (January, 1967)	775.58

12.10. The item-wise break up of the project estimates in respect of Unit I is not available. In this connection, the Management have stated "since the project estimates of HMT I, Bangalore relate to a very old period, the papers unfortunately are not traceable."

12.11. The details of actual expenditure in respect of HMT I and II units as on 31st March, 1972 are as follows:—

	(Rs. in lakhs)
Land	13.98
Buildings .	147.08
Plant & Machinery and Factory Equipment	614.00
Others	115.73
Sub total	890 79
Township	224.51
	1,115.30

12.12. A statement showing the project cost of HMT II, Bangalore and new items approved by the Board of Directors in the annual budgets from time to time and the actuals as on 31st March, 1971 against the total budget provision is given in Appendix IX. It has been stated by the Management that 'break-up of actual expendi-

ture separately against project cost and new items is not readily available.'

- 12.13. As regards the new items not envisaged in the Project Estimates, it has been stated that the bulk of the new items was represented by Plant and Machinery and factory equipment which were required for balancing the capacity required for meeting the diversified production programme as well as for replacements. These items were approved by the Board of Directors from year to year depending upon the estimated requirements from time to time.
- 12.14. In a written reply the Ministry have, however, stated as follows:—
 - "It has been observed that the expenditure on new items aggregating to Rs. 290.45 lakhs relates to the period 1962-63 to 1970-71. The Management had indicated that the expenditure under the various heads had been approved by the Board of Directors from time to time as the same was within the competence of the Board. However, in respect of certain individual items, the cost has gone up by more than 10 per cent and the Management has, therefore, been advised to correct the situation by obtaining appropriate approval of the Government according to the prescribed procedure.
- 12.15. The Committee enquired as to how an effective control was exercised by the Management with reference to the Project Estimates in the absence of item-wise break-up of Project estimates of Unit I being available and actual expenditure in respect of Unit II not being comparable with the Project estimates. The Management have stated as under:—
 - "In respect of Factory I, Capital expenditure was incurredfrom time to time with reference to the approved project
 costs only. However, these records are not readily available now. In respect of Factory II, as well as new items
 approved by the Board, control has been exercised from
 time to time with reference to the approved project
 cost and additional capital expenditure budgets from
 year to year. It has been ensured that the capital expenditure is always within the approved budgetary limits
 only."
- 12.16. A statement showing the break-up of actual expenditure vis-a-vis the estimates as on 31st March, 1972 in respect of HMT III,

Pinjore, HMT IV, Kalamassery and HMT V, Hyderabad is given in Appendix X. The Details furnished in the statement do not include the figures relating to new projects, viz., Tractor Project at HMT III, Pinjore, Printing Machinery Project at HMT IV, Kalamassery and Press Division at HMT V, Hyderabad.

12.17. It will be seen from the details given in the Appendix that there has been a considerable shortfall in respect of township expenditure in respect of units III, IV and V. This was stated to be mainly due to curtailment/postponement of the construction of the quarters owing to financial stringency.

C. Revision of Project Estimates

12.18. The break-up of increase in the project cost in respect of HMT IV and V reason-wise is furnished below:—

IMT IV and V reason-wise is furnished below:—	
HMT IV—KALAMASSERY	(Rs. in lakhs).
Original project Cost	750.00
Add: 1. Increase in construction cost by 20%, change in structural design Provision of increased floor area of about 60% etc., etc.	ign, (+) 92·50
2. Air conditioning not included in the original estimate	(+) 17⋅∞
 10% price increase, 10% regulatory duty and also increase due to n availability of free foreign exchange. 	(+)62·50
1	922.00
4. Curtailment of expenditure on township	(—) 136∙∞
Revised project cost (1st Revision)	786⋅∞
5. Extra expenditure due to devaluation	54. 16
	840.16
HMT V—HYDERABAD	
Original Project Cost	775.00
Add:	
 Increase in construction cost by about 13%, levelling the surfa increase in the cost of excavation etc. 	(+) 15.36
Increase due to the enhancement of customs duty to provision of e cranes not originally contemplated due to increase in cost of me suring instruments, Motors etc.	(+) 81.32
3. Due to provision of Steel furniture in place of wooden	(+) 6.67
	878 · 38
4. Reduction due to curtailment of Township buildings Revised I ject Cost (Ist Revision)	Pro- (—) 78·38

800-00

5. Expenditure due to devaluation

57.98

857.98

or 858.00

12.19. During evidence the Joint Secretary of the Ministry explained the position with regard to revision of Project estimates as follows:—

"The project estimates as originally made generally have to undergo a certain revision because of two sets of factors. One is that there is more depreciation of capital in the shape of plant and machinery as the project gets on stream. Secondly, there are certain factors which are completely beyond the control of the units, like statutory levies devaluation and so on. If the original estimates and revised estimates are compared and if we take out the factors accounted for by statutory levies and devaluation, the project revised estimates do not represent more than 10-15 per cent rise and in no case have the revised estimates been pierced."

- 12.20. Asked as to why the projects were incomplete and how the capital expenditure was still being incurred against capital estimates even today, it was stated that there were certain items of expenditure like the township and certain auxiliary establishments where it was felt that the expenditure could wait These were phased out and were being completed now.
- 12.21. The Committee are surprised to note that the records containing the item-wise break-up of the project estimates in respect of Unit I and the break-up of actual expenditure separately against project cost and new items in respect of Unit II were neither available with the Management nor with the Government. The expenditure on new-items alone aggregate Rs. 290.45 lakhs during the period 1962-63 to 1970-71. The Committee were informed that the bulk of the new items relate to Plant and Machinery and factory equipment which were required for balancing the capacity required for meeting the diversified production programme as well as for replacements.
- 12.22. The Committee fail to understand as to how an effective control was exercised by the Management with reference to the Project Estimates in the absence of item-wise break-up of Project Estimates and the break up of the actual expenditure being available.

The Committee are not satisfied with the statement that "It has been ensured that the capital expenditure is always within the approved budgetary limits only". In the absence of relevant records it cannot be ascertained as to whether the expenditure incurred against each and every item was within the limit sanctioned for each component, The Committee, therefore, recommend that responsibility for the missing records should be fixed and steps should be taken to trace all the records without any delay.

- 12.23. The Committee adso take a very serious note of the fact that in spite of excesses on the estimated cost being more than 10 per cent in individual cases, the management did not obtain the approval of Government prior to the incurring of such expendituure. The Committee have also noted this lapse in the case of project cost in respect of Watch Factory I & II at Bangalore,
- 12.24. The Committee need hardly stress that incurring of expenditure in excess of sanctioned estimates without even bringing the excess to the notice of the competent authority is irregular and the Committee recommend that responsibility for the lapses may be fixed. Government should also ensure that such lapses do not recur.
- 12.25. Since the Government have advised the Management to correct the situation, the Committee hope that the Management would now get the approval of Government to the revised estimates according to the prescribed procedure without any delay. The Committee would like to be informed within three months of the presentation of the Report about the action taken by the Management/Government in this regard.

D. PROFITABILITY ANALYSIS

12:26. The working results of the Company for the last six years are analysed below:-

				(Rs.	(Rs. in lakhs)	
	1966-67	1967-68	1968-69	1966-67 1967-68 1968-69 1969-70 1970-71	16-0/61	1971-72
Income						
Sales · ·						
Machine tools .	1256.69	1196.46	1202.66	1256.69 1196.46 1202.66 1292.13	1636.45	2484.23
Watches	. 247.96	00.697	332.53	374.47	407.00	469.28
	1504.65	1504.65 1465.46		09.9991	1535 19 1666 60 2043 45	2953.51
Other income	107-97	85.26	179.30	159.74	145.09	10.0/1
Increase/decrease in finished and semi-finished goods	. 212.41	272.68 ()125.37	—)125·37	119.59	238·54	207.71
	1825.03	1823.40	1579.12	1825.03 1823.40 1579.12 1945.93 24.26.08	24. 26. 08	3331 29
Expenditure-before interest on long term loans	1616-42	1797.95	1616-42 1797-95 1511-83 1892-44	1892-44	2265.43	3084.57
Profit	(+)208·61 (+)25·45 (+)67·29 (+)53·49 (+)161·65 (-)246·72	.)25·45 (+	-) 62.29	.) 53*49 (-	+)161-65	,)246.72
Less: Interest on long term loans & deferred foreign credits .	82.38	91.41	101.57 107.78	107.78	108.31	124.21
Net profit/loss	. (+)126·23 (-)65·96(-)34·28 (-)54·29 (+)53·34 (+)122·51	-)96.59()	-)34.28 (-)54.29 ((+)53.34 (1122.51

12.27. Losses during 1968-69 and 1969-70 would have been higher by Rs. 68.94 lakhs and Rs. 41.09 lakhs respectively but for the adjustment made on account of excess provision of Income Tax of Rs. 34.47 lakhs in 1968-69, withdrawals of excess provision from development rebate reserve of Rs. 7.54 lakhs in 1968-69 and Rs. 30.96 lakhs in 1969-70 as no longer required, profit on sale of imported machines during 1968-69 amounting to Rs. 26.93 lakhs and credits relating to previous years written back in 1969-70 amounting to Rs. 10.13 lakhs.

12.28. The net loss of Rs. 54.29 lakhs for the year 1969-70 was mainly due to increased expenditure (Rs. 110 lakhs including Rs. 22 lakhs pertaining to 1968-69) on salaries and wages on account of wage revision, as a result of the recommendations of the Central Wage Board Award, given effect to retrospectively from 1st January, 1969.

12.29. The net profit during the years 1970-71 and 1971-72 is inclusive of the development rebate reserve of Rs. 22.56 lakhs and Rs. 10.40 lakhs withdrawn as no longer required during the years 1970-71 and 1971-72 respectively. The net profit for the year 1971-72 is also inclusive of the subsidy of Rs. 20.00 lakhs sanctioned by the Government of India to compensate the company for the interest liability on loans aggregating to Rs. 347.00 lakhs converted into equity capital.

12.30. With regard to the losses incurred by the Company the Management have stated as under:

"The year 1967-68 was the worst year of recession which resulted in a net loss of Rs. 66 lakhs. The position of orders booked during the first three quarters of the year 1968-69 continued to remain unsatisfactory and the order position showed signs of improvement only during the last quarter of 1968-69. In view of this, the year 1968-69 had also resulted in a net loss of Rs. 34 lakhs which, however, shows an improvement in working results as compared to the working results during On the other hand the expenses on salaries, wages and other expenses (particularly the interest liability) most of which are of a fixed nature have increased from year to year commensurate with expenses. We have been taking all steps like stopping further recruitment to ensure that the expenses do not go up unreasonably. But in an established industry, expenses cannot be curtailed

unless retrenchment is resorted to. On the contrary expenses increase yearly in the range of 5-10 per cent. This is on account of increments and general increase in the Dearness Allowance and other expenses.

During the year 1968-69, the Board considered various proposals for retrenchment and lay off of labour to reduce fixed expenses and to make the Units more profitable. In view, however, of signs of improvement in the demand for machine tools and the difficulties involved in getting highly skilled labour at short time to undertake production of highly sophisticated machines, these proposals could not be put into action. The loss during the year 1968-69 would have been much less if measures were taken to reduce labour force.

The working of the Company during the year 1969-70 resulted in a loss of Rs. 54 lakhs successively for the third year mainly on account of the sharp increase of Rs. 110 lakhs in wage and salary cost which the Company had to bear during the year as an effect of the recommendation of the Central Wage Board for Engineering Industries. Because of this factor alone a clear possibility of showing a profit was turned into an actuality of loss.

In 1970-71 the working results of the Company despite brief spell of disturbed industrial relations resulting in strike and lock-out during October/November, 1970 in HMT I & II, Bangalore and the Watch Factory, Bangalore showed a net profit of Rs. 30.78 lakhs after providing for depreciation of Rs. 209 lakhs and interest on loans including loans from Government amounting to Rs. 163 lakhs. (Interest on Government loans Rs. 92 lakhs)."

12.31. During evidence the Committee pointed out that the Management had stated that "in the established industry expenses cannot be curtailed unless retrenchment is resorted to". They enquired whether the Government did not agree that the proper approach to reduce the cost of production was through technological improvements; and if so, what steps had been taken in that tion. The Secretary of the Ministry explained as follows:—

"Though we agree fully, technological improvement need not necessarily reduce the cost in all circumstances. A technological improvement might in a given situation definitely increase efficiency, but to derive the full benefit of the technological improvement, one has to have a network, one has to have an order of production, one has to have a certain degree of stability in supply of components and raw materials, stability with regard to induction of inflow of finance, marketing etc. All these factors are very important and, therefore, while ideally it is correct that technology is primarily the instrument of efficiency, unless other things are there, I am afraid, technological improvement does not necessarily lead to reduction in cost.

As far as the standard force is concerned, the standard force is derived on the basis of a given component of men, that one has to have taking the job at its standard level. If the orders do not materialise or due to certain circumstances production levels go down, it will be very difficult for any organisation to keep on varying the standard force because the standard force really represent the minimum complement of men and skill that is needed to maintain the production at the minimum efficient level. While it is very necessary to see that avoidable induction of labour which is unproductive is stopped, if in a particular year, the production goes down, it may not either be desirable or possible to concomitantly cut down the standard force."

- 12.32. The Committee pointed out that every year, the salaries and wages were going up. This meant that the cost of production was going up. They desired as to the method followed for keeping the cost at least at the same level, if it could not be reduced. It was stated that this could be achieved through higher production.
- 12.33. In regard to the steps taken to reduce the cost of production, the Chairman, HMT stated as under:—
 - "We must have a technological improvement to reduce our cost and efforts are being made continuously in this direction. We have been doing it. We have strengthened production technology cells in each of the Units. We are hiring people. Raw graduates are given freedom to criticise the methodology employed in the various shops and this is being continued and we are sending these boys abroad to see how similar jobs are done and how our collaborators and others work. They will come back and I think we will continuously have to keep on improv-

ing our production technology. We have to make use of the labour 100 per cent and improve our own management efficiency and production technology."

12.34. The unitwise working results for the year 1970-71 and 1971-72 are as indicated below:

	1970—71 1971—72
I & II	(—) 40·42 30·09
III	(+) 7·46 25·68
IV	(—) 53·23 (—) 97·29
v	(_) 69·22 (_) 66·13
	(—) 155·41 (—) 167·65
Watch factory Head Office	(+) 190·23 (+) 227·17 (+) 18·52 (+) 2·99

12.35. The Committee enquired about the extent to which profitability of the Company was contributed by the following factors:—

- (a) Increase in the profits of Watch factory,
- (b) Profit on the sale of tractors assembled out of imported components, made for the first time in 1971-72 by Unit III,
- (c) Profit on the sale of Printing Presses and Heavy Duty Presses manufactured in Units IV and V.

12.36. It was stated as follows:—

"While admitting that the profits which have finally emerged have been substantially contributed to by the Watch Factory, it may not be factually correct to say that the Tractors and Printing Presses and Heavy Duty Presses have contributed substantially to the profits in 1971-72. Of course in the coming years the Tractors, especially, can contribute very substantially. The margin in Printing Presses also is likely to be fairly high but in Metal Forming Presses the margin is not likely to be high because it is very heavy equipment and it is unlikely that the profits margin will be substantial till the imports are substantially reduced and production is indigenised. The type of work is such that we are unlikely to get a very substantial margin so far as Heavy Duty Presses are concerned."

12.37. In regard to profitability analysis the Chairman, HMT stated during evidence as under:—

"We have given profitability analysis of every unit, but if you ask profitability analysis of a new production unit that we have introduced, that is only a domestic exercise, that is so inter-linked with another capacity that it is difficult to give. If we are using the available capacity of HMT III and if you ask what is the extent of profit, don't you make profit in tractor and lose in machine, it is difficult to give you. We are making profit. But this is overall figure I can give you."

He added:

"I personally feel, unless you have an exclusive export market, machine tool is an industry which has got very limited scope for profit. In foreign countries we have seen that in such type of factories they make two things. In one factory they are manufacturing machine tools and make guns and weapons. They balance up their balance-sheet and ultimately there is profit in balance-sheet. We have seen Renaults. They make machine and cars but they have 60 per cent of their market abroad. So they are not so much affected by depression in machine tool business. Our pattern of machine tool is continuously better by (a) diversifying vertically, we are designing new type of machines and (b) we are also diversifying horizontally by taking other products so that overall profitability is kept always in view."

E. Unitwise Working Results

12.38. The following table indicates the unitwise working results:—

							(Rs. in lakh	3)
			1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
Machine To	ools U	nits						
I & II			(+)91.83	()21.69	()88.04	()57.45	()40.42	(4)30.09
III .			()39·32	()35.92	(—)24·51	()26.98	(4) 7.46	(÷)25·68
IV .			(+)18.10	()51 · 33	()52.36	()58.63	()53.23	(-)97.29
v .			()43 · 85	(—)73·86	()97:15	(—)117·31	(—)69·22	()66.13
,			(+)26.76	(—)182.80	(-)262.06	(—)260·37	()155 · 41	(—)107·65
Watch Fa	ctory		(+)99.47	(十)116.85	(+)147.83	(+)171.70	(+)190.23	(+)227.17
Head Off	ice*				(+)79.95	(±)34·38	(+)18.52	(+) 2.99

^{*}Profits of Head Office represent write back of excess provisions and income from services rendered centrally.

12.39. It is seen that Units I & II incurred losses from 1967-68 to 1970-71, Unit III incurred losses from 1966-67 to 1969-70, Unit IV from 1967-68 to 1971-72 and Unit V has incurred losses from 1966-67 to 1971-72.

12.40. In computing the losses, the following expenditure on social overheads has been taken into account:—

(Da in Jakka)

				(Ks. in iakns	,	
	1966—67	1967—68	1968—69	1969—70	1970—71	1971—72	
1. Township	32.96	47:43	49.57	52 · 28	54.83	34.64	
2. Schools and edu cational facilities	1.16	1.53	1.31	1.27	1.70	1·76	
3. Medical	7.23	7·76	6.05	7.84	8.81	11.13	
4. Subsidised transport	- 24· 76	25.66	26.01	29. 12	29.90	36.41	
5. Others	15.90	18.56	19.76	20.47	26.00	13.99	
TOTAL	82.01	100.94	102.70	110. 98	121.24	98. 22	

12.41. The Committee enquired about the reasons which resulted in the losses in Unit IV & V. The Joint Secretary of the Ministry explained the position as follows:—

"So far as Units IV and V, that is Kalamassery and Hyderabad, are concerned I would submit that Kalamassery would not have made losses had it not been for the serious labour troubles which have been plaguing it for the last three to four years. You will observe that in 1966-67 it did return a surplus of 18 lakhs. It has run into losses not because anything is wrong with production planning or because anything is wrong with the product mix, but the only trouble is that the factory has not worked to full capacity because of continuing labour troubles. Even today Kalamassery has not full orders and it is not that due to non-availability of work that Kalamassery is suffering. Kalamassery is suffering because it has not been able to produce to the extent of orders it has always had and that has been due to the serious labour difficulties, as I have just now submitted.

In order, however, that the Kalamassery unit also could break even, we are thinking of a new line at Kalamessery, that is, printing presses. For the printing presses, the capital cost is Rs. 428 lakhs and when it is fully in production it should have a turnover of around Rs. 5 crores and this is a line which should give us a pre-tax return of at least 16 per cent of the capital employed. Therefore, we are fairly hopeful in our expectation that in case Kalamassery gives a couple of years' working untroubled by go-slow and other methods which affect efficiency, it should be possible for it not only to come up to a point of break-even but to return a sizeable surplus in course of time

As regards Hyderabad, as has been explained, this is a unit which produces special purpose machine. There are selling problems in the sense that, several orders have been cancelled and for several orders which were given, machines were ready but deliveries were not taken. This is because this equipment is high value equipment which is tailored to a particular unit and is not capable of being diverted and unless the party on whose specifications it has been built takes it, it is not possible to sell it. The value of the equipment is such that the party which orders for it must also be fairly advanced in project formulation, and must have also got all the clearances-whether it is procedural or clearances from the financial institution. have got instances where we have seen that even reputed concerns, after having given orders and paid advance. have allowed the advance to be forfeited but have not been able to lift the machines either because they are run dry of cash or certain clearances are pending or foreign collaborations are not there or they have not got all the ends tied up so far as financial institutions are concerned.

So far as special purpose machines are concerned, the items are such that the time taken for making the special purpose machines is 24-30 months. Therefore this unit has necessarily to have two things. One is heavy capital investment without which you cannot make special purpose machines and the other is a very long building time which means a very high inventory of works in progress.

Therefore we feel that this position will not remain because we have added the Heavy Duty Presses and the metal forming press and also lamp making machine in the line of production in Hyderabad. We do feel that with the turn over of Rs. 8.0 crores on account of lamp making machine and Rs. 3.5 crores on account of metal forming press it should be possible for Hyderabad to function in the manner that their machine capacity will not remain idle and that they will not suffer due to heavy lead of works in progress because at that time they will be able to use the machine for terms of metal forming machine and lamp making machine. These difficulties with gard to Units IV and V have been constantly under review of the Board of Directors which have been engaging the attention of the Government and these new lines of production which had been given to Kalamassery and Hyderabad had been given due appreciation and response in order to enable to come to a stage when they can break up this and also start showing certain surplus. We quite confident that in three years' time both Kalamassery and Hyderabad will be out of the red.

So far as Kalamassery is concerned there is a question with regard to continued labour unrest. So far as Hyderabad is concerned, we are quite certain that once the lamp making machine and heavy duty press start functions in proper order, we will be successful in breaking the ground."

.12.42. The Committee find that whereas the Company incurred a net loss of Rs. 154.53 lakhs during 1967-68 to 1969-70, it showed a net profit of Rs. 53:34 lakhs and Rs. 122:51 lakhs during 1970-71 and 1971-72 respectively. The Committee, however, note that it is the watch factory that has mainly and substantially contributed towards profitability and economic viability of HMT. As against the total profit of Rs. 9.53 crores made by the watch factory, during 1966-67 to 1971-72, the machine tool units incurred a net loss of Rs. 9:42 crores during this period. The bulk of the loss was contributed by unit IV (Kalamassery) and Unit V (Hyderabad) Unit IV incurred a loss of Rs. 312.84 lakhs during 1967-68 to 1971-72 and Unit V incurred a loss of Rs. 467:52 lakhs during 1966-67 to 1970-71. Recession in the country resulting in low order position, increase in the expenses on salaries, wages and other expenses particularly the interest liability from year to year and the expenditure incurred on excess staff resulting in high cost of production, disturbed industrial relations resulting in strikes and lock-out have been cited as the reasons for the losses in the machine tool units.

- 12.43. As explained in the preceding Chapter of the report, the Committee need hardly point out that there has been lack of proper planning right from the beginning in not having made a clear and realistic assessment of the demand for the various types of machine tools in the country, not fixing the capacities of the units on a scientific basis taking into account the relevant factors affecting production, not improving the productivity and labour efficiency resulting in high cost of production, not and in not having a broad blue print for diversification etc.
- 12.44. The Committee have at the relevant places made suitable recommendations in order to increase the productivity and production performance of HMT. They hope that the recommendations will be considered and implemented by the Government Management in the best interest of HMT.
- 12.45. The Committee also hope that with the remedial measures already introduced by the Management, it should be possible to improve profitability of HMT and maintain its dominant role as producer of machine tools in the country.

F. Credit Control

- 12.46. In respect of sales effected under DGS&D Rate Contracts, -90 per cent to 98 per cent of the invoice value is payable on proof of despatch and the balance amount is payable after receipt and acceptance of the machines and accessories. In respect of acceptances of tender issued by DGS&D, the terms of payment vary from A.T. to A.T. and 90 per cent to 95 per cent is made on proof of despatch and the final instalment payment is made on proof of receipt and acceptance of the goods and also after adhering to other payment terms and conditions of the contract such as the approval for the extension of the delivery date, if any, approval of the final price if the prices earlier accepted are provisional subject to escalation etc. In the case of supplies to DGOF under Supply Orders issued them, the terms of payment vary from order to order though the bulk of payment is made either in instalments or on proof of supply and the balance payment is again subject to receipt and acceptance of goods, amendments to supply order for delivery date, final price etc.
 - 12.47. In case of special purpose machines, the Company generally insists on an advance payment upto 30 per cent with the order.
 - 12.48. The payment terms and conditions normally extended to DGS&D Rate Contract are also applicable to direct sales to Public Sector Undertakings.

12.49. In respect of sales to private parties the company generally insists on advance upto 20 per cent with the order and balance payable before despatch or against documents through bank.

12.50. In the case of leading and established customers credit is also extended with a view to promote the sale of the machines. In such cases, as far as possible, the company insists on Letter of Credit or Bank Guarantee. Sale to private parties also include sale Under IDBI and instalment schemes and also payment under bill market scheme.

12.51. The sales department has been authorised to extend different terms of payment to the customers within the limits of delegated powers. All cases involving deviations are put up to competent authority for approval.

12.52. The following table indicates the value of book debts and the sales during the last six years from 1966-67:—

(Rs. in lakhs)

1966-67 1967-68 .	•	 ·	•	Good 336·14 328.44	Doubtful	336.14	1504 · 65	•
1967-68	•						- ' '	•
	•	•		228 44	0.20			
				320.44	0.20	328 64	1465.46	22.4
				436.44	0.30	436.64	1535 · 19	28.4
1969-70				479.43	0.30	479 · 63	1666.60	28 · 8
1970-71			•	626 · 88	0.30	627.08	2043 · 45	30.7
1971-72 .				690 · 78	0.30	690·98	2953 · 51	23.4

12.53. The details of the amounts outstanding for more than one year as at the end of each year and its distribution between Government Departments and Private Parties are indicated below:—

(Rs. in lakhs) 1966-67 1967-68 1968-69 1969-70 1970-71 1971-72 Government 80.01 78.01 Departments 53.43 82.38 92.83 90.59 Private Parties 12.27 11.41 34.05 27.52 44.54 15.55 65.70 108 · 38 114.76 105.53 TOTAL 135.13 93.79

12.54. The following table indicates the percentage of debts outstanding for over one year to the total debts during the period 1967-68 to 1971-72.

1967-68								28.5%
1968-69	•			•				24.8%
1969-70	•							23.0%
1970-71	•			•	•	•	•	16.8%
1971-72							•	19.5%

12.55. The Company has attributed (April, 1971) the following reasons for outstandings beyond 1 year:—

Government Departments

- (a) Non-receipt of 2nd and 5th copies of DGS&D Inspection Notes.
- (b) Non-finalisation of firm prices by DGS&D in respect of rate contracts, etc.

Private parties.

12.56 A major portion of outstandings represents amounts due under Hire Purchase Sales Scheme, which are repayable in 25 monthly instalments.

12.57. In order to meet its working capital requirements the Company has arranged cash credit facilities and bill discounting facilities with the State Bank of India subsidiaries and the nationalised banks. The extent of cash credit availed of and the bills discounted together with the interest and commission paid are given below:—

(Rs. in lakhs)

Year		•			Cash cre- dit availed of at the end of the year	Interest paid	Bills dis- counted and shown as outstand ing at the end of the year	Commis- sion paid -
1966-67	•				542 · 18	41.12	62.01	1.40
1967-68			•	•	519-46	13.04	127.03	1.30
1968-69					402 · 47	45. 58	257·35	1.11
1 969-7 0					409 · 83	33.29	190-90	0.91
1970-71			2° 1\$		807 · 57	54.88	590.43	0.75
1971-72					1687 - 37	97.25	670.13	1.11

12.58. In view of the fact that the Company is having bill discounting facilities, the position of Sundry Debtors as indicated above is after excluding the bills discounted which were outstanding as at the end of each of the years. Again, there will be hardly any debtors in respect of watches. In order to have a proper appreciation of the percentage of Sundry Debtors to sales, the Committee enquired about the percentage of book-bets to sales after taking into account the bills discounted which were outstanding as at the end of the year.

12.59. In this connection the management have, in a written reply, stated as follows:—

"In our opinion it would not be correct to consider the value of bills discounted as part of book debts for making the comparison of outstanding book debts with reference to turnover at the end of each year. The very purpose of discounting of bills is to have quick realisation of debts and thereby improve the ways and means position. The liability for the company in respect of bills discounted would arise only in the unlikely event of the bills being not honoured by the customers when presented by the Bankers. We, therefore, feel that any comparison of book debts inclusive of bills discounted to the turnover would represent a misleading picture of book debts."

12.60. Asked about the criteria followed by the Company for discounting of bills it has been stated as under:—

"The IDBI bills are discounted after the sale of machines. Hire purchase and Instalment Sales Bills also are discounted after sale of machines. In respect of other bills, discounting is resorted to as and when found necessary i.e. depending upon the ways and means position and utilisation of the cash credit limits.

12.61. The bills under Hire purchase and Instalment Sales carry interest payable by the customers and hence the discounting of bills under these two schemes does not involve any interest liability to the company.

12.62. The Management have furnished the following details of bills discounted under various schemes during the last five years as follows:—

	Bills dis	counted	Bills outstandin year	_	end of the
	IDBI	HPS and ins- talment	IDBI	HPS ment	& instal-
	(Rs. in	lakhs)			····
1967-68	76.58	12.00	49.23		1.39
1968-60	110.47	15.95	209.79		10.35
1969-70	219.52	30.73	124.45		12.22
1970-71	247.55	36.80	492.11		[28·63
1971-72	222.89	61.49	542.72		42.02

12.63. The Committee enquired about the terms and conditions for the discounting of the bills. The Management have stated as follows:—

1.

"The bills are discounted by the bankers according to their normal terms which include payment of nominal discounting commission and interest for the discounted period. As already explained the Company does not incur any interest liability in respect of bills discounted under IDBI, Hire purchase and Instalment schemes. terest on other bills discounted the rate of interest charged by the bankers for the discounted period is the same as applicable to the cash credit loans. If bills had not been discounted, the cash credit utilisation would have been higher to that extent and hence the same would have attached interest liability on such higher cash credit utilisation. Hence no additional burden is involved on the company in respect of discounting the bills. In this connection we may also clarify that but for the discounting facility being availed of by the company the ways and means financial position of the company during the year would have been very seriously affected, and the company would have faced serious financial difficulties in day to day financial management.

Details of interest and commission paid during the last 5 years for general bills discounted are as follows. Interest chargas in respect of IDBI bills and HPS/Instalment scheme

have not been furnished as the interest charges are borne entirely by the customers.

				 	C	ommission (Rs. in 1	Interest
1967-68						1.18	3.12
1968-69						1.08	2.05
1969-70						0.85	0.38
1970-71						o·68	2.44
1971-72					•	0.99	2.93

The discounting Commission paid on HP/Instalment sales Bills discounted are as follows:—

1967-68									(Rs. inlakhs)
1968-69		•							0.03
1969-70									0.06
1970-71									0.07
1971-72	•			•	•	٠	•		0.12

12.64. The Committee enquired whether the Company's present system of billing and collection of debts permitted effective control on the realisation of debts and how the company explained the large amount of debts over one year. It has been stated that:—

"there has been an improvement in the position during 197071 and 1971-72. The company has a good system for follow up of all outstanding debtors. However, in view of
the various procedural formalities involved in getting
clearance from DGS&D and DGOF in respect of supplies made against their supply order/Rate Contracts and
Acceptance of Tender, certain amount of delay in respect
of collection of debts appears to be inevitable, more particularly in respect of balance payment due which are
subject to receipt of 2 & 5 copies of Inspection Notes,
finalisation of firm prices, amendment of delivery dates
etc."

12.65. Asked about the steps taken to ensure realisation of old outstandings the management have stated as follows:—

"All old debts are subjected to special periodical reviews and follow up action is taken to collect these debts. In important cases, follow up is done even by personal visits to

customers for collection of outstandings. These outstandings are discussed periodically with the DGS&D and DGOF officials with a view to expedite the collection of all outstandings. Out of debts outstanding for over one year as on 31st March, 1972, we have already collected Rs. 30.32 lakhs."

12.66. It is noticed from the Review of Accounts by Indian Audit and Accounts Department for the year ending 31st March, 1972, that the working capital of the Company amounted to Rs. 1389.83 lakhs in 1969-70, Rs. 1970.65 lakhs in 1970-72 and Rs. 2407.06 lakhs in 1971-72 and represented 9.9, 11.5 and 10.2 months' value of production at cost (excluding depreciation) during these years. The Committee enquired whether the Management considered that the working capital was on the high side and about the measures, if any, being adopted to keep the working capital requirements to the bearest minimum so as to limit the cash credit drawal and the interest paid there on.

12.67. In a written reply the Management have stated as under:-

"The inventory of raw materials Stores and Spare Parts,
Tools and instruments should, in our opinion, be considered in relation to the production programme of the
subsequent year as the inventory planning is to be made
on the basis of future projections of production."

12.68. On this basis, the inventory holdings of these three items as a percentage to the total expenditure on production of subsequent year works out as follows:—

Year of p	rodn.	Total cost of	Percentage of			Work-in- progress	
		Prodn.	R.M.	S&S	Tools	Total	progress
		 (Rs. in lak	ths)				
1969-70		2000 • 22	8.7	6.7	7.5	22.9	18.9
1970-71	•	2373.74	11.6	6.3	5.6	23.5	17.4
1971-72		3208 · 78	11.0	6.4	4.6	22.0	16.3

12.69. It can be seen from the above statistics that the inventory holdings of raw materials, stores and spare parts and tools together do not show any wide fluctuations during 1969-70 to 1971-72. It can also be observed that the inventory of work-in-progress as a percentage to total expenditure on production also shows, more or less, a steady trend.

- 12.70. The working capital (excluding the finished stock from the calculations of the working capital) as a percentage to the value of production at cost during these years (excluding depreciation) would represent about 8½ months value of production during 1969-70 and 1970-71 and about 7 months value of production during 1971-72. On this basis the working capital position shows an improvement in 1971-72 as compared to 1969-70 and 1970-71. The company has a programme to liquidate the finished stocks in such a way as to restrict its stock holdings to around or less than Rs. 5 crores by the end of March, 1973 and rigorous efforts are being made to achieve this object. The other factor which has made an impact on the working capital is the increase in loans and advances. This is mainly due to the fact that due to general financial stringency, and difficult supply position, most of the suppliers insist on payment for supplies by presenting the documents through Banks.
- 12.71. Since a substantial amount of sale takes place during the last quarter of the year and more particularly during the last month of the financial year, the sundry debtors as on the closing day of the financial year is somewhat on the higher side though large part of these debts would have been collected in the subsequent months.
- 12.72. The management is also very keen on restricting the working capital to the bearest minimum and in our opinion a working capital of about 6 to 8 months value of production will have to be considered reasonable for our industry, keeping in view the production cycle time, debts collection time and also the need to hold a buffer inventory of critical production materials etc.
- 12.73. The Committee find that the value of book debts increased from Rs. 336·14 lakhs in 1966-67 to Rs. 690·78 lakhs as at the end of the year 1971-72. During the same period sales increased from Rs. 1504·65 lakhs to Rs. 2953:51 lakhs. The percentage of debtors to sales worked out to 22:3 per cent in 1966-67 and 23:4 per cent in 1971-72. The Committee have been informed that with effect from 1967-68, the Company has been discounting the bills with its bankers. The bills so discounted and outstanding as on 31st March, 1972 aggregated Rs. 670:13 lakhs. The figures of sundry debtors as on 31st March, 1972 are exclusive of these outstanding bills. But for the discounting of these bills, the sundry debtors as on 31st March, 1972 should have gone up by Rs. 670:13 lakhs and the percentage of debtors to total sale as on 31st March, 1972 would come to 46 per cent (approx.) as against 22:3 per cent in 1966-67.

The Committee note that while the turnover is inclusive of the sale of watches which is almost made on cash basis, the book debts

pertain to machine tools. If this fact is taken into account, the percentage of book debts to turnover will be still higher than the figure of 46 per cent. Owing to the increase in the working capital requirements partly contributed by the heavy book debts and finished stock, the company had to avail of large cash credit and bill discounting facilities from the banks. The incidence of interest and commission on these facilities amounted to Rs. 98:36 lakhs in 1971-72 which is quite heavy. The Committee recommend that the Management should evolve an effective system of follow up of all outstanding debts to ensure their quick realisation and also take concerted measures to bring down the inventory of finished stock within reasonable limit.

12.74. The Committee also find that in respect of bills outstanding for more than one year, the major portion relates to Government Departments. The Committee recommend that this problem should be tackled at the level of the Ministry so that the outstandings are cleared without any delay. The Committee also suggest that the procedure for the clearance of bills for supplies to Govt. Departments should be reviewed so as to ensure that such delays are avoided in future.

G. Internal Audit

12.75. The internal audit section started functioning from the middle of 1969-70 in Units I & II, from August, 1970 in Watch Factory and from 1st April, 1971 in Units III and V.

12.76. According to the instructions issued by the Bureau of Public Enterprises in September, 1967, a proper system of internal audit was required to be introduced and an Audit Manual outlining the scope and programme of work for internal audit was to be compiled. In December, 1970 the Company informed the Bureau that action had been taken to have a continuous and effective system of internal audit and to compile the Internal Audit Manual. The Management stated (December, 1971) that the Manual has since been issued.

12.77. The Committee enquired as to why the Company did not introduced the system of internal audit in its various units uptil 1969-70. The management have stated in written reply that:

"the standard force for Internal Audit Department was sanctioned by the Board of Directors in April, 1969. After the approval of the standard force of the internal audit department action was taken to recruit qualified personnel for being posted as internal Audit Officers after giving them an intensive training in the various fields."

12.78. In regard to the internal audit in Unit IV at Kalamassery the management have stated that the Officer recruited for the purpose of Internal Audit in HMT IV submitted his resignation. In spite of several interviews being conducted to fill up these posts, we have not been able to select a suitable candidate. Attempts are again being made to call for fresh applications to find out a suitable candidate for the post of Internal Audit Officer in HMT IV, Kalamassery. However, in HMT IV, Kalamassery we have recruited an Audit Assistant who has been discharging some of the duties of Internal Audit.

12.79. The management have further informed the Committee as follows:—

"Internal Audit Officer in HMT V, Hyderabad has since submitted his resignation and hence the post, is presently vacant.

We have at present vacancies of 10 posts in the Internal Audit Department consisting of 2 officers, 2 audit assistants and 6 stenographers. We propose to fill up the posts of stenographers as and when situation warrants the same.

Apart from the position explained above it may be pointed out that the Deputy Controller of Audit was conducting a general review of the accounts of the various units of the Company. In this connection we would also like to clarify that the Company has a good system of Internal Control which serves the preliminary purpose of internal audit to a great extent. Under the present working arrangements all proposals involving financial expenditure are sanctioned only with the prior financial concurrence which effectively serves the purpose of controlling the expenditure from the initial stage itself.

In view of the proposals under consideration for restructuring the organisation by formation of subsidiaries and Holding Company, we are also thinking of decentralising the audit functions."

12.80. The Committee regret to note that although the units of HMT have been functioning for almost 10 years now there was no effective system of internal audit till 1969-70. The Committee find that even now the internal audit organisation has not been built up

in a full measure. The Committee feel that management is still going slow in the process. The Committee need hardly stress that internal audit being one of the essential tools of management control, the Company should activise the internal audit cells in the various units and make use of the reports of internal audit to set right the deficiencies and plug loopholes if any, in the working of the units. The Committee would also reiterate their earlier recommendation contained in para No. 206 of their Fifteenth Report (1967-68) Fourth Lok Sabha that the functions of the Internal Audit should also include a critical review of the system procedures and operations of the Company as a whole.

IIIX

ORGANISATION

A. Organisational Structure

- 13.1. In view of the fact that the operations had become too numerous for the Centralised Organisation to administer and control effectively and on the recommendation of the Ministry of Industrial Development and Internal Trade, the Company decided in September, 1971 to undertake a study in depth of its multi-unit organisational set up with a view to investigate the feasibility of breaking up the present structure into various subsidiary Companies, with a holding corporate apex at the top based on product specialisation and regional consideration. In February, 1972, it was decided, on the basis of the report of the consultants, who were engaged for the purpose, that the existing structure should be broken up into subsidiaries with a holding Company at the apex. A Committee was appointed by the Directors to work out the details regarding the organisational structure of the subsidiaries, the control to be exercised by the apex, tax benefits, flexibility of Intercorporate investments etc., and to submit a report.
 - 13.2. During evidence the Chairman, HMT informed the Committee that Dr. Kamla Choudhury of the Institute of Management, Ahmedabad who was entrusted with the job made a thorough study and submitted a report. It was brought out in the report that HMT had grown in size and structure so vast that it needed a very highly decentralised organisational set up with various subsidiaries coming under the apex holding Company. Dr. Kamla Choudhury suggested that the Company should be divided into product-wise subsidiaries. She recommended a machine tool subsidiary, watch subsidiary, a tractor subsidiary, a printing press subsidiary.
 - 13.3 The Management examined the reported and found that it was difficult to have a coordination in case the Company was divided into product-wise subsidiaries. Secondly, HMT had diverted the various factories into different lines of production. The diversification, for example, in HMT Pinjore was such that it was inter-woven

and it was difficult to disting. + suggested that HMT should have a geographical dispersal. HMT I and the sidiary, Srinagar Watch Factory wow ted by Government and has like that. The proposal had been accep.

13.4. In his statement at the Nineteenth Annual HMT stated as of Hindustan Machine Tools Ltd. the Chairman, follows:—

"Our preliminary thinking is that the HMT's various undivisions would be formed into separate subsidiary companies. There will be seven such subsidiary companies:

(i) Machine Tools and Die-Casting and Plastic Injection Moulding Machines, Bangalore; (ii) Machine Tools and Tractors, Pinjore; (iii) Machine Tools and Printing Press Machinery, Kalamassery; (iv) Machine Tools and Heavy Duty Presses and Press Brakes, Hyderabad; (v) Watches, Bangalore and Srinagar; (vi) Machine Tools, Ajmer, which at present functions separately as Machine Tool Corporation of India and (vii) International Operations.

The ownership of these seven subsidiary companies would vest in the HMT Holding Company. The Holding Company would look after, among others, matters like: Corporate planning; Finance; Sales and Marketing; relations with the Government, the Parliament and the public; Evaluation and control of the performance of its Subsidiaries; broad personnel policies; Research and Development; Management systems and Organisational development.

- All other functions and relevant powers would be delegated to the subsidiary companies. This decentralisation would cover among others, production, product design and fabrication of proto-types, administration of personnel and industrial relations and above all, profitability of the respective units."
- 13.5. In regard to the subsidiary for the watch factories, the Secretary of the Ministry informed the Committee during evidence as follows:—
 - "So far as the Watch factory is concerned, the first thinking was that since the Kashmir Watch factory was in the process of being set up, we should have one subsidiary for

watches which should cover both Bangalore and Kashmir. But even here it has been felt that very serious problem will come up in controlling units from Bangalore. If local Manager has to look upto Bangalore for direction and decision and the decisions are not taken in time and the progress will be retarded. We are, therefore, now thinking of two subsidiaries—one in Kashmir and other in Bangalore."

He further informed the Committee that:-

"There was a proposal from HMT that in addition to these, two more subsidiaries ought to be set up-one for Sales and the other for export. So far as sales are concerned the Chairman and the Managing Director did feel that since the Sales function has been exercised certainly in the past and all the expertise in regard to selling had more or less been concentrated in Bangalore, it would be much better to have a separate sale subsidiary. Government, however, felt that it would not be right divorce the sales function from the production function because a General Manager must know what he is going to sell and has to plan for production accordingly. responsibility is properly to be developed, it was felt that each subsidiary must have its sales responsibility. was the view of the Government. In the beginning a good deal of assistance will be needed for the sales from the Headquarters of the Holding Company because expertise was developed there in the past. Over the years necessary expertise ought to be built up in the subsidiaries so that each subsidiary may operate as an integrated unit in production and sales. International export operations are of a specialised character requiring a judgement of the overseas markets fairly closely, what sort of machine tools, designs and controls would be most appropriate? It was felt that this should have concentrated attention by a separate subsidiary. So, we have thought of a separate international subsidiary."

13.6. Asked as to whether it was advisable to have one organisation to deal with export of machine tools of the private sector as also the public sector; it was stated:—

"HMT international is being organised in order to give a thrust to exports. It will not be impossible for HMT

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International to undertake export responsibility from the private sector also, provided it is assigned to them. It is not our intention at the moment that we should try to coerce them to come under one export agency, but if such an agency is formed and is found successful, we would foresee that in course of time, the HMT International will not only spearhead the export of machine tools, but would have a very substantial percentage of export of machine tools in the public sector and private sector."

13.7. The Committee enquired about the present position with regard to the formation of holding Company, the Secretary stated as follows:—

"The Memorandum and Articles of Association are being finalised and various suggestions in this regard have been received from the Chairman, HMT. We have consulted all the other concerned Ministries. We have had the benefit of advice and comments of the C.A.G. in this regard and we are at the moment considering all these and so a final decision on the future pattern is not yet taken. We do hope that in the next two months we will be able to take these decisions so that Holding Company pattern may come a reality from the beginning of the new financial year."

- 13.8. In reply to Starred Question No. 335 in Lok Sabha on 6th December, 1972 it was stated that "it is expected that the proposed reorganisation of Hindustan Machine Tools Ltd. would optimise efficiency, foster initiative at the different management levels and ensure overall economy by utilising accountability. It is also expected that the Holding Company, in course of time, can be forged into an effective instrument for shaping and implementing Government's policy in regard to the development of the machine tools industry."
- 13.9. The Committee enquired as to how these results were expected to be achieved. In a written reply, the management have explained the position as under:—
 - "In the old set up, all decisions, policy as well as executive, were being made by one corporate entity, the Company Head Office; many executive decisions were also made by the Head Office. Production units did not develop an adequate sense of participation in these decisions and their performance was quite often left wanting because of this.

- In the new set up, policy decisions and future plans will be made by the Holding Company, with the participation of all the Managing Directors of Subsidiaries. These Plans and the appropriate Budgets would be approved for a full financial year in advance; the Subsidiaries would have clear goals ahead of them and the freedom to take all necessary executive decisions and lalso a sense of responsibility for achieving these goals. This 'optimise efficiency at production unit level, tiative, and ensure overall economy utilising accountability. The Holding Company, as an investing making body, not fixed with executive actions. will able to assume a detached and objective view of the Company's plans vis-a-vis the National Policies and will thus be able to take over responsibilities for shaping implementing Government's policy in regard to development of the machine tool industry."
- 13.10. It has been further stated that the formation of a Holding Company and subsidiaries in respect of HMT has two advantages:—
 - (i) Improvement of internal efficiency by the decentralisation of authority;
 - (ii) Integration of Government's policy responsibilities concerning machine tools under one agency—the Holding Company and the professionalisation of policy administration.
- 13.11. HMT having grown too big for centralised administration, would benefit greatly by the decentralisation of executive responsibilities and authority into autonomous Profit Centres. The profit centres would be set up as legally independent Subsidiary Companies, with Boards of their own, which status would enhance the sense of autonomy and responsibility at the Subsidiary level.
- 13.12. The Ministry has so far borne the responsibility for all entrepreneurial decisions concerning capital works, industrial relations, etc., which have resulted in delays that at times worked out to the disadvantage of the commercial interests of the Company. With a Holding Company coming into being, as an investing and Policy making body at a level higher than the level of the operat-

ing units, the Government can entrust the Holding Company with the responsibility for policy administration and overall supervision so that the decisions are made more promptly and in a business way since professionalists will be entrusted in taking these decisions.

- 13.13. The Committee understand that Government propose to form a holding company with each of the units as subsidiaries. It has been argued that HMT had grown in size and structure so vast that it needed a very highly decentralized organisational set up with various subsidiaries coming under the holding Company. In reply to Starred Question No. 335 on 6th December, 1972 it was stated that it was expected that the proposed reorganisation of Hindustan Machine Tools would optimise efficiency, foster initiative at the different management levels and ensure overall economy by utilising accountability. It was also expected that the Holding Company in course of time, could be forged into an effective instrument for shaping and implementing Government's policy in regard to the development of the machine tools industry.
- 13.14. The Committee have been informed that a final decision in regard to the formation of a holding company is yet to be taken. The Committee would suggest that all the implications of the holding company should be gone into carefully before taking a final decision in the matter. The Committee urge' that while taking a decision it should be ensured that the accoutability of the company to the Public and Parliament is not in any way reduced.

B. Labour Relations

Lock-out in Units I & II of H.M.T.

- 13.15. A two week lock-out was declared in Units I & II of HMT in Bangalore from 8-9-1972 to 22-9-72. Lock-out was again declared on 10-11-1972 which lasted upto 9-12-1972 (29 days). The production losses due to labour agitations during 1972-73 (upto December, 1972) amounts to approximately Rs. 3.5 crores. The management have described the chain of events which resulted in the lock-out as follows:—
 - In HMT I & II right from the commencement of the current financial year (1972-73), there has been some sort of tesion and silent unrest in the minds of the workmen, which have manifested themselves from July, 1972 onwards in the form of demonstrations, processions, tooldown strikes, abusing, fighting and assaulting amongst

workmen within the factory premises and outside due to inter-union rivalry mainly between HMT Karmika Sangha (HMTKS) and HMT Employees' Association (HMTEA) over the question of recognition. The series of unfortunate events ultimately culminated in told indiscipline, acts of sabotage and threats to safety of Company's property and the lives of loyal workmen, Supervisory and Managerial staff leading to a two week lock-out from 8-9-1972 to 22-9-1972.

At the intervention of the Hon'ble Minister for Labour Transport, Touprism and Wakfs of the Government of Mysore who convened a meeting in his Chambers between the representatives of the Management and the rival Unions. and consequent upon his efforts, the Management of HMT I & II Units signed an agreement with the HMTEA, which had earlier called for demonstrations and strikes. One of the principal clauses of the agreement was that the labour would assure peace and productivity within the works. However, the factories did not return to complete normalcy. On the part of the Management all possible step had been taken to ensure protection and safety for workmen within the works, in addition to feeding all materials required for production. As advised by the Hon'ble Minister for labour, Government of Mysore, the Management of the Units started discussing all matters relating to labour and production with the HMTEA, in addition to discussion with the recognised Union viz. HMTKS. In spite of our round the clock vigil and persistent efforts for maintaining full normalcy and optimum production, instances of indiscipline, grouping together by workmen, abusing, complaints and counter complaints by the rival union members and fights and assaults, due to inter-union rivalry continued. The minds of the employees appear to be still very much unsettled with consequential effect on production.

In this connection it is further stated that a meeting between Shri M. S. Krishnan, President, HMTEA and CM, HMT I & II was fixed at 10.00 a.m. on 9-11-1972 in the office of the Personnel Manager. Shri M. S. Krishnan along with the office bearers of HMTEA arrived at 10.00 a.m. on the said date in Town Administration Building where the said meeting was to be held. Within a few minutes of this, a few office bearers of rival union viz., HMTKS and

some active workers numbering about 35 unauthorisedly entered the Town Administration Building and shouting and creating a scene in front of the Personnel Manager's Office. When the General Manager came to attend the schedule meeting, he was prevented by HMTKS office bearers and active workers from going into the Personnel Manager's office for the meeting. Since the situation was going out of control, the General Manager went to the Security Department to contact the Police for help. At this stage the group which had gathered near the Personnel Manager's office tried to forcibly open the door and started breaking the ventilator glass panes and also started throwing cups, saucers, trays and other office materials inside the Personnel Manager's office. Meanwhile, the supporters of HMTEA numbering about 500 to 600 came out of the Shope and started coming towards the Town Administration Building. A few of them came out of the main gate and tried to enter the Town Administration Building. There was a scuffle between the two groups enterance. At this stage, the Police arrived and prevented the employees coming out of the gate and also took away all the employees who were crowding and creating a scene in front of the Personnel Manager's Office. The General Manager requested Shri Krishnan to appear to the workers who had assembled inside the factory to go back to their work spots. Shri Krishnan along with GM, Security Personnel and the Personnel Manager went inside and appealed to the employees to go back to their work spots. On hearing Shri Krishnan. the employees went back to their work spots. However, all of a sudden after the commencement of the 'A' shift at about 5.40 a.m. the next day i.e. on 10-11-1972 all the workmen struck work. The active members of the HMTEA prevented the Managers and Supervisory personnel who were due to come to work at 7.15 a.m. They also broke the window panes of the Office of HMTKS. various encounters between the rival Unions 30 people got injured and some 4 out of them rather badly requiring immediate medical treatment. As there was riot inside the factories and there was every likelihood of further danger to the property the management of the units was constrained to declare a lock out a little after 10.00 a.m. on 10-11-1972.

The Labour Commissioner, Govt. of Mysore had called a meeting of the representatives of the Management and

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the representatives of all Registered Trade Unions, i.e., HMT Karmik Sangha, HMT Employees' Association, HMT Mazdoor Sangha and HMT Youth Workers Union at 10.30 a.m. on 7-12-1972. Meanwhile a meeting was convened by the Hon'ble Labour Minister, Govt. of Mysore at which Shri G. Ramanujam, General Secretary, INTUC and Shri Satish Lumba, General Secretary, AITUC and other State leaders of INTUC and AITUC and the representatives of the Management were present. Through the good offices of the Hon'ble Chief Minister, the Labour Minister, Shri Ramanujam and Shri Satish Lumba, an agreed solution for the lifting of the lockout was arrived at, the terms of which are as follows:—

- Both the Unions in identical terms will make an appeal to the Management and to the Govt. to lift the lockout. They will also make an appeal to the workmen to resume duty and maintain discipline and production.
 - 2. There will not be victimisation of workers. The suspended workers will continue to be under suspension but they will however get subsistence allowance as per the standing orders. The enquiries will be completed within a period of one month;
 - 3. The lockout will not cause break in service;
 - 4. The workmen will be paid 1 month's recoverable salary advance which will be recovered in six monthly instalments commencing from the wages for the month of March 1973 payable in April, 1973;
 - 5. In response to the appeals of the unions the Management will lift the lockout from 5.30 a.m. on 9-12-1972."
- 13.16. During evidence the attention of Chairman, HMT was drawn towards the Report of the Committee on 'Personnel Policies and Labour Management Relations in Public Undertakings (Seventeenth Report Flfth Lok Sabha).' The Committee desired to know the steps taken on the report particularly with regard to recognition of labour unions.

The Chairman, HMT explained as follows:-

"This problem is not as simple as it looks on the face of it. We have been discussing it at various national levels. I am the Chairman of the Action Committee on Industrial Re-

lations in the public sector. I have been meeting all the chiefs of the unions; we have had several discussions and we are again meeting on the 6th and 7th February to find out if there is any possibility, at least in the public sector, of having a certain set of norms for recognition of the unions."

He added that:-

"We are helpless before the differences of the multi-unions in HMT I & II. In HMT III, there is a recognised union which has been working satisfactorily. The other unions wanted to establish their rights over the workers. There was a scuffle and the State Government intervened. The State Government have given recognition to the present union. We have been advised by the Labour Commissioner to deal with this union which is a majority union."

13.17. In regard to the problems of the multiplicity of unions the Secretary of the Ministry stated as under:—

"Where there is a multiplicity of unions, the Management do not know as to with which union they should talk. In the code of discipline, the union which has been recognised as a result of its following, and which has been adjudged to be the largest, is the one to be talked to. As the time elapses, other Unions also claim larger following. Management have always to depend on the State Governments to know, as to which union has got the larger following at a particular point of time. This is also a question which involves time and in the case of HMT, one of the difficulties has been that one of the unions which claimed that it has got a larger following, feels aggrieved that on its representation, the counting of the following has yet been done by the Government. All these are problems, which the Management have got to face from day to day."

C. Industrial Relations in HMT IV Kalamassery

13.18. In regard to the industrial relations position in Unit IV the management have informed the Committee as follows:—

"Due to the existence of Multi Unions and inter-union rivalry Industrial relations continue to be difficult in HMT IV, Kalamassery. There are at present 8 union representing 504 LS—17.

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different sectional interests and political affiliations. In putting up demands they compete with each other making the issues complicated and an agreement difficult. There was labour trouble in this unit during March—April, 1972 resulting in a strike which lasted for 16 days. The long term Agreement with the unions expired in December, 1972. Labour unions have put up fresh demands some of which are prima facie unreasonable involving heavy financial commitments. The demands are being studied now. With several unions in the field, it is a hard task to arrive at a settlement smoothly. The Committee enquired about the bonus scheme introduced in Unit IV at Kalamassery. In a written reply the management have stated as follows:

"The present incentive bonus scheme in HMT IV, Kalamassery was introduced from June, 1971 and there has been no change in the scheme since then. Under this scheme employees are enabled to get substantially higher incentive bonus and overall production bonus. Under the scheme introduced in June 1971 a direct worker can earn incentive Bonus to a maximum of Rs. 130/- per month as against the maximum of Rs. 65/- per month under the scheme in force prior to June, 1971. This is expected to motivate the workers to show better efficiency and thereby contribute to higher productivity."

13.19. During evidence the Chairman, HMT explained the position as under:—

"Not only in Kalamassery, but in HMT I, II and III labour incentive schemes are there. But in Kalamasserv, because of this trouble, we gave an added attraction that if the improvement is very spectacular, during the 25th Year of India's Independence, we will give them a watch to all the sections. Every section would get a watch presentation. So far, the results have been good in Kalamassery with this new incentive bonus and also additional incentives announced in view of India's 25th Year of Independence. But, during the past three months, they have raised another issue. They want now added dearness allowances and revision of wage structure which agreement has expired on 31st December. On the one side, we have been asked by the Government that wage revision has to be done very carefully and on other side, labour is now demanding that we should revise the wage scales. Anyway, negotiations are going on in HMT IV and we have appealed to them also. I have made a personal appeal the 8 Unions and I have asked them some time. I think something will be settled."

D. New Code of Conduct of Industrial Relations

13.20. The Committee pointed out that during the course of discussion on the Calling Attention Notice in the Rajya Sabha on 28th November, 1972 the Minister of Industrial Development had stated that a new code of Conduct or new pattern of relations for the public sector was under the active consideration of the Government and a basic paper had been drawn up and was being discussed with the labour leaders.

13.21. They enquired whether the new pattern of relations had been finalised. The Secretary of the Ministry explained the position as follows—

"This has been the subject matter of discussion for quite some time. As a matter of fact, the reply of our Minister in Rajya Sabha which had been referred to was given in the context of the discussions which had been going at that time. We have been advised that two seminars have already taken place on this subject. The Ministry of Labour is involved in it. A paper was first prepared and that was placed before the first seminar. Certain amendments were effected. It was placed before the second seminar. On the 6th, 7th and 8th of February, there is going to be a third seminar wherein the representatives of trade unions, public sector undertakings, Government departments etc. will be represented. This will be a completely representative seminar, and some conclusions are expected to emerge. The question as to whether there can or there could be a separate set of industrial relations only in regard to public sector, has to be answered. If it can be so conceived, what will be the frame-work, what will be the operative part of that, all these will have to be decided. Thereafter, the consent of all concerned has to be obtained before it becomes a pattern which can be adopted. At this stage, therefore, we can only submit for the consideration of the Committee that this is a matter which is being discussed at different levels on a very wide-based manner and certain conclusions are expected to emerge."

- .13.22. The Committee find that the multiplicity of trade unions particularly in Units I & II at Bangalore and Unit IV at Kalamassery has led to inter union rivalaries adversely affecting industrial relations and thereby production performance. Lockout had to be declared twice in Units I & II during 1972-73 resulting in loss of Rs. 3.5 crores. The Committee have been informed that due to the existence of multi unions and inter-union rivalry the industrial relations continue to be difficult in Unit IV. There was labour troubles in this unit during March-April 1972 resulting in a strike which lasted for 16 days. The Committee recommend that in the best interests of the Company so that the production in the Company may not suffer, an early settlement of the disputes should be arrived at and better labour management relations established.
- 13.23. The Committee have dealt at length with the problem of labour management relations in their 17th Report on Personnel Policies and Labour Management Relations in Public Undertakings' (fifth Lok Sabha) and would like to reiterate that the company should spare no effort to give the workers in the undertaking a sense of participation and involvement in the challenging task of greater production for the good of the country.
- 13.24. The Committee understand that a new code of conduct or a new pattern of relations for public sector is under the active consideration of Government. They hope that all the aspects affecting labour relations such as recognition of unions; amenities to workers and incentive schemes etc. will be thoroughly examined by the Government in order to find a lasting solution to the problem of labour management relations.

XIV

· CONCLUSION

- 14.1. The Committee have expressed surprise that no reliable statistics or data of the demand of different types/categories and sizes of machine tools in different quality ranges has been made by Gevernment so far. Due to inadequate statistics it was not possible for the Working Groups set up for Machine Tools for the Third and Fourth Five Year Plans to determine the category-wise requirements of machine tools. The Committee have felt that a reasonably accurate assessment of the country's future demand for machine tools is not possible unless a realistic item-wise break-up of the demand is available. The Committee have, therefore, recommended that a detailed survey about the requirements of different types of machine tools in the country should be made without delay before investing nation's resources in the expansion programme for machine tools during the Fifth Five Year Plan.
- 14.2. The Committee have noted that the Report of Working Group for Machine Tools for the Fourth Five Year Plan, and the draft Report of the Working Group for the Fifth Plan mentioned the installed capacity of HMT as Rs. 25 crores when actually the Board of Directors had indicated the installed capacity of all the five units at Rs. 17.7 crores on a two shift basis. The Committee have pointed out that when the Units of HMT are actually working on two shifts, the mentioning of the installed capacity calculated on the basis of 3 shift working gives an incorrect picture about the role played by HMT in the overall development of machine tool industry in the country.
- 14.3. The Committee have further noted that whereas the value of production at the existing installed capacity in the private sector was mentioned as Rs. 23 crores in the Fourth Plan document, in the draft Report for the machine tools for the Fifth Five Year Plan the same has been mentioned as Rs. 31 crores. The existing installed capacity in the public sector in the Fifth Plan document remains almost the same as quoted in the Fourth Plan document. As the actual installed capacity of HMT is even less than the capacity quoted in the Plan documents, the Committee have felt that the advantage of meeting the country's requirement with regard to machine tools goes to the private sector especially when the actual production in HMT is must less than the actual installed capacity.

- 14.4. The Committee have also found that the installed capacity of HMT fixed in 1960 in terms of value continues to remain the same even now in spite of the increase in price level, and no allowance for price escalations has since been made while fixing the installed capacity in terms of value.
- 14.5. The Committee have further noted that the installed capacity of Units I & II was initially approved in January, 1960 Rs. 7.2 crores on the basis of two shift working as the introduction of three full shifts was considered uneconomical. On the basis of production of Rs. 981 lakhs during 1964-65, it was concluded that a production of Rs. 10 crores would be achieved in HMT I & II units on two shift working with refined technological improvement and increased efficiency. The Committee have now been informed that the capacity of HMT I & II Units on two shift working is only Rs. 7.2 crores as it was not possible to achieve a production of Rs. 10 crores due to the appearance of recession and consequential low demand for modern tools, production of more and more sophisticated products in the diversified production programme persistent labour problems, etc. The Committee have felt that installed capacity in terms of optimum utilisation rate cannot be changed due to variable factors like labour inefficiency, low order position etc., as in such a case the actual utilisation of capacity cannot be correctly judged.
- 14.6. The Committee have also found that in order to evaluate the actual performance of HMT, the Company have calculated the capacity as actually available from year to year. This developed capacity has been worked out with reference to the production of a few standard general purpose machines utilising 80 per cent of the available capacity on two shift working and is subject to certain assumptions regarding requirement of standard hours, inefficiency factor, value of machines etc. The Committee have strongly felt that this cannot provide a realistic parameter to evalute the actual production performance which comprise a totally different product pattern and has been undertaken under conditions materially differing from those assumed in the working of developed capacity.
- 14.7. The Committee have expressed surprise that the developed capacity as worked out by the management at 1.3 inefficiency or even at actual inefficiency on two shift working exceeded the installed capacity fixed in full two shift working in Units I, II, III and IV. The targets fixed in respect of Units I and II were higher than the developed capacity at 1.3 inefficiency or at actual ineffi-

both the installed capacity as well as the developed capacity have not been worked out on a realistic basis. The Committee have stressed that Government Management should fix the installed capacity on a realistic basis and work out the developed capacity in a more scientific manner so as to serve as a suitable parameter to evaluate the actual production performance.

- 14.8 The Committee have noted that in several years, the targets were fixed much lower than the available capacity. In certain years the targets were even much lower than the developed capacity. More than 50 per cent of the capacity remained unutilised in some years.
- 14.9. The poor production performance in HMT has been mainly ascribed to the recession in the country during the years 1966-67 to 1969-70. The increase in the capacity of the machine tool units of the company by completion of the new projects already initiated more particularly at a time when domestic demand for machine tools was at a subdued level, accentuated the problem of unutilised capacity and depressed demand prevented fuller exploitation of HMT's potential. It has been stated that the demand for common items such as lathe and Milling Machines shrank as the demand forecast had been worked out under different sets of conditions and assumptions. Initial production difficulties in respect of new products, technical and manufacturing problems and labour agitations have been cited as some of the other reasons that resulted in shortfall in production.
- 14.10. The Committee however, feel that besides these factors the lack of production planning was yet another significant factor that contributed to the loss in production.
- 14.11. The Committee were informed that when the factory was set up there was a broad production profile and it was felt that public sector should take up more difficult items leaving the private sector to take up the less difficult ones. The Committee have felt that had the Company engaged itself in more sophisticated machine tools rather than on standard machines, the HMT would not have been affected by recession as has been admitted by the Chairman, HMT himself during evidence.
- 14.12. Due to fall in demand of the machine tools manufactured by HMT, the Company decided to expand their activities in various directions through diversification of production, with the result

that the production in HMT is now showing an upward trend. I has been stated that the increase in sales during the recent years has been from new types of machine tools introduced for the first time as part of diversification programme. From the sales performance of HMT from 1969-70 to 1971-72, the Committee have noted that 31 per cent of the increase in sales was contributed by old products and the remaining by the new products. It is, therefore, evident that the demand for old type of machine tool manufactured prior to the launching of the expansion programme has not picked up sufficiently even though the recession was over long.

- 14.13. The Committee have therefore felt that in the past the planning of production and product-mix of HMT had not been related to demand for the products as otherwise this situation would not have arisen.
- 14.14. The Committee have recommended that Government should take a serious note of this demand projection and examine the matter in depth to see what further diversification programme could be taken up by HMT so as to maintain its dominant role as producer of machine tools in the country. The Committee have also stressed that product-mix and the pattern of machine tools should be carefully worked out keeping in view the demand of machine tools in the country and overall profitability of the Company. The Committee have also stressed that before deciding the future production programme for the Fifth Five Year Plan the Government should clearly demarcate the respective roles of the private and public sectors so that they can meet in full the overall needs of machine tools in the country at the same time ensuring that the interest of small scale sector is not in any way affected.
- 14.15. The Committee have recommended that Government should make a detailed study about the items which can be profitably, economically and technologically manufactured by the small scale industries and ensure that such items are given only to the small scale units who may be given the requisite technical assistance so that the quality of the products does not in any way affect the main industries.
- 14.16. The Committee have recommended that the Company/Market Research Department should make a special study about the requirements of the small scale sector as they feel that HMT has an important role to play in the growth and in the modernisation of machinery and equipment in the small scale industries.

- 14.17. The Committee have noted that HMT have been supplying machines to the small scale sector on hire-purchase basis. The Committee have recommended HMT should maintain close liaison with the small scale industries corporation, the Commissioner for Small Scale Industries at the Centre and the Director of Industries in the States so as to study in depth the requirements of machinery for small scale sector and make it available in time to the small scale sector.
- 14.18. The Committee have expressed their regret that although the Working Group for Machine Tools for the Fourth Plan had pointed out in their report that many of the existing designs of indigenous machine tools were outmoded, it is only recently that this lacuna was noted by HMT when they found that their machines did not find ready market. The Committee have felt that the Indian Machine Tools Industry has not been backed up by a vigorous and dynamic research and development programme which studies in depth the requirements of users.
- 14.19. The Committee have recommended that the activities of the National Committee on Science and Technology, the Central Machine Tool Institute, Bangalore and the Design and Development Department of HMT should be well coordinated and all possible assistance and encouragement should be given to Indian engineers to evolve and master basic designs so that machine tool industry in India may be able to stand on its own feet.

The Committee have felt that although at the earlier stages it was imperative for HMT to enter into technical arrangements in order to bridge a wide gap that existed between India and more developed countries in the field of design and development of machine tools, a stage has now come when dependence on foreign technical assistance and know-how should be reduced to the minimum.

- 14.20. The Committee have, therefore, recommended that Government HMT should chalk out a realistic phased programme of achieving self-reliance so that not only the imports of machine tools are reduced to the minimum feasible limit but the dependence on foreign technical assistance and know-how is also gradually brought down if not altogether eliminated.
- 14.21. The Committee have recommended that the Government | HMT should make a detailed study about the items which can be manufactured indigenously. The Design and Development Department of HMT and the Central Machine Tool Institute, Bangalore

should keep themselves up-to-date in this regard, so that the necessity of finding out this information through advertisements is obviated. The Government HMT should also analyse the parts of imports so as to decide as to which items should be feasible for indigenous manufacture.

- 14.22. The Committee have noted that valuable time was lost in procedural details before starting the actual production of several diversified items. The main object of diversification was to meet the extremely urgent and important need of many of the productive organisations both in the Public and Private Sectors. Diversification was also intended to help the Company to utilise the spare capacity particularly during the periods of recession. The Committee have felt that the purpose for taking up of diversification schemes is defeated if the manufacture of items is delayed. The Committee also found that the need for diversification was not examined with regard to the market demand.
- 14.23. The Committee have recommended that Government should evolve a procedure for expeditious disposal of procedural formalities so that delays at all levels are avoided.
- 14.24. The Committee have recommended that all the cases of delays in starting the manufacture of diversified items may be investigated with a view to fix responsibility for the delays. The Committee have further recommended that the cases where diversification programme was launched without realistically assessing the actual demand for such items should be investigated with a view to fix responsibility. The Government Management should ensure that such mistakes are not repeated in future.

The Committee have expressed their regret that valuable time was lost in finalising the details of the schemes for the manufacture of Tractors, Printing Presses and Heavy Duty Press for these projects. Procedural formalities consumed much of the time.

- 14.25. They have emphasised that most of the issues involving different organisations in the Ministries should be resolved by joint meetings at high levels so that the approval of DPR is not delayed. The Committee have recommended that the process of indigenisation of tractors, printing presses and heavy duty presses may be accelerated so as to achieve self-reliance expeditiously.
- 14.26. The Committee have further expressed surprise as to who noted that Government have not so far fixed prices for the tractors, printing presses and heavy duty presses. The economic viability

of these projects cannot therefore be accurately assessed. The Committee have recommended that the details regarding pricing and profitability may be finalised without further delay.

14.27. The Committee have found that during the years 1967-68 to 1971-72, the production performance of unit IV at Kalamassery has been far from satisfactory and the shortfall in production ranged from 30 per cent to 58 per cent of the developed capacity at 1.3 inefficiency factor. The shortfall has been stated to be due to reduction in the production of a number of pilot lathes, drum turret and low value LT-lathes. The Committee were informed that the .Unit did not have the full capacity to manufacture some of the accessories and most of the machines were to be supplied with Tooling which had to be designed etc. The Committee have expressed their surprises as to how the production programme was determined when adequate facilities were not arranged nor the expertise for them developed in advance of taking them for production. The Committee have taken a serious view of this defective and inadequate planning which has resulted in continuous loss, and have suggested that this matter should be thoroughly gone into and responsibility fixed. The Committee have expressed the hope that with the balancing equipment now added and the measures taken, it should be possible to achieve the targets of production.

14.28. The Committee have expressed their regret that Unit V of HMT which was mainly set up to meet the demand for special purpose machines and Fay Automatics could not get adequate orders for these machines to utilise its capacity. The orders secured could not be executed in time due to lower level of a labour efficiency.

14.29. The Committee have expressed surprise as to how the collaboration agreement with Messrs. Renault was entered into without taking into account the technological requirements of sophisticated machines in India. They have expressed their regret that this serious matter was not thoroughly investigated and have recommended that it should be gone into now and responsibility fixed for such defective agreement with Messrs. Renault.

^{14.30.} The Committee were informed that HMT are now in the advanced stage of negotiations with an American firm Messrs. Cross Company in order to improve their technology and in order to get orders from the international market for special purpose machines.

- 14.31. They have recommended that the implications of the proposed agreement with Messrs. Cross Company should be carefully examined so that the mistakes in the earlier agreement with Renault are not repeated.
- 14.32. The Committee have further noted that out of the machines already installed machines worth Rs. 1 crore needed replacement as they were not capable of giving the required accuracy. Some of them could not even be reconditioned. The Committee have expressed the surprise as to why such machines were accepted without proper examination verification of their capabilities. They have recommended that this matter should be probed into thoroughly and the responsibility for the lapses fixed.
- 14.33 The Committee have expressed unhappiness that Government/Management are not following and fixed pricing policy with regard to the sale of Special Purpose Machines. The Committee have felt that HMT with all the technological advantage and the experience should be able to produce the machinery at economic cost. The Committee have expressed the hope that with the procurement of export orders, it should be possible to increase their production and reduce the cost of production so that the price may be competitive.
- 14.34. The Committee have expressed surprise that on the one hand Unit V is suffering due to lack of adequate orders on the other hand licence had been issued to Messrs TELCO for the manufacture of SPM's for a capacity of Rs. 100 lakhs per annum as a part of a diversification scheme in the existing undertaking to introduce a new item of manufacture. Their application for the recognition of the existing installed capacity for a total production of Rs 200 lakhs per annum is now under the consideration of Government. The Committee have recommended that Government should fully examined the implications of allowing further expansion to TELCO keeping in view the unutilised capacity of Unit V.

The Committee were informed that Government have decided to import an entire plant from Italy for the manufacture of scooters. The argument advanced for such an import was however, hardly convincing. It has been admitted that the competence of HMT to produce the machines needed for the manufacture of scooters was beyond any doubt. But the Plant was being purchased in order to meet the pent up demand for scooters. The Committee have pointed out that the demand for scooters had not grown all at once. The existing private manufacturers had not been able to cope with

the demand for the past few years. The difficulty regarding idle capacity in Unit V of HMT was also being felt since its very inception.

- 14.35. The Committee have strongly felt that the decision to take up the manufacture of scooters in the public sector has been unduly delayed. Had the decision to set up such a Project been taken earlier, the advantages would have been three fold. First the manufacture of SPM's in Unit V would have enabled HMT to utilise its idle capacity in that unit. Secondly, the Public Sector in addition to meet the growing demand for scooters would have provided a fair competition in the sale of scooters. Thirdly it would have helped the country in the acquisition of advanced technology which could have been certainly better than the technology already available in the country about the manufacture of Lambretta scooters.
- 14.36. The Committee have recommended that effective steps should be taken to secure orders for the Special Purpose Machines required by the Private Sector for the manufacture of tractors etc.
- 14.37. The Committee have expressed the hope that with improved technology and adequate number of orders, the working of Unit V of HMT would improve.
- 14.38. The Committee have expressed their regret that as against the export target of Rs. 7.5 crores for the machine tool industry in the country to be achieved by 1973-74 only 50 per cent of the target is expected to be achieved by that year. During 1970-71 India's export of machine tools has been of the order of about Rs. 3 crores. The share of HMT was Rs. 1.06 only.
- 14.39. In spite of the fact that HMT has turned out various sophisticated machines under the numerous collaboration agreements it has not been able to attract foreign buyers.
- 14.40. The Committee have stressed that unless the machine tool industry is kept uptodate, it will hardly have any chance in the external market. They have, therefore, recommended that all possible encouragement should be given by Government to the Central Machine Tools Institute and Design and Development Deptt. of HMT so that designs and know-how are kept up dated in order to keep pace with what is happening in the outside world.

- 14.41. The Committee have further recommended that in view of the imperative necessity for expanding India's export on top-priority basis, Government HMT should try to build up the image in the developing countries and socialist countries where there is great potential for India's exports. This can be done by improving the quality of our products after sales service and participating in Exhibitions held in these countries.
- 14.42. The Committee have found that utilisation of machines and labour was not satisfactory in all the units of HMT, particularly in Units III, IV & V. The percentage of idle hours to available hours in respect of machines varied from 18.7 to 26.3 in Units I & II, 22.48 to 31.4 in Unit III, 37.7 to 47.4 in Unit IV and 28.3 to 45.2 in Unit V. The percentage of idle hours to net available hours in respect of labour varied from 16.53 to 17.4 per cent in Units I & II, 13.14 to 18.0 in Unit III 25.74 to 41.0 in Unit IV and 15.39 to 27.0 in Unit V. As a result of non-utilisation of machines and labour there was enormous idle capacity in the Units. The idle capacity was around 30 per cent in Units I, II & III 40 to 50 per cent in Unit IV and 30 to 40 per cent in Unit V Labour efficiency in all the units was also not impressive. It was only about 62 to 79 per cent in Units I & II 64 to 75 per cent in Unit III, 53 to 68 per cent in Unit IV and 44 to 71 per cent in Unit V.
 - 14.43. The main reason for all these maladies was stated to be low order position caused by severe recession. Idle machine hours due to 'no Operators' were on account of absenteeism. Low order position responsible for very low moral of workers also contributed to absenteeism. The absenteeism in all the units was very much higher than the normal limit of 10 per cent. The idle time was also relatively higher for want of jobs. This gave rise to paradoxical situations. On the one hand, the machines remained idle for want of operators on the other hand the labour remained idle for jobs, materials etc. Again on the one hand there was dearth of orders to fully utilise the capacity, on the other hand the orders in hand could not be executed for want of operators, materials, mechanical and electrical repair of machinery etc. As a result of these, the production performance remained unsatisfactory in all the units of HMT, particularly in Units III, IV & V.
 - 14.44. The Committee have found that the Company were now taking a number of steps to elimate idle hours and improve productivity. They have felt that diversification of production in order to secure adequate orders, supply of requisite quantity and quality of materials, reduction of absenteeism, introduction of preventive

maintenance and repair systems in order to minimise machine-breakdown, and introduction of incentive were steps in the right direction. The Committee have therefore, recommended that all these measures should be pursued vigorously in order to increase productivity and production.

- 14.45. The Committee have expressed surprise that Government Management have not made any analysis of the requirement of staff in relation to the available developed capacity in all the Units of HMT. In financial terms the loss due to surplus labour during the years 1968-69 to 1970-71 has been assessed at Rs. 118 lakhs.
- 14.46. The Committee have felt that the employment of staff far in excess of the actual requirement not only means payment of excessive wages and salaries but results in low productivity labour troubles affecting the cost of production and lowering of morale generally. They have, therefore, recommended that a review of the standard force taking into account the expansion programmes launched by the Company and the actual strength should be undertaken without any delay so that the staff may be usefully and economically deployed.
- 14.47. The Committee have expressed concern that there was a large scale out-go of trained personnel from the HMT. It has been stated that "retention of staff who have been trained and brought up by the Company to man managerial posts, in the face of severe competition including higher emolument offered by the private sector for trained personnel, continues to pose a problem to the Company".
- 14.48. The Committee have felt that the recruitment, training and promotion policy should be so devised as to encourage persons of merit to get themselves absorbed with an assurance for further advancement.
- 14.49. The Committee have stressed that the sales organisation should not be unduly multiplied simply with the addition of new products. They have recommended that the cost of sales organisation should be commensurate with the sales turnover.
- 14.50. The Committee have stressed that in order to sustain the confidence of the customers in the products of HMT the best form of sales management especially in sale of machinery would be in having an efficient after-sales service and providing ready response to the difficulties of customers in the maintenance of machinery. The Committee have also suggested that the sales marketing organisation should develop a system of feed back of information to the management regarding the types, and pattern of machine tools need-

ed by the customers so that the programme of production is reoriented to the latest market trends consistent with the needs of customers.

14.51. The Committee have found that there has been an accumulation of stocks in regard to established products such as lathes, grinders, radial drills, milling machines etc. During the years 1967-68 to 1969-70 Such an accumulation has been attributed to recession and during 1970-71 and 1971-72 it has been stated to be "due to drop in the order position." The Committee have also noted that whereas the Company was short of orders for the established machines, they could not execute the orders for sophisticated machines within the prescribed dates of delivery as according to the Company the manufacture of such machines involved more technical and production problems than in the case of General Purpose Machines (e.g. lathes, radial drills, milling machines, etc.).

14.52. The Committee have recommended that the reasons as to why the Company went on manufacturing standard machines without any orders therefore should be investigated.

14.53. The Committee have found that out of the pending orders for 1285 machines (excluding consignment orders) as at the end of March, 1972, 340 orders could not be executed although the promised delivery dates had expired. The Committee have noted that during 1966-67 to 1971-72 orders worth Rs. 686.31 lakhs were cancelled. The Committee have also found that orders worth Rs. 52.72 lakhs were cancelled as the Company could not supply the machines on the due dates of delivery.

14.51. The Committee have stressed that the delay in the execution of orders acts as an inhibiting factor in securing further orders as well as in the cancellation of orders already secured. They have recommended that effective steps should be taken by the Company to ensure that the delivery dates are adhere to. Besides delay in the delivery of machines, the orders were cancelled due to change in customer's requirement subsequent to placement of orders, financial difficulties faced by the customer, difficulties experienced by the customers in getting the projects sanctioned from Government, cancellation of letters of intent earlier booked as orders but later on removed as orders could not materialise for several reasons. Committee have felt that many of the problems quoted above could however be solved if the Government/Management had taken suitable steps at the appropriate time. Financial difficulties faced by customers due to delay in getting loans or difficulties experienced by the customers in getting the projects sanctioned from Government can be solved by the Ministries concerned. The Committee have recommended that appropriate steps to help the customers to lift the machines should be taken as soon as such difficulties come to the notice of Government Management.

14.55. The Committee have expressed surprise that as on 31st March, 1972 the Company had in stock 1075 machines valued at Rs. 644 lakhs. Out of these 433 machines valued at Rs. 243 each were without orders. It has been stated that 194 machines valued Rs. 125 lakhs were manufactured in Unit III merely to utilise the idle capacity in that Unit. One hundered machines valued at Rs. 411.50 lakhs were not lifted by the customers during 1969-70 to 1971-72 due to financial difficulties. Among these customers mentioned by the management are the reputed firms with sound financial position. The Committee have expressed surprise as to how the Company could not evolve a rational machinery for guarantee of payment from such customers. The Committee have recommended that the manufacture of 433 machines without firm orders for them should be investigated as the machines remaining unsold only blocked the Capital.

14.56. The Committee have recommended that effective procedure should be evolved for ensuring prompt payment by customers who have placed firm orders. The question of imposition of penalty should be considered in the light of past experience. The Committee have also recommended that the orders for the machines which were manufactured in anticipation of orders should be secured without delay so that undue accumulation of stock is avoided.

14.57. The Committee have found that throughout the past years (except in respect of Unit V for 1967-68 and 1971-72 and Unit III for 1968-69) and 1971-72 the actual sales were far less than the budget framed by the Company on the basis of the sales forecast. In Unit III & IV the sales performance was not even 50 per cent of the sale budget in 1966-67. It has been stated that the Sales budget had to be revised keeping in view the order position and other relevant factors.

14.56. They have recommended that realistic targets should be fixed keeping in view the order position and other relevant factors and the reasons for the non-achievement of targets should be analysed every year so as to improve the system of sales. Likewise expert targets should also be fixed as realistically as possible keeping in view the sales prospects and the order position after a careful study of the export market.

14.59. The Committee have noted that the selling prices are fixed. in respect of (a) established machines with reference to cost of production and landed cost of equivalent imported machines; (b) machines manufactured out of Company's own design with reference to cost of production including venture allowance at a fixed percentage; and (c) sophisticated and tooled up machines with reference to cost of production or landed cost of equivalent imported machines and in all these cases, the prices are subject to the constraint of what the market can bear. The Committee have found. that in regard to sophisticated machines, the selling prices have in several cases did not cover even the factory cost of production and have thus, regulated in loss. The Committee have felt that with the experience now gained and the expertise acquired over a period of years, it should not be difficult for the Company to effect economies. in working, improve efficiency and reduce the cost of production, so as to obviate the necessity of selling its products at loss than the cost price on the plea of "what the market can bear" and incurlosses in the transactions.

14.60. The Committee have expressed their regret that out of 250 SPM's manufactured in the Unit V upto 1971-72, the Company incurred losses aggregating Rs. 71 lakh in respect of 123 machines (about 50 per cent of the total) and in 50 cases the Comyany could not even recover the Factory costs, and the loss on this account alone amounted to Rs. 18.44 lakhs. The Committee have found that the losses were mainly due to estimates not being realistic taking into account the actual in efficiency, designing and engineering difficulties etc. The Committee suggest that the reasons for the losses should be more critically analysed and suitable remedial measures taken to effect economies in cost of production by improving efficiency and maximising output.

14.61. The Committee have expressed their regret that HMT could not achieve the targets in regard to the manufacture of watches mainly due to delay on the part of Government in releasing the requisite foreign exchange. It has been stated that "due to difficult foreign exchange position the factory had to restrict the production just to keep it going. With the result that in 1965-66 it produced only 1,96,110 watches against the targets of 2,40,000 watches. Though the necessity for the addition of a few balancing machines and equipment estimated to cost Rs. 6 lakhs to attain the target of 3,60,000 watches per year from 1968-69 onwards was felt by the Management in 1966, foreign exchange for them was released by Government only between September, 1966 to January, 1970, with the result that HMT could produce only 3,00,000, 3,30,000 and 3,45,000

watches d...ing 1968-09, 1969-70 and 1970-71 against the target 3,60,000 watches per year. The Committee were given to understand that the present requirement of foreign exchange for the first watch factory for the production of 3,80,000 watches per year is of the order of 55 lakhs and that, the Company were still experiencing and pent up demand for watches in the country.

- 14.62. The Committee have felt that the needs of foreign exchange for HMT for production of watches should be met on a priority basis in order to enable HMT to work to full capacity and meet the growing and pent up demand for watches in the country.
- 14.63. The Committee have found that the construction and commissioning of the watch factory III at Srinagar has been delayed mainly on account of avoidable factors such as non-availability of constructional steel, cement, and some other building material. There have also been delays in regard to the acquisition of land, approach road, water supply, drainage system and electricity.
- 14.64. The Committee have recommended that Government should take positive and effective steps to resolve the outstanding issues with the State Government. The Committee have also recommended that Government should give priority for allotment of commodities like steel and cement etc. to public sector undertaking so as to avoid delays in the construction and commissioning of Plants. In view of the growing demand for watches in the country, the factory at Srinagar should be completed without any further delay. Production programme should be chalked out on a realistic basis and concerted efforts should be made to adhere to the targets.
- 14.65. The Committee have expressed regret that the service facilities with regard to the repair of HMT watches were very inadequate and the process of getting the defective watches repaired is quite tedious and time consuming as more often then not the watch has to be sent to Bangalore for a thorough check up. The Committee have felt that with the gradual increase in the sale of watches, provision of adequate service facilities on decentralised basis is an imperative necessity.
- 14.66. The Committee have recommended that in order to attract customers and in order to improve the image of HMT, repair and service facilities should be arranged in all the principal cities of India so as to ensure prompt service to the customers.

- 14.67. The Committee have found that there have been an upward revsion in prices of the three types of watches on three occasions.
- 14.68. The Committee have recommended that concerted efforts should be made to reduce/contain the cost of production of watches so that there is no occasion to increase the prices further.
- 14.69. The Committee have expressed surprise that the records containing the item-wise break-up of the project estimates in respect of Unit I and the break-up of actual expenditure separately against project cost and new items in respect of Unit II were neither available with the Management nor with the Government.
- 14.70. In the absence of relevant records it cannot be ascertained as to whether the expenditure incurred against each and every item was within the limits sanctioned for each component justifiable. The Committee have, therefore, recommended that responsibility for the missing records should be fixed and steps should be taken to trace all the records without any delay.
- 14.71. The Committee have found that whereas the Company incurred a net loss of Rs. 154.53 lakhs during 1967-68 to 1969-70, it showed a net profit of Rs. 53.34 lakhs and Rs. 122.51 lakhs during 1970-71 and 1971-72 respectively. The Committee, however, noted that it is the watch factory that has mainly and substantially contributed towards profitability and economic viability of HMT. As against the total profit of Rs. 9.53 crores made by the watch factory, during 1966-67 to 1971-72, the machine tool units incurred a net loss of Rs. 9.42 crores during this period. The bulk of the loss contributed by unit IV (Kalamassery) and unit (Hyderabad) unit IV incurred a loss of Rs. 312.84 lakhs during 1967-68 to 1971-72 and Unit V incurred a loss of Rs. 467.52 lakhs during 1966-67 to 1970-71. Recession in the country resulting low order position, increase in the expenses on salaries, wages and other expenses partcularly the interest liability from year to year and the expenditure incurred on excess staff resulting in high cost of production, disturbed industrial relations resulting in strikes and lockout have been cited as the reasons for the losses in the machine tool units.
- 14.72. The Committee have pointed out that there has been lack of proper planning right from the beginning in not having made a clear and realistic assessment of the demand for the various types of machine tools in the country, not fixing the capacities of the units on a scientific basis taking into account the relevant factors

affecting production, not improving the productivity and labour efficiency resulting in high cost of production, and not having a board blue print for diversification etc.

- 14.73. The Committee have in their report made suitable recommendations in order to increase the productivity and production performance of HMT. They have expressed the hope that the recommendations will be considered and implemented by the Government/Management in the best interest of HMT.
- 14.74. The Committee have expressed the hope that with the remedial measures already introduced by the Management, it should be possible to improve profitability of HMT and mantain its dominant role as producer of machine tools in the country.

14.75. The Committee find that the value of book debts increased from Rs. 336.14 lakhs in 1966-67 to Rs. 690.78 lakhs as at the end of the year 1971-72. During the same period, sales increased from Rs. 1504.65 lakhs to Rs. 2953.51 lakhs. The percentage of debtors to sales worked out to 22.3 per cent in 1966-67 and 23.4 per cent in 1971-72. The Committee have been informed that with effect from 1967-68, the Company has been discounting the bills with its bankers. The bills so discounted and outstanding as on 31st March, 1972 aggregated Rs. 670.13 lakhs. The figures of sundry debtors as on 31st March, 1972 are exclusive of these outstanding bills. But for the discounting of these bills, the sundry debtors as on 31st March, 1972 should have gone up by Rs 670.13 lakhs and the percentage of debtors to total sale as on 31-3-72 would come to 46 per cent (approx.) as against 22.3 per cent in 1966-67.

The Committee note that while the turnover is inclusive of the sale of watches which is almost made on cash basis, the book debts pertain to machine tools. If this fact is taken into account, the percentage of book debts to turnover will be still higher than the figures of 46 per cent. Owing to the increase in the working capital requirements partly contributed by the heavy book debts and finished stocks the company had to avail of large cash credit and bill decounting facilities from the banks. The incidence of interest and commission on these facilities amounted to Rs. 93.36 lakhs in 1971-72 which is quite heavy. The Committee recommended that the Management should evolve an effective system of follow up of all out standing debts to ensure their quick realisation and also take concerted measures to bring down the inventory of finished stock within reasonable limit.

14.76. The Committee have also found that in respect of bills outstanding for more than one year, the major portion relates to

Government Departments. The Committee have recommended that this problem should be tackled at the level of the Ministry so that the outstandings are cleared without any delay. The Committee also suggest that the procedure for the clearance of bills for supplies to Government Departments should be reviewed so as to ensure that such delays are avoided in future.

- 14.77. The Committee have noted that Government propose to form a holding company with each of the units as subsidiaries. It has been argued that HMT had grown in size and structure so vast that it needed a very highly decentralised organisational set up with various subsidiaries coming under the holding Company. It was stated that it was expected that the proposed reorganisation of Hindustan Machine Tools would optimise efficiency, foster initiative at the different management levels and ensure overall economy by utilising accountability. It was also expected that the Holding Company, in course of time, could be forged into an effective instrument for shaping and implementing Government's policy in regard to the development of the machine tools industry.
- 14.78. The Committee have been informed that a final decision in regard to the formation of a holding company is yet to be taken. The Committee have suggested that all the implications of the holding company should be gone into carefully before taking a final decision in the matter. The Committee have urged that while taking a decision it should be ensured that the accountability of the company to the Public and Parliament is not in any way reduced.
- 14.79. The Committee have recommended that in the best interests of the Company and so that the production in the company may not suffer an early settlement of the disputes should be arrived at and better labour management relations established.
- 14.80. The Committee have noted that a new code of conduct or a new pattern of relations for public sector was under the active consideration of Government. They have expressed the hope that all the aspects affecting labour relations such as recognition of unions; amenities to workers and incentive schemes etc. would be thoroughly examined by the Government in order to find a lasting solution to the problem of management labour relations.

AMRIT NAHATA.

Chairman,
Committee of Public Undertakings.

APPENDIX I; Marie (Vide para 6.2 page 119 of Chapter VI)

Statement showing the produce-wise quantative analysis of the targets and production

	:									(Fig	(Figures in Numbers)	umbers)	
		961	1962-67		1967-68	8			1968-69			0/-6961	
Particulars	Original	Revi	sed Actu	als ** Or	iginal R	evised	Actuals **	Original Revised Actuals** Original Revised Actuals** Original Revised Actuals**	Revised A	ctuals **	Original Revised Actuals**	Revised A	Actuals **
			·m	-4	- S	عد ا	7	-00	0	of .	i i	177	12
Units I & II, Bangalore													
LB Lithes	480	•	737	741	360	466	464	36	416	6,4	8	8	ş
Grinders .	270	٥	270	270	250	114	114	95	8 6	%	. i	, &	175
Radial Drills		٥	390	\$	275	188	188	90	163	168	250	054	9
Sutface Grindera	•	\$;		4	-	-	35	6	7	, ¥	, ×	· ×
Single Spindle Automatics	\$	0			8	₩.	∽	45	35	32	; · S	· 5	, . #
Multi Spindle Automatics		:		;		:		01	-	-	∞	•	
Milling Machines	\$6	vo	63	%		25	25	20	33	35	Ş	2	, , ,
Pre-sclesfor Production/Universal Labbies (L-22)	9	Q	16	8	150	&	&	ę	. 8	8	2 021	, .	G &
Genr Sharper Re-creicelly Controlled Milling M	٠ ع		77	31	8	9	9	01	13	13	2 3	8	8
chines (E-2)	977	Q	230	181	\$	**	84	23	43	36	4	91	4
												Ì	

													å
—		6	4	8	9	7	∞	6	10	11	13	13	-
Special Purpose Machines	6	15	13	:	6	7	2	=	8	4	13	8	
Mechanical Cylindrical Grinder		:			:	7	75	33	4	\$\$	T.	`\$ \$	•
Min Oruster								:	æ	45	45	8	
Heavy Duty Lathes (L-45)						H	v ∩	•	1	11	S	'	
Hydraulic Carbide Tools Grinding and Lapping Machines (GT20) .		:	:	:	:	9	75	8 1	8	ंक्स	25	Q_ (
Gear Hobbers				13	7	-	15	•	~	13	~	•	
Prototype					:			:		:	:	4	
ž.	9991	81/1	8991	1248	086	780	1017	156	·&	1475	1304	1288	270
Unit III, Pinjore	-												
Electrically Controlled Milling Machines (F3/F4)	8	Š	જ	8.	10	01	89	æ	88	&	8	73	
Milling Machines (M2).	150	145	117	440	236	229	150	298	310	80	97	240	
Milling Machines (M2P)	160	115	115	10	191	191	75	98	\$	8	115	115	
Heavy Duty Gear Hobbers (L-400)	01	:		:				:					
Radial Drills (R-40)													
Electrically Controlled Milling Machines (E-2)	150	'n	∽									:	

Broaching Machines (RW5)							9	7	7	17	6	6
Turret Ram Type Milling Macchines (M I TR)				:	'n	74	115	23	81	500	55	\$
	\$60	315	287	630	411	402	405	450	452	296	486	477
Unit IV, Kalamassery												
High Speed Precision Lathes (H2226).	480	460	468	300	253	249	195	219	198	185	215	202
LB Lathes (Centre)	266	225	205	220	144	144	&	136	119	500	131	110
Copying Lathes, .	96 96				:	:	38	٧	~	8	ይ	29
Drum Turret Lathes				7			12			91	11	15
Centre Lathes LT 20	:	:	:	:			:			270	184	78
Short Turning Lathes .	10	•		:								:
									:	:		}
	780	685	673	\$27	397	393	325	360	322	917	571	₹. 7£9
Unit V. Hyderabad												
Multi Spindle Drills.	io											:
Fine Boring Machines	Q	11	12	9	:	'n	:	:	'n	:	:	:
											-	}

1		4	æ	4		v	6 7		œ	ο.	2	H	12	13
Special Purpose Machines		2	23	25	:	:		27	:	:	34	:	:	67
Fay Automatics											7	:		•
Horizontal Boring Machines .								:			:	:	:	Ħ
Presses			:	:	: .			:			14	:	:	. 4
		8	*	37	o o	:		32			82	:		135
**Reasons for shortfall in general:	ral:													
Unit I & II, Bangalore:			(i) Ti	(i) Time taken in the development of phisticated machines.	in the	devel hines.	opmen		efficiency	and skil	and skills for the manufacture of so-	e man	ufacture	+08 Jo
			(ii)	ifficulties	in fixi	ng tar	gets in	the in	(ii) Difficulties in fixing targets in the initial stages of production.	of produ	ction.			
			T (iii)	he target	s had to	o be re	evised i	n the c	ourse of tl	he year de	(iii) The targets had to be revised in the course of the year depending on the inflow of orders	on the	inflow of	orders
			(iv) (v)	Strike/loc 26-7-1968.	kout an	d oth	er type	s of lab	our agitat	ions duri	Strike/lockout and other types of labour agitations during the period from 12-7-1968 to 26-7-1968.	iod fr	om 12-7.	1968 to
Unit III, Pinjore:			(E) S	hortfall is roduction	n respe	a of	E2 (Mi	illing M	Shortfall in respect of E2 (Milling Machines) in production of these machines to Units I & II.	in 1966-6 I.	Shortfall in respect of E2 (Milling Machines) in 1966-67 was owing to the transfer of production of these machines to Units I & II.	ng to t	he transf	tr of
			(ii) S-ii	Shortfall is in the	in M2P machines (introd production programme.	mach ion p	ines (in rogram	itroduce iffe.	d for the	first tim	Shortfall in M2P machines (introduced for the first time) in 1966-67 was due to revision in the production programme.	-67 was	due to	evision
			S (iii)	hortfall is	n F3/F	3 mac	hines ir dems fa	1 1966-(ced in	(iii) Shortfall in F3/F3 machines in 1966-67 and 1967-68 and in was due to several problems faced in the initial manufacture.	1967-68 au manufact	and 1967-68 and in NITR machines in 1968-69 initial manufacture.	'R mac	hines in	69-8961
			(vi)	Strikelloc her type	k out o	during abour	agitati	1966 to ions.	24-9-196	6, 4-8-19	(iv) Strikclock out during 27-8-1966 to 24-9-1966, 4-8-1969, 21-1-1970 to 23-1-1970 and other types of labour agitations.	.1970 to	0 23+1-19	70 mind

2 72

(i) Shortfall in respect of lathes LB and H22 26 was due to revision of production targets as a result of extremely discouraging order position.	
Unit IV, Kalamassery:	

(ii) Shortfall in respect of Copying lathes, Drum Turret lathes and LT 20 machines was owing to a number of technical problems relating to manufacture and assembly of these machines in the initial stages of manufacture.

(iii) Strike lockout during 6-2-1967, 22-8-1967, 9-9-1967 to 22-10-1967, 8-5-1968, 19-8-1968 to 23-8-1968, 8-9-1969 and 31-12-1969 and other types of labour agitations.

Strike lockout during the period 13-6-1969 to 16-6-1969, 28-11-1969 and 8-1-1970 to 22-1-1970 and other types of labour agitations.

Unit V, Hyderabad:

APPENDIX II

(vide Para 6.3, Page 119 of Chapter VI)

Statement showing Product-wise production analysis

Products			_		1970-7	1		1971-72	
				0	R	A	0	R	A
HMT I & II, Ban	galor	e							
LB				300	300	300	250	250	250
L 22 .				160	110	110	120	110	110
E 2				50	11	12		•.•	
Мз				10	10	10		••	
Radial drills				270	270	270	340	440	440
Grinders				240	240	210	210	260	260
Gear shapers			•	35	35	35	35	35	35
L 45	•		•	16	10	8	20	22	22
Minichucker	•		•	60	60	50	100	60	6ა
Chucker			•	10	10		10	••	
SSA .				80	42	32	100	90	:90
MSA		•		28	17	17	24	24	22
G9,				120	120	90	100	130	1,30
S.G. , ,				40	40	20	22	36	36
G.H.				20	20	20	30	30	24
Column drilling	•			20	20	20	50	50	50
GT 20				– ,		_	_	_	
SPMs .						1	_		
GSP		•		• •			5		I
Prototypes		•	•	7	2		5	2	
				1466	1317	1205	1421	1532	1530
HMT III, Pinjore 2D/3EM 3				75	75	70	37	67	67
	•								5
F4/EM 4		•	· 		5	5	5	5	

Products	197	0-71		19	71-72		
	0	R A		0	R A		
M. 2		160	230	235	180	183	18
M ₂ P/EP .		100	145	96	96	57	5.
Gear Tester						2	l
UM 3 .				••		2 _	}
Prototypes		••	••	3	••	••	
MIER .		100	80	60	100	80	8
Broaching machines	•	27	23	23	25	25	2
File cutting marhines		50	••	• •	• •	• •	•
Duplex milling machine		8				••	•
FN 2/FT .	•	20	20	• •	50	100	6
	_	545	578	541	493	521	49
HMT IV, Kalamassery							
H 22/26 lathes		219	184	183	190	220	16
LB lathes		171	122	115	240	149	10
LT 20 lathes .	•	330	209	186	180	92	6
Copying lathes		40	5	10	30	25	1.
Drum currets		20	5	7	10	6	:
		780	525	501	650	492	34
		С	R	A	С	R	A
HMT V, Hyderabad							
SPM/FHM				50			59
FAY				20			13
FBM .				12			8
Press Brakes Press :				43			28
	_	·····		125			108

O-Original Budget. R-Revised Budget.

A-Actual Production.

APPENDIX III

(Wide Para 6.6 Page 121 of Chapter VI)

Statement showing short fall in production with reference to original targets in respect of the manufacture of new machines taken up for production under various collaboration agreements as well as of the machines developed with the compnay's own design effort.

	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
Units I & II						
Surface Grinders	40	39	21	9	80	
Single Spindle Automatics	40	45	13	39	48	10
L-2 ² · ·	50	70	4	39	50	10
Gear Hobbers .		12	10	10		6
Multi-spindle Automatics			9	11	11	2
G ₉ · · ·	• •		71		36	
GT-20 · ·	• •		57		•••	
E-2 · · ·	59		16	30	38	
L-45 ·		• •	4	6	8	
Gear Shapers ·	39	54		2		4
Special Purpose Machines	27		5			
Mini Chukers			••		10	40
Chukers · ·					10	10
Gr · · ·	••				30	•••
	255	220	210	142	255	82
Jnit III M2P	45		• •	••		
F3/F4	40	80	31.	7		
E-2	145	-		•		
Broaching Machine	•		4	12	4.	
MITR · ·			97	160	40	20

		1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
L400 Gear Hobb	ers	10	••		••		••
20/3/EM3 ·					••	5	••
M ₂ P/EP ·					• •	• •	39
FN2/FT2		• •	••	••	••	20	
	_	240	80	132	179	69	59
Unit IV							
Copying Lathes	•	30		33	19	30	16
Drum Turret Lathes	•		7	12	I	13	8
LT-20	•	• •	• •		192	144	115
	-	30	7	45	212	187	139

APPENDIX (.

(Vide para 8.15, page 184 of Chapter VII1) Details of Orders Booked during the Exhibitions.

(Value in Rupees Lakhs)

Sl. No.	Exhibition	Participated through	Period	No. of M/Cs	Orde Booke	
			1	dis- olayed	No.	Value
1	2	3	4	5		6
	1967-68			·		
1	International Trade Pair Wellington, Newzealand	Ministry of Commerce	August, 1967	4	4	1.93
2	International Engineering & Marine Exhibition London, U.K.	EEPC	25th April to 4th May, 1967	2		
3	Plovdiv, International Fair Plovdiv, Bulgardia	Ministry of Commerce	24th Sep- tember to 3rd October, 1967.	2	2	0.71
4	Leipzing Spring Fair · ·	ICTFE	3rd to 12th March, 1968	4		
5	50th International Swedish Fair Co.	Ministry of Commerce	19th to 28th May, 1967.	2		
	1968-69					
6	Westee Show, Losangelese, U.S.A.	Through HMT's agents	10th to 14th March, 69.	3		
7	Budapest International Trade Fair, Budapest Hungary.	Ministry of Commerce	17th to 27th May, 1968.	5		
8	Helsinki International Trade Fair Helsinki Finland.	Ministry of Commerce	19th to 29th Sept. 1968.	1		
9	Indian Exhibition Prague Czechoslovakia	, Ministry of Commerce	2nd to 18th August, 196	8 4		
10	Baghdad International Fair, Baghdad, Iraq	ICTFE	Ist to 30th Oct. 1968	1	1	0. 25
1	z Zagreb International Autuman, Fair Zagreb, Yogos- lavia.		12th to 22nd Sept. 1969	4		••

1	2	3	4	5	6	
	1969-70					
12	II Asian International Trade Fair, Tehran, Iran	Ministry of Foreign Trade	5th to 24th Oct. 1970	3	••	••
13	25th Plovdiv International Fair, Plovidiv, Bulgaria.	Ministry of Foreign Trade	21st to 30th Sept. 1969	5	4	1.79
14	ASTME, show, Chicago U.S.A.	Through HMT's Agents	2nd to 5th May, 1969	3	••	••
15	Toronto Production Show, Toronto .	Through HMT's agents.	2 ⁿ d to 6th • June, 1969	4	••	••
16	EXPO-70 World Fair Osaka, Japan.	Ministry of Foreign Trade	15th March to 13th Sept. 1970.	3	••	••
17	V. International Engg. Show, Melbourne, Australia	Through HMT's Agents.	4th to 9th August, 1969.	6	••	
.18	International Trade Fair Auckland, Newzealand.	De.	August, 1969	5	••	••
	1970-71					
19	Djakarta Fair, Djakarta Indonesia.	Ministry of Foreign Trade	13th June to 18th July, 1970	2	••	••
20	Indian Exhibition Kualalum- pur, Malaysia.	Do.	7th to 21st July, 1970.	3	I	0.15
:21	Indian Exhibition Suva, Fiji	Do.	November, 1970	2	3	1-13
:22	Indian Exhibition Singapore	Do.	26th August to 9th Sept. 1970.	3	••	••
:23	Bogota International Fair, Bogota, Columbia.	Do.	roth to 26th July, 1970.	3	••	••
:24	Cairo International Fair, Cairo, Egypt.	ICTFE	6th May to 5th June, 1970.	I	••	••
:25	Bucharest Fair, Bucha rest, Rumania	ICTFE	13th to 24th Oct. 1970	5	5	2.90
:26	Poznan Fair, Poznan, Poland.	Ministry of Foreign Trade.	14th to 23rd June, 1970	5	••	••
27	V Japan International Fair Tokye, Japan.	BEPC	28th Sept. to 18th Nov. 70.	1		

1	2	3	4	5	6	i
28	International Engg. Exhibition, Sydney.	EEPC	17th to 22nd August, 1970	7	4	1.40
29	International Machine Tool Exhibition, Hannover, West Germany.	AMTMI	6th to 15th Sept. 1970	13	87	26.82
;	1971-73					
30	Fourth International Ma- chine Tool Exhibition, Sydney.	Through Agents	14th to 23rd October, 1971	11	••	• •
31	International Trade Fair Wellington, Newzealand.	Do.	18th August to 4th Sept. 1971.	7	12	4.00
32	27th Plovdiv International Fair, Plovdiv.	ICTFE	September 19—28, 1971	6	2	2. 23.
33	Laipzig Spring Fair, 1972 .	ICTFE	14th to 23rd March, 1972	8	••	••
	1972-73]					
34	Utrecht Techni-show 1972 Utrecht, Holland.	Through Agents.	26th May to 3rd June,\(\) 1972.			••
35	Machine Tool International 1972 Exhibition Olympia, London.	Do.	21st June to] Ist July,'j 1972.	••	••	• •
36	International Engineering Exhibition, Sydney.	Direct	7th to 12th August, 1972.	7	••	••

APPENDIX V

(Vide para 8.27, page 187 of Chapter VIII)

HMT's AGENTS ABROAD

S. No.	Name and address	Date of agreement	Area covered	Products
1	2	3	4	5
1	American Tool Works Co., Pearl Street at Eggleston Avenue CINCINNATI-2 CHIO-45202 USA.	8-2-197	North, South & Centrel America.	Presplector Universal Lathes A24UP, Milling M/cs FN2 & EM2 Supercut Lathes, C21, Radial Drills-RD.
2	Wickman Machine Tool Sales Ltd. P.B. 44, Banner Lane, Tile Hill, Coventry, England.	1-4-1970	UK and Nor- thern Ireland.	All exportable Products.
3	Van Kranenburg N. V. Schiekade 205 Rotterdam-4 (Holland).	6-12-1967	Holland	Do.
4	Scandinavian Phoenix A/S, Vesterbragade, 65 Copen- hagen V, Denmark.	24-5-1968	Denmark	Do.
5	Helmann Kolb Maschinen- fabrik 5 Koeln Ehrenfeld Hospieltstrasse 37/41 West Germany.	1-9-1969	Federal Republic of Germany, France, Italy, Austria, Switzerland, Norway & Spain	Radials
6	J. Van Wassdik S.P.R.L. 1020 Brussels, 66-72 Rue Picard, Belgium.	22-10-1971	Belgium	All exports products.
7	Malaysian Gauge and Tool Sin Brd. Jalan Tukang 2/2 Batu Riga Industrial Estate, Shah Alam Selanger, Kualalumpur, Malaysia.	5-9-1968	Malaysia and Singapore.	Do.
8	Sigma Engineering C/o Consuelo Industries Incl., 1120, Mendiola Ex- tension, Paco, Manila, Re- public of Philippines.	8-8-1970	Philippines	De.

T	2	3	4	5
9	The Engineering General Co., P. O. Bag Ramses 9-11, Orabi Street, Cairo, U.A.R.	15-9-1967	U.A.R.	All exportable products.
10	Meterol Company Ltd. Passage, Pastan, Museum Square, Avenue Sepah, P.O. Box 571, Tehran, iran.	28-9-1970	Iran	Do.
II	Moyes & Groves Ltd. 768 Great South Road, Penrose, Auckland S.E. 6, New Zealand.	1-6-1971	New Zealand	Do.
12	Ceylon Steel Corporation Athurugiriya (Ceylon) Republic of Sri Lanka.	3-2-1968	Ceylon	Do.
13	Nepal Construction and Engineering Corporation (Pvt) Ltd., 8/324, Pyukha Tole, Kathmandu, Nepal.	10-10-1972	Nepal	Do.
14	Nigeria Engineering Works Ltd., Plt, 49, Trans Amadi Industrial layout Harcourt, Nigeria.	30-3-1968	Nigeria	Do.
19	Western Trading Co. Ltd. 4-6, 2-Chome, Roppongi Minato-ku Tokyo, Japan.	17-11-1972	Japan	Single Spindle Automatics TR.
16	H. Y. Matloub P.O. Box 3103, Baghdad, Iraq.	17-6-1970	Iraq	All exportable products.

APPENDIX VI Export Sales (Vide para 8.27, page 187 of Chapter VIII.)

(value in Rupees lakh)

Country/Agents								1965-66	1965-66 1966-07	1907-06	t hoc and	thoracon then to	-1 -16- x1-016x	
Estrope Wichman, Phyland	•	•	•	•	•	•	•	:	:	:	2.078	1.914	3.83	3.37
Van Krananhurg. Holland	land .	•	•	•	•	•	•	:	:	0.272	1.382	8.900	8.58	13.83
Bonthron & Ewing. Sweden	weden	•	•	•	•	•	•	:	:	:	:	1.224	1.67	:
Scandinavian Phoenix, Denmark	Denmark	•	•	•	•	•	•	:	:	:	0.264	0.507	2.19	91.1
Hormann Kolo, West Germany	Germany	•	•	•	•	•	•	:	:	:	9.820	13.867	32.85	4.33
Other Agents, West German	ermany	•	•	•	•	•	•	:	0.435	0.611	:	:	:	:
Switzerland	•	•	•	•	•	•	•	669.0	:	:	:	:	1.07	0.33
France	•	•	•	•		•		:	:	0.240	0.354	:	:	:
				•	TOTAL	ķ	1.	669.0	0.435	1.123	4.654	25.113	61.05	23.02
East European Countries	•		•	•	•	•		0.630	1.577	:	692.1	0.614	:	:
Poland	•	•	•		•	٠	•	4.948	20.489	2.980	:		:	ó
Czechoslovakia.	•			•	•	•	•	10.304	[0.6. 0	i i	: .	E.	:	
Bulgaria	•	•	•	•	•-	••	••	: .	3.216	o.710	: "	\$64.t	:	2.3
Hungary .	•							:	3.800	:	:	:	:	:

Country/Agents			1965-6	66 19	19-99	1965-66 1966-67 1967-68	1968-69	02-6961 69-8961	17-0791	1971-73
U.S.S.R.					:	4.262	:	:	:	
Kumana	•	•		:	:	:	:	:	8.7	:
		TOTAL	. 16.072		26.133	7.952	1.269	2.409	2.80	2.36
America and Canada	SUB 7	SUB TOTAL	16.771		28.62	0.975	5.923	125.22	\$3.00	35.33
Vernick	•	•	•	:	:	:	:	1.211	:	;
K.G. Gardner	•	•		:	:	:	11.831	2.6.9	6 .0	:
Verson All Stari	•	•	•	:	:	:	0.743	1.569	95.0	2.55
H. H. Roberts Machinese	•	•		· :	:	:	:	3.030	2.70	0.33
8	•	•	•	:	:	:	•	:	:	13.44
Other Agents	•		•	:	:	:	:	:	:	14.39
	•	•			0.396	1.015	1.042	2.358	o . 0	2.48
Australia and New Zealand		TOTAL		:	0.396	1.015	13.616	15-135	4.58	33.19
₹.	•	•	•	0.243	:	:	612.0	10.058	17.32	14.26
wrote a grove, new Lealand .	•		. 0.2	0.250	0.812	1.124	0.413	3.323	12.72	13.00
bors-Through Export Office Remonless		Total	0.493	2	0.812	1-124	1.132	13.381	30.0€	27.26
Ceylon Steel Corpn. Ceylon	•		•	:	:	:	18.482	26.987	7.59	10.28

Country/Agents	g									1965-66	1966-67	1967-68	1968-69	17-0761 07-9961 93-8961	16-0/61	1971-72
Iraq .										:	:	:	3.838	:	:	6.0
Egypt .	•	•	•	•	•	•	•	•	•	:	:	:	:	:	:	0.73
Ceiro	٠	•	•	•	•	•	•	•	•	:	:	:	0.401	0.401	:	: :
Kenya .	•	•	•	•	•	•	•	•	•	:	:	:	2.182	:	9.0	2.53
Ethopia .	•	•	•	•	•	•	•	•	•	:	:	:	1.048	:	:	:
Uganda .	•	•	•	•	•	•	•	•	•	:	:	:	:	0.188	2.71	:
Ghans .	•	•	•	•	٠.	•	•	•	•	*:	:	:	:	0.794	:	:
Beria .	•	•	•	•	•	•	•	•	•	:	:	:	:	:	4	:
Muscat .	•	•	•	•	•	•	•	•	•	:	:	:	:	0.270	0.7	
Nigeria .	•	•	•	•	•	•	•	•	•	009 •	907.0	:	:	:	0.3	:
South Africa	•	•	•	•	•	•	•	•	•	:	:	:	:	:	3 :	: 8
Singrapore	•	•	•	•	•	•	•	•	•	:	:	0.235	:	:	91.1	;
Philippines	•	•	•	•	•	•	•	•	•	:	:	:	:	:	:	
Malaysis	•	•	•	•	•	•	•	•	•	:	:	:	:	1.730	2.74	
Bhuten .	•	•	•	•	•	•	•	•	•	:	:	;	:	0.633	8 8	1 8 0 0
																•

٠.,

country/Agents	ş									1905-00	1900-07	1907-60	1965-60 1900-67 1907-69 1968-69 1969-70 1970-71 1971-73	1969-70	16-0/61	1971-73
Nepal				•		٠				:	;	:	:	:	0.47	:
Kuwait .	•	•	•	•	•	•	•	•		:	:	:	:	:	0.78	:
							H	TOTAL	1.	0.600	90t.a	0.235	0.235 25.951 31.308	31.308	16.51	\$0.50
						8	SUB TOTAL	Z.	۱ ِ ٔ	17.864	17.864 31.201		11.449 46.653 87.345 106.92	87.345	106.92	106.33
Watches	•	•	•	•	•	.	•	•		:	:	ES-10-234	0.393	0.214	0.72	1.04
						35	L ON	GRAND TOTAL	1	17.864	31.201	17.864 31.201 11.983 47.046 87.559 107.64	47.046	87.559	107.64	107.37

APPENDIX VII

(Vide para 9.20, page 239 of Chapter IX)

Statement showing the percentage increase in the actual cost over the standards under various cost components where standards have been fixed.

Product/t	ype		1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
1			2	3	4	5	6	7
HMT I LBs	& II	700			••	••	5.8	••
	10	· •			••	• •	5.9	• •
LB	17 7	700	20. 5	25.3	35.8	12.1	7.0	5-8
	10	000	20.6	25.5	35.9	12. 1	5.4	5.9
LB	20 10	000	20.7	29.2	35.7	12.3	5.4	••
	1	500	20.3	43.9	35.5	12.6	5.4	
L 22 T	P		• •	• •	• •	••	27.2	13.9
	UP .			••	••	• •	28 · 8	14.4
	PP .		• •	• •	• •	• •		13.0
6 13	300 U	•	46· I	30.3	74.3	30.8	15.9	••
	300P		46.3	33.3	••	31.7	14.6	••
	300PI				••	••	13.4	• •
	500U	•	45.8	31.3	74.4	30.2	15.7	• •
	500P		, 4 6·0	32.6	78· I	31.1	15.6	• •
	800B		. 44*:	30.2	74.3	30.1	16.2	••
	800P	•	. 44.	7 31.7	77.7	30.6	16.7	••
夏 130	300U	i		••	••	••	••	12.9
	300P		•	••	••	••	• •	13.3
	300P	L		••	••	• •	••	13.0
	5000	J		••		• •	••	13.
	500P	•	•				••	13.
	. 500F	L	•				••	13.
	J008	J			••			13.

.

, <u></u>	I		2	3	4	5	6	7
	800P		• •	••	• •	• •	• •	13.8
G 17	500U	•	41.7	• •	••	31.2	18.6	13.9
	500P.	•	42· I	32· I	79·8	31.7	16.6	14.3
	8∞U	•	42.3	30.3	76· I	30.4	17.4	14.0
	800P	•	42.7	••	77 · 7	31.1	15.5	14*4
	800 PL	•	• •	••	• •	••	17.4	••
	1200Ü	•	42.2	30.4	76· I	30.6	16.2	14.3
	1200P	•	43.4	31.3	80.2	31.6	15.6	••
G22	2000U	•	••	• •	••	••	20.6	14.5
	2000P	•	42.7	31.4	80. R	30.7	17.3	14.8
M	50	•	45.2	24°4 °	37.9	14'7	11.6	8.2
6		•	43.7	35.0	44.2	22.5	15.9	8.5
(52 .	•	43.4	34.7	44.5	24.0	16.3	8.7
	63 .	•	43.3	34.4	44.6	25.3	16.3	8.8
	65 .	•	41.3	31.2	41.7	25.0	18.3	9.7
G9SS		•	••	• •	••	••	• •	17.9
GS2A			••	••	••	••	••	14.3
L45	1500	•	••	••	••	••	••	16.4
L-45	2000 .	•	••	••	••	••	• •	16.4
	3000 .	•	••	• •	••	••	••	16-4
	4000 .	•	••	••	••	••	••	16.3
	5000 .	•	••	••	••	••	••	16.3
TR	16 .		••	••	••	••	••	20.4
	22 .	•	• •	• •	••	••	••	20.4
	25 .	•	••	••	••	••	••	2012
	32 .	•	••	••	••	••	••	21.6
	43 .	•	••	••	••	••	••	21.5
	60 .	•	••	. • •	••	••	••	21.2
SFW		•	••	••	••	• •	••	24.3
	2 .	•	••	• •	••	••	••	24.6

	1			2	3	4	5	6	7
НМ1	r III. I	Pinjo	r e						
M	2		•	••	••	••	••	30.3	22.9
M	2 P			••	••	• •	••	9.3	8.3
EM	3			••	••	••	••	32.0	42.5
M	1 TR	i	•	••	••	• •	••	65·1	52.0
RW	5			••	••	••	••	39.6	111.1
FN	2			• •	••	• •	• •	201-6	40.2
H <i>MT</i>	'IV Ka	lam	25 56 Ty.						
H		•		••	••	••	••	102.0	55· I
LB			•	••	••	• •	••	84-6	59:6
LT.			•	••	••	••	••	92· I	76.4
C. La	thes	•	•	••	••	••	••	64· I	30- I
D. T	urrets.	•	•	••	••	••	••	78.3	177.3

APPENDIX VIII

(Vide Para II-13, Page 258 Chapter XI)

Purchase of Additional balancing Machines for Watch Factory

Sl. No.	Description of Machinery	Date of request for FB & IL	Import Licence No. and date
1.	Decorating Machine (Sun Ray) for Watch Dial —I No.	ls Secl. F-4 (1966-67) 18-4-66	G/AU/1029272/C dated 29-9-1966
2.	Decorating Machine (Record Type) for Watch Dials-I No.	2)	29
3.	Nikon Steroscopic Microscope type SM-5 & SM-1 20 sets	33	33
4.	West Abrassive Blasting Machine-1 No	»	39
5.	Nikon Messures Scope-1 set	39	>>
6.	Apparatus for Testing Water proof Watch cases-set	,,)
7.	Bergeon Drilling & Die sinking Machine-1 No	0.	C/AU/1033129/C :: dated 10-8-1967
8.	Autelca Revitting Machine-1 No	99	20
9.	Cam Meorometer-1 No	33	39
10.	Hauser Wheel Trueing Machine-1 No	Secl. 4F- (1966-67) dated 18-4-1966	G/AU/1033125/C dated 10-8-1967
11.	Hauser Wheel Trueing Machine-1 No.	. ,,	A/AU/1034633/C
12.	Citizen Cam Farming Machine-1 No	»	dt. 31-3-68 "
13. 14.	Grinder Supper Spriomatic Hair Sec	Secl. F-4(1966-67) ated 18-4-1966 cl. F-4-(1966-67) tt. 18-4-66	G/CG/202784581 dated 8-1-1969
15.		d. F. 4(ii) dt. 16-12-1967	GKG/2027937/C dt. 14-1-70.
16.	Hauser type, measuring Machine—1.No.	29	29
17.	Technical type Vertical Milling Machine—I No.	20	29
18.	Strausak Automatic Milling Machine		
19.	EUAG Universal Grinding Machine	39	39

Acres and

APPENDIX IX

(Vide para 12.12, Page 290 Chapter XII)

Statement of Project Cost (HMT II) Additional Budget Provision approval by Board from time to time and actual expenditure as on 31st March, 1971.

								(R	s. in lakhs)
	Partic	ulars	ı			Project Cost	New items approved by Board in annual budgets	Total budget provision as on 31-3-1971	Actuals as i on 31st March, 1971
n.	Land					7.00	13.27	20.27	10.54
2.	Buildings (F	actor	ry)			34∙∞	22.00	56.00	43.28
3.	Plant and factory equ			an.	d	166·12	195.82	361·94	240.37
4.	Others	•	•	•		19.25	15.75	35.∞	26.33
						226.37	246.84	473.51	320. 52
′5 •	Township	•	•	•		54.50	43.61	98.11	50·81
	TOTAL	•	•		•	280.87	290 · 45	571.32	371.33

APPENDIX X

(Vide para 12.16 page 291 Chapter XII)

Statement showing the break up of the Original, Revised Project estimates and the Actuals (including Commitments upto 31st March, 1972,

											<u>.</u>	(Rs. in lakhs)	
Particulars		Original	Į,	`			Revised		Actuals a	Actuals as on 31-3-1972	27		
	HMT	HMT IV	HMT	Total	HMT III	HMT WHT V	HMT V	Total	HMT III	HMT IV	HMT V ₂	Total	
Land .	17.75	20.00	13.00	\$0.75	\$0.75 17.75	21.00	18.81	\$7.56	8.63	13.26	13.99	35.88	
Buildings [] 156.40	156.40	126.50	00.991	448.90	448'90 🛣 156'40	219.00	175.55	580.95	159.43		162.00		
Plant, machinery													
equipm:nts	358.78	334.00	388.00	1080.78	358.73	441.16	523.88	1323.82	356.79	436.76	471.34	471.34 1264.89	
Others.	61.77	29. 50	47.30	118.57	41 · 77	\$2.00	57.44	151.21	\$7.78	75.53	88.09	194.16	
Total .	\$74.70	\$10.00	614.30	614.30 1699.00	\$74.70	733.16	775.68 2083.54	2083 . 54	\$82.60	722.16	708.21	2012.97	
Township	175.30	240.00	160.70	\$76.00	175.30	107.00	82.32	364.62	159.48	80-65	67.37	307.50	
TOTAL .	750.00	250.00	775.00	2275.00	750.00	775.00 2275.00 750.00 840.16 858.00 2448.16	858.00	2448 · 16	742.08	802.81	775.58	2320.47	

*Nors:—The actuals include Technical Assistance Fee of Rs. 9.32 lakhs, Rs. 6.16 lakhs and Rs. 2.45 lakhs not provided for under Original/Revised estimates.

APPENDIX XI

Summary of Conclusions Recommendations of the Committee on Public Undertakings contained in the Report

Serial No.	Reference to para No. in the Report	Summary of Conclusions/Recommendations
1	2	3
1.	2.26	The Committee find that though the Government initially decided to set up machine tool factories at a total capital investment of Rs. 30 crores and for this purpose, entered into an agreement in March 1949 with M s. Oerlikons Marchine Tools Works, they subsequently decided to limit the scope of Project and the investment to about Rs. 9 crores and to establish a factory for the manufacture of 400 High Speed Lathes only as a result of representations from private sector and entered into a revised agreement with the collaborators. The Committee also find that since under the limited scope of the revised agreement, the Unit did not become economically viable, Government again decided to diversify the production and take up in collaboration with the European Machine Tools Manufacturers production of most of the items which were earlier dropped in the original agreement. From the way the Government had been changing their decisions about the scope of the Project, the Committee are forced to conclude that precious years were lost between 1949 and 1956 due to lack of proper planning before setting up the project. The Committee feel that before setting up the Project Government should have made a thorough and detailed study about the requirements of the different types of machine tools in the country and specifically earmarked roles to be played by the public and private sectors in the field.

Tarana and Salara

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The Committee cannot also appreciate the undue haste in entering into an agreement with M|s. Oerlikons without a proper examination in depth of the various implications of the terms of their agreement. It was only later that Government realised their earlier mistake in giving M|s. Oerlikons the right and advantage to participate in the management and administration of the Company and also find that collaborators could not assist in the manufacture of new types of diversified machine tools. The Committee can at this stage only hope that such mistakes are not repeated in future.

2. 3.14 to 3.15

The Committee are surprised to note that no reliable statistics or data of the demand of different types categories and sizes of machine tools in different quality ranges has been made by Government so far. Due to inadequate statistics it was not possible for the Working Groups set up for Machine Tools for the Third and Fourth Five Year Plans to determine the category-wise requirements of machine tools. In spite of the observations made by the Working Groups in their reports submitted to the Government and also the recommendation made by the Estimates Committee, in their 14th Report (1954-55), the Government have not made any detailed survey of the requirement of machine tools in the country, with the result that only rough estimates had been made with regard to the requirement of machine tools during the Third & Fourth Five Year Plans. As against the total estimated requirement of machine tools for the years 1961-65 valued at Rs. 170 crores as worked out by the Working Group, the actual requirement of machine tools during this period was of the order of Rs. 232 crores.

The Committee feel that a reasonably accurate assessment of the country's future de-

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mand for machine tools is not possible unless a realistic item-wise break-up of the demand is available. The Committee, therefore, recommend that a detailed survey about the requirements of different types of machine tools in the country should be made without delay before investing nation's resources in the expansion programme for machine tools during the Fifth Five Year Plan.

3. 3.34 to 3.39 The Committee are surprised to find that the Report of working group for Machine Tools for the Fourth Fivt Year Plan, and the draft Report of the Working Group for the Fifth Plan mentioned the installed capacity of HMT as Rs. 25 crores when actually the Board of Directors had indicated the installed capacity of all the five units at Rs. 17.7 crores on a two shift basis. The Committee need hardly point out that when the Units of HMT are actually working on two shifts, the mentioning of the installed capacity calculated on the basis of 3 shift working gives only an incorrect picture about the role played by HMT in the overall development of machine tool industry in the country.

The Committee further note that whereas the value of production at the existing installed capacity in the private sector was mentioned as Rs. 23 crores in the Fourth Plan document, in the draft Report for the machine tools for the Fifth Five Year Plan the same is mentioned as Rs. 31 crores. The existing installed capacity in the public sector in the Fifth Plan document remains almost the same as quoted in the Fourth Plan document. As the actual installed capacity of HMT is even less than the capacity quoted in the Plan documents, the Committee feel that the advantage of meeting the country's requirement with regard to machine tools goes to the private sector especially when the actual production in

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HMT is much less than the actual installed capacity.

The Committee also find that the installed capacity of HMT fixed in 1960 in terms of value continues to remain the same even now in spite of the increase in the price level, and no allowance for price escalations has since been made while fixing the installed capacity in terms of value. The Ministry have admitted that "fixation of installed capacity in money terms has lot of defects because when the prices of machines go up for the same capacity, it only means that physical production goes down."

The Committee further note that the installed capacity of Units I & II was initially approved in January, 1960 at Rs. 7:2 crores on the basis of two shift working as the introduction of three full shifts was considered uneconomical. On the basis of production of Rs. 981 lakhs during 1964-65, it was concluded that a production of Rs. 10 crores would be achieved in HMT I & II units on two shift working with refined technological improvement and increased efficiency. The Committee have now been informed that the capacity of HMT I & II Units on two shift working is only Rs. 7.2 crores as it was not possible to achieve a production of Rs. 10 crores due to the appearance of recession and consequential low demand for modern tools, production of more and more sophisticated products in the diversified production programme, persistent labour problems, etc. The Committee feel that installed capacity in terms of optimum utilisation rate cannot be changed due to variable factors like labour inefficiency, low order position etc. in such a case the actual utilisation of capacity cannot be correctly judged.

The Committee are not happy about the way in which the installed capacity has been fixed.

They, therefore recommend that the installed capacity should be fixed on a scientific basis so that a correct parameter may be available for assessing the performance of HMT.

The Committee also find that in order to evaluate the actual performance of HMT, the Company have calculated the capacity as actually available from year to year. This developed capacity has been worked out with reference to the production of a few standard general purpose machines utilising 80 per cent of the available capacity on two shift working and is subject to certain assumptions regarding requirement of standard hours, inefficiency factor, value of machines etc. The Committee strongly feel that this cannot provide a realistic parameter to evaluate the actual production performance which comprise a totally different product pattern and has been undertaken under conditions materialy differing from those assumed in the working of developed capacity. The Committee, therefore, recommend that a realistic appraisal of the developed capacity, taking into account the actual product pattern, standard hours requirement, efficiency factor may be made from year to year so as to serve as a suitable parameter to evaluate the actual production performance.

4.17 to

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The Committee note that valuable time was lost in procedural details before starting the actual production of several diversified items. The main object of diversification was to meet the extremely urgent and important need of many of the productive organisations both in the Public and private sectors. Diversification was also intended to help the Company to utilise the spare capacity particularly during the periods of recession. The Committee feel that the purpose for taking up of diversification schemes is defeated if the manufacture of items is delayed.

The collaboration agreement for the surface grinder was signed in 1961 whereas their actual production was commenced in 1967-68. The process of selection of the family of machines to be manufactured by the Company took a lot of time. Agreement for Die Casting machine and Plasting Injection Moulding Machines was signed in 1969, whereas the 'DPR was approved more than 3 years after the signing of the agreement. Collaboration agreement for the manufacture of Heavy Duty Engine Lathes and Machining Centre for drilling and boring machines was signed in November, 1971, whereas only 3 prototypes of Heavy Duty engine lathes have been manufactured uptil now. In case of machining centres only the specifications have just Collaboration been finalised. agreement garding manufacture of Ram Bed Type Milling Machines is lying ineffective since September, 1970 as not even the first order has been placed with the collaborators so far. This clearly indicates that the need for diversification was not examined with regard to the market demand.

The manufacture of Swiss type automatics could not be taken up as per schedule because of undue delay on the part of Government in according approval to the phased manufacturing programme as well as delay in the release of foreign exchange for import of components and initial plant and machinery.

The collaboration agreement for the manufacture of Swiss type Automatics was signed in March, 1971. The Company applied for the Industrial licence in October, 1971 but the same was issued by Government in November, 1972. The licence for the import of machinery has, however, been issued only now. As a result of these delays the assembly of machine which was to start in the last quarter of 1972-73 will now be started during 1973-74. Delivery schedules

relating to the supply of multi-spindle automatics, single spindle automatics, Broaching machines, copying lathes, Fay automatic and Horizontal Boring machines to the Defence organisation and supply of Horizontal Boring machines to M|s Bharat Earth Movers Ltd. could not be adhered to although the demand for these items was quite urgent from the point of the national security.

The Committee recommend that all the cases of delays in starting the manufacture of diversified items may be investigated with a view to fix responsibility for the delays. The Committee would also like to be informed about the original schedules drawn up for the manufacture of different diversified items, the extent of delay in starting commercial production in each case and the extent to which the delay was avoidable. The Committee also recommend that Government should evolve a procedure for expeditious disposal of procedural formalities so that delays at all levels are avoided.

The Committee further recommend that the cases where diversification programme was launched without realistically assessing the actual demand for such items should be investigated with a view to fix responsibility. The Government Management should ensure that such mistakes are not repeated in future.

It has been stated that Company could not adhere to the delivery schedule with regard to machine tools supplied to the Defence Organisation and M|s. Bharat Earth Movers Ltd. as most of the sophisticated machines were being assembled and tried out for the first time in the country and sufficient experience to achieve and results could not be gained as originally planned due to the technological handicaps. The Committee are given to understand that "it takes a minimum time cycle up to 11 to 2 years, for general

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purpose machines and 4 to 5 years for highly sophisticated machines to develop requisite skill and efficiency norms involving design and manufacture of complicated tooling". The Committte need hardly stress that before launching on a diversification, the Company/Government should satisfy that there is assured market for the diversified product. It should also take timely action for acquisition of the necessary skill and training of personnel etc. The Committee recommend that the Company should ensure fuller utilisation of capacity augmented by creation of facilities for taking up production of new items in the event of demand for the new items being recurring and/or not materialising to anticipated extent.

5. 4,53. to 4.58.

The Committee find that in the context of falling demand for machine tools which were being manufactured by HMT and the underutilisation of capacity as a result thereof a Sub-Committee of the Board of Directors suggested diversification of production. They suggested the manufacture of Tractors, Printing Presses and Heavy Duty Presses in Units III, IV and V respectively.

The Committee regret to note that valuable time has been lost in finalising the details of the schemes for these projects. Procedural formalities consumed much of the time.

The Technical collaboration agreement for the manufacture of tractors was signed in January, 1971 and the DPR was submitted to Government by the Company in June, 1972 but the same has not been approved by Government so far. A technical assistance agreement for the manufacture of Printing Presses was concluded with an Italian firm in September, 1969 and was approved by Government in January, 1971. The DPR for the Project was submitted to the Government in April, 1971 and the same was approved after about 1½ years (September, 1972). The technical collaboration agreement with an American firm for the manufacture of Heavy Duty Presses was concluded in May, 1969. The Project Report was submitted to Government in March, 1970 and the same was approved by Government after two years i.e. in March, 1972.

The Committee fail to appreciate the justifications offered by the Government for delaying the approval of the Project Reports. Instead of giving a green signal to the Company to go ahead with the projects Government should have completed their examination of the DPR and the profitability of the project and approved the DPR in time to enable the Company to proceed with the project after the financial sanction is actually available.

The Committee are informed that a special procedure has been laid down for the approval of DPR on the basis of which investment decisions are taken by Government. The Committee would like that the special procedure should be given a fair trial. They would, however, emphasise that most of the issues involving different organisations in the Ministries should be resolved by joint meetings at high levels so that the approval of DPR is not delayed.

The Committee recommend that the DPR for the manufacture of tractors should be finalised without any further delay. The Committee find that despite the fact that the company decided to go ahead with the projects without waiting for the formal approval of DPRs by the Government, they have not yet started the process of indigenisation but are still struggling with the assembly of machines out of imported compoments. The Committee recommend that the process of indigenisation of tractors, printing presses and heavy duty presses may be accelerated so as to achieve self-reliance expeditiously. Effective steps should be taken to solve the problems like power cut so that production of tractors is not retarded.

The Committee fail to understand as to why Government have not so far fixed prices for the tractors, printing presses and heavy duty presses. The economic viabilty of these projects cannot therefore be accurately assessed. The Committee recommend that the details regarding pricing and profitability may be finalised without further delay.

6 5.14 to 5.19

The Committee find that on an average cumulative contribution to HMT to the velopment of indigenous production chine tools since the commencement of productions has been of the order of 40 per cent to 45 per cent. The Committee however, note that the value of production in HMT indicated a sudden dropfrom Rs. 12.21 crores in 1966 to Rs. 9.3 crores in 1967 and Rs. 9.75 crores in 1968. The Committee were informed that when the factory was set up there was a broad production profile and it was felt that public sector should take more difficult items leaving the private sector to take up the less difficult ones. The Committee, therefore, feel that had the Company engaged' itself in more sophisticated machine tools rather than on standard machines, the HMT would not have been affected by recession as has been admitted by the Chairman, HMT himself during evidence.

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Due to fall in demand of the machine tools. manufactured by HMT, the Company decided. to expand their activities in various directions. through diversification of production, with theresult that the production in HMT is now showing an upward trend. It has been stated that theincrease in sales during the recent years has: been from new types of machine tools introduced for the first time as part of diversification programme. From the sales of performance of HMT from 1969-70 to 1971-72, the Committee note that 31 per cent of the increase in sales was contributed by old products and the remaining by the new products. It is, therefore, evident. that the demand for old type of machine tools. manufactured prior to the launching of the expansion programme has not picked up sufficiently even though the recession was over long ago.

The Committee are therefore inclined to feel that in the past the planning of production and product-mix of HMT had not been related to demand for the products as otherwise this situation would not have arisen,

The Committee would like Government take a serious note of this demand projection and examine the matter in depth to see what further diversification programme could be taken up by HMT so as to maintain its dominant role as producer of machine tools in the country. The Committee, also stress that product-mix and the pattern of machine tools should be carefully worked out keeping in view the demand of machine tools in the country and overall profitability of the Company. The Committee need hardly stress: that before deciding the future production programme for the Fifth Five Year Plan the Government should clearly demarcate the respective roles of the private and public sectors to that

beyond this limit as it is necessary to depend on imports for several reasons such as the difficulty in production of certain types of machine tools as well as the uneconomic nature of production of small quantities of machine tools.

The Committee, however, regret to note that no detailed review has been made by the Government/HMT to find out the contribution made by HMT with regard to import substitution. It has been stated that roughly the contribution of HMT would be of the order of 40 to 45 per cent of the total contribution made in the country in regard to indigenisation of the manufacture of machine tools.

The Committee feel that although at the earlier stages it was imperative for HMT to enter into technical arrangements in order to bridge a wide gap that existed between India and more developed countries in the field of design and development of machine tools, a stage has now come when dependence on foreign technical assistance and konw-how should be reduced to the minimum.

The Committee, therefore, recommend that Government/HMT should chalk out a realistic phased programme of achieving self-reliance so that not only the imports of machine tools are reduced to the minimum feasible limit but the dependence on foreign technical assitance and know-how is also gradually brought down if not altogether eliminated.

It has been stated that whenever any proposal for import from any industry comes, the applicant is required to advertise the requirement in order to find out whether the items can be manufactured indigenously. The Committee, however, recommend that the Government/HMT should make a detailed study about the items

they can meet in full the overall needs of machine tools in the country at the same time ensuring that the interest of small scale sector is not in any way affected.

It has been pointed out by the Chairman, HMT that the increase in the output of the new items taken up by the HMT as part of the current expansion programme can be expected to impart continued and vigorous momentum upto 1975-76. Thereafter, the expansion of production and sales of the HMT will lose its vigour and tend to level off, with familiar adverse impact on the profitability.

Since according to the Management, the gestation period of a new engineering project from primary conceptual thinking to actual production is about 5 years, the Committee need hardly stress that Government should plan right from now, for the programme of expansion to be taken up after 1975-76, so that the Company can utilise its capacity to the maximum.

7 5.27 to

5.31

The Committee find that as a result of sustained efforts for import substitution, the import of machine tools has been gradually brought down. In 1956, the indigenous production of machine tools from the HMT and other units in the country met only 11 per cent of the total machine tool requirements of the Indian economy. The other 89 per cent of the requirement was net by imports. In 1970 and 1971, the domestic production provided as much as 70 per cent of the machine tool requirements of the country. The Committee were informed that at the end of the Fifth Plan the percentage met through imports is expected to be reduced to anything between 20 to 25 per cent. It has also been stated that it may not be possible to go

which can be manufactured indigenously. The-Design and Development Department of HMT and the Central Machine Tool Institute, Bangalore should keep themselves uptodate in thisregard so that the necessity of finding out thisinformation through advertisements is obviated. The Government/HMT should also analyse thepattern of imports so as to decide as to which items should be feasible for indigenous manufacture.

5.47 to 5.50

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R. O. 53

The Committee find that in addition to thenew types of machines established for production under the various collaboration agreements, HMT have also produced several new types of machines developed out of its own design efforts. The sale of Company's own design products upto 31st March, 1972 amounted to a little over Rs. 17 crores. HMT have also been assigned the task of developing on their own or in collaboration with the Central Machine Tool Institute, Bangalore as many as 28 machine tools: out of 50 selected designs. The Committee also note that the annual expenditure on Design and Development Department of HMT has been gradually increasing. As against Rs. 21.74 lakhs: incurred in 1966-67, Rs. 57 lakhs were spent in the year 1971-72. While all such efforts on the part of HMT to achieve self-reliance are highly commendable, the Committee feel that tivities in this direction should be further intensified in order to master the advanced technology in the manufacture of sophisticated machine tools and to evolve designs for numerical control systems.

The Committee regret to note that although the Working Group for Machine Tools for the Fourth Plan had pointed out in their report that many of the existing designs of indigenous machine tools were outmoded, it is only recently that this lacuna was noted by HMT when they found that their machines did not find ready market. The Committee feel that the Indian Machine Tool Industry has not been backed up by a vigorous and dynamic research and development programme which studies in depth the requirements of users.

The Committee note that Government have been urging both HMT and other public sector Units to undertake the Research and Development facilities so that they keep the production technology uptodate. A high level Group under the National Committee of Science and Technology has been constituted to devote attention to this problem.

The Committee recommend that the activities of the National Committee on Science & Technology, the Central Machine Tool Institute, Bangalore and the Design & Developing Department of HMT should be well coordinated and all possible assistance and encouragement should be given to Indian engineers to evolve and master basic designs so that machine tool industry in India may be able to stand on its own feet.

5.70 to 5.75

The Committee regret to note that as against the export target of Rs. 7.5 crores for the machine tool industry in the country to be achieved by 1973-74 only 50 per cent of the target is expected to be achieved by that year. During 1970-71 India's export of machine tools has been of the order of about Rs. 3 crores. Out of this the share of HMT was Rs. 1.06 crores.

The need for giving priority to the export of machine tool was realised when the machine tool industry was badly hit by recession. It was felt that the export was absolutely necessary in order to balance the ups and downs in the economy and demand pattern of the machine tools.

It has been stated that in case there is a slight indication of recession, the first industry to be hit would be the machine tool industry. Exports, therefore, act as a safety valve when there is no internal demand. Secondly, exports help the country to earn foreign exchange which helps to bridge the gap between export and import and thus balance the trade. Thirdly, it is only by entering into the export market for standard machines that the country can keep itself abreast of the time and redesign and introduce new inventions.

The Committee note that the Working Group for machine tools for the Fourth Five Year Plan made valuable observations/recommendations with regard to the promotion of India's exports but the Committee find that the export of machine tools has not been tackled successfully resulting in unsatisfactory performance in respect of export of machine tools from the country in general and exports by HMT in particular.

The Company has now worked out a multipronged strategy to expand the HMT's export of machine tools from the current stagnant level of about Rs. one crore per year to about Rs. crores per year during the Fifth Plan period. The Committee feel that in case such steps had been taken earlier HMT's export business would not have suffered as it has during the past years. In spite of the fact that HMT collaboration agreement has turned out various sophisticated items collaboration agreements, under numerous has not been able to attract foreign buyers. HMT also entered into dealership arrangements with foreign firms but it has been stated that some of these did not work well as HMT had not got sufficient experience in this regard.

Yet another reason for the decline in export was that the outmoded Indian Machine Tools:

did not find market abroad. It has been admitted that the Indian machine tool industry had not in the past been backed by vigorous and dynamic research and development efforts. There was no incentive to the industry including the public sector units to go in for research and development in a big way.

The Committee find that Government are now learning through past experience in order to improve all the methods for promoting exports. The Committee need hardly stress that unless the machine tool industry is kept uptodate, it will hardly have any chance in the external market. They would, therefore, like to stress that all possible encouragement should be given by Government to the Central Machine Tools Institute and Design and Development Department of HMT so that designs and know-how are kept updated in order to keep pace with what is happening in the outside world.

The Committee further recommend that in view of the imperative necessity for expanding Indian's export on top priority basis, Government/HMT should try to build up the image in the developing countries and socialist countries where there is great potential for India's exports. This can be done by improving the quality of our products after sales service and participating in Exhibition held in these countries.

10 5.84 to 5.87

The Committee find that Government/HMT are giving encouragement to small scale industries by asking them to buy the equipment produced by HMT on hire purchase or deferred payment basis. The Committee were informed that although the small scale industries had considerably improved in sophisticated technology but still if the heavy and large scale industry had to depend on small scale ancillary industries, they had to improve their quality.

The Committee recommend that Government should make a detailed study about the items which are and which can be profitably, economically and technologically manufactured by the small scale industries and ensure that such items are given only to the Small Scale Units who may be given the requisite technical assistance so that the quality of the products does not in any way affect the main industries.

The Committee note that the HMT, Bangalore, have an industrial estate attached to it wherein they have been encouraging the small scale sector to produce parts required for their manufacturing programme. The Committee expect HMT to give a similar lead for development of small scale industries to supply items for their manufacturing programme in their other factories also.

The Committee note that HMT have been supplying machines to the small scale sector on hire purchase basis. The Committee would like HMT to maintain close liaison with the small scale Industries corporation, the Commissioner for Small Scale Industries Centre and the Director of Industries in the states so as to study in depth the requirements of machinery for small scale sector and make it available in time to the small scale sector.

The Committee are surprised to note that the developed capacity as worked out by the management at 1.3 inefficiency or even at actual inefficiency on two shift working exceeded the installed capacity fixed in full two shift working in Units I, II, III and IV. The targets fixed in respect of Units I & II were higher than the developed capacity at 1:3 inefficiency or at actual inefficiency, except for the year 1968-69. All this clearly indicates that both the installed capacity as well as the developed capacity have not been worked out on a realistic basis. The Committee have already pointed out the lacunae

11 6.5

in this regard. They would again like to stress that Government/Management should fix the installed capacity on a realistic basis and work out the developed capacity in a more scientific manner so as to serve as a suitable parameter to evaluate the actual production performance.

12 6.15 to 6.17

10.553

The Committee regret to note that the actual production during 1967-68 to 1971-72 was less than the targets in all the Units except for 1971-72 in Units I & II 1968-69 to 1971-72 in Unit III and 1967-68 and 1971-72 in Unit V. In several years, the targets were fixed much lower than the available capacity. In certain years the targets were even much lower than the developed capacity. More than 50 per cent of the capacity remained unutilised in some years.

production performance poor HMT has been mainly ascribed to the recession in the country during the years 1966-67 to 1969-70. The increase in the capacity of the machine tool units of the company by completion of the new projects already initiated more particularly at a time when domestic demand for machine tools was at a subdued level, accentuated the problem of unutilised capacity and depressed demand prevented fuller exploitation of HMT's potential. It has been stated that the demand for common items such as Lathe and Machines shrank as the demand foremast had been worked out under different sets of conditions and assumptions. Initial production difficulties in respect of new products, technical manufacturing problems and labour agitations have been cited as some of the other reasons that resulted in shortfall in production.

The Committee, however, feel that besides these factors the lack of production planning is yet another significant factor that contributed to the loss in production. The Committee have already pointed out that neither any proper category-wise assessment had been made with regard to the requirement of machine tools in the country nor a proper production profile was earmarked on a scientific basis. The Company went on diversifying their production during the past vears as and when it was realised that the products which were already ing manufactured by did not find adeit quate market. The Committee would therefore. like to stress that realistic projections should be made and the product-mix including the diversified items that are to be manufactured by HMT should be decided on the basis of a detailed analytical study. The Committee also recommend that the reasons for shortfall in production should be analysed in greater depth so that remedial measures may be taken and the recurrence of such mistakes avoided in future.

to 6.26

The Committee find that during the years 1966-67 to 1971-72, the production performance of unit IV at Kalamassery has been far from satisfactory and the shortfall in production ranged from 30 per cent to 58 per cent of the developed capacity at 1.3 inefficiency factor. The shortfall has been stated to be due to reduction in the production of a number of pilot lathes. drum turret and low value LT lathes. The Committee were informed that the Unit did not have the full capacity to manufacture some of the accessories and most of the machines were to be supplied with Tooling which had to be designed etc. The Committee are at a loss to understand how the production programme was determined when adequate facilities were not arranged nor the expertise for them developed in advance of taking them for production. It was only in 1971 that a Committee was constituted and certain suggestions for improving the performance of

the unit were made which after approval by the Board in 1972 are being implemented. The Committee take a serious view of this defective and inadequate planning which has resulted in continuous loss, and suggest that this matter should be thoroughly gone into and responsibility fixed.

The Committee hope that with the palancing equipment now added and the measures taken, it should be possible to achieve the targets of production.

The Committee would also stress that steps should be taken early to resolve the problems affecting industrial labour relations so that production in the Unit is improved.

14 6.48 to 6.53

The Committee regret to note that Unit V of HMT which was mainly set up to meet the demand for special purpose machines and Fav Automatics could not get adequate orders for these machines to utilise its capacity. The orders secured could not be executed in time due lower level of labour efficiency. Even a period of 5 years was considered inadequate for developing the efficiency and skill required for the manufacture of sophisticated machines and overcoming the initial production problems. Committee further note that the agreement with M/s Renault could not be fully exploited as the design techniques formed by RNUR could not be adopted for the requirements of SPM in India, Renault contemplated manufacture of substantial number of special purpose machines designed for automotive use and the demand for special purpose machines for automotive did not materialise.

The Committee are at a loss to understand as to how the collaboration agreement with Renault was entered into without taking into account the technological requirements of sophisticated machines in India. They regret to note that this serious matter was not thoroughly investigated and recommend that it should now be gone into and responsibility fixed for such defective agreement with M/s Renault. The Committee would like to be kept informed of the action taken in this regard.

The Committee were informed that HMT are now in the advanced stage of negotiations with an American firm M/s. Cross Company in order to improve their technology and in order to get orders from the international market for special purpose machines.

The Committee recommend that the implications of the proposed agreement with M/s Cross and Company should be carefully examined so that the mistakes in the earlier agreement with Renault are not repeated.

The Committee further note that out of the machines already installed machines worth Rs. 1 crore needed replacement as they were not capable of giving the required accuracy. Some of them could not even be reconditioned. The Committee fail to understand as to why such machines were accepted without proper examination/verification of their capabilities. The Committee recommend that this matter should be probed into thoroughly and the responsibility for the lapses fixed.

The Committee are unhappy to note that Government Management are not following any fixed pricing policy with regard to the sale of

Special Purpose Machines. The Committee feel that HMT with all the technological advantage and the experience should be able to produce the machinery at economic cost. The Committee hope that with the procurement of export orders, it should be possible to increase their production and reduce the cost of production so that price may be competitive.

15 6.62 to 6.67

The Committee are surprised to note that on the one hand unit V is suffering due to lack of adequate orders on the other hand licence had been issued to M/s TELCO for the manufacture of SPM's for a capacity of Rs. 100 lakhs per annum as a part of a diversification scheme in the existing undertaking to introduce a new item of manufacture. Their application for the recognition of the existing installed capacity for a total production of Rs. 200 lakhs per annum is now under the consideration of Government. The Committee would like the Government to fully examine the implications of allowing further expansion to TELCO keeping in view the unutilised capacity of unit V.

The Committee are informed that Government have decided to import an entire plant from Italy for the manufacture of scooters. The argument advanced for such an import is, however, hardly convincing. It has been admitted that the competence of HMT to produce machines needed for the manufacture of scooters was beyond any doubt. But the Plant is being purchased in order to meet the pent up demand for scooters. The Committee would, however, like to point out that the demand for scooters has not grown all at once. The existing private manufacturers have not been able to cope with the demand for the past few years. The difficulty regarding idle capacity in Unit V of HMT was also being felt since its very inception.

The Committee strongly feel that the decision to take up the manufacture of scooters in the public sector has been unduly delayed. Had the decision to set up such a Project been taken earlier, the advantages would have been three fold. First the manufacture of SPM's in Unit V would have enabled HMT to utilise its idle capacity in that unit. Se ondly, the Public in addition to meet the growing demand for scooters would have provided a fair competition in the sale of scooters. Thirdly it would have helped the country in the acquisition of advanced technology which could have been certainly better than the technology already available in the country about the manufacture of Lambretta scooters.

The Committee regret to note that Government decided to import four Fay automatic lathes required by the Defence Department in March, 1971 without actually examining the capacity of HMT machines to meet the demand in spite of the fact that HMT gave an assurance that lathes of the requisite Horse Power could be manufactured by HMT. The Committee need hardly stress that such imports which involve a huge amount of foreign exchange should have been avoided. The possibility of meeting the further demand of the Defence Department by HMT with regard to the shell manufacturing machines should be fully explored before taking up any decision about their import.

The Committee further recommend that effective steps should be taken to secure orders for the Special Purpose Machines required by the Private Sector for the manufacture of tractors etc. The possibility of getting orders from Mining and Allied Machinery Corporation who are also taking up the manufacture of tractors should also be explored.

The Committee hope that with improved technology and adequate number of orders, the working of unit V of HMT would improve.

16 6.80 to 6.81

The Committee find that a number of Electrically controlled Horizontal and Vertical Milling Machines manufactured in Units I and II HMT for the Defence Department developed some defects in actual operation and had to be rectified at the cost of the Company. The manufacture of these machines resulted in a loss of over Rs. 54 lakhs to the Company apart from an estimated development cost of about Rs. 30 lakhs. The Committee further note that out of 410 Electrically Controlled Milling Machines (2D3) manufactured in Unit III rectification of defects on 202 machines at a cost of Rs. 14 lakhs had to be carried out. The Committee would urge that the reasons for the defects developing in both types of Machines should be carefully gone into and remedial measures taken to avoid such developing in future. The Committee regret to note that the Company had not examined the financial implications before accepting the orders which ultimately resulted in a loss to the Company.

The Committee were informed that the need for rectification arose on account of these sophisticated machines being taken up for the first time with new and inexperienced labour. The Committee need hardly point out that the supply of defective machinery to the customer, acts as an inhibiting factor in securing further orders. The Committee feel that there should be a closer quality control and stricter supervision at each stage of production and recommend that the machines should be fully tested at the premises of the factory with regard to their performance before these are despatched. Since the manufacture of these machines is customer oriented the Committee

feel that the best form of sales management in such cases should be to provide after sale service to the customers.

7.16 to 7.19

The Committee find that utilisation of machines and labour was not satisfactory in all the units of HMT, particularly in Units III, IV and V. The percentage of idle hours to available hours in respect of machines varied from 18.7 to 26.3 in Units I and II, 22.48 to 31.4 in Unit III, 37.7 to 47.4 in Unit V and 28.3 to 45.2 in Unit V. The percentage of idle hours to net available hours in respect of labour varied from 16.53 to 17.4 per cent in Units I and II, 13.14 to 18.0 in Unit III 25.74 to 41.0 in Unit IV and 15.39 to 27.0 in Unit V. As a result of non-utilisation of machines and labour there was enormous idle capacity in the Units. The idle capacity was around 30 per cent in Units T, II and III 40 to 50 per cent in Unit IV and 30 to 40 per cent in Unit V. Labour efficiency in all the units was also not impressive. It was only about 62 to 79 per cent in Units I and II 64 to 75 per cent in Unit III, 53 to 68 per cent in Unit IV and 44 to 71 per cent in Unit V

The main reason for all these maladies was stated to be low order position caused by severe recession. Idle machine hours due to 'no operators' were on account of absenteeism. Low order position responsible for very low morale of workers also contributed to absenteeism. The absenteeism in all the units was very much higher than the normal limit of 10 per cent. The idle time was also relatively higher for want of jobs. This gave rise to paradoxical situations. On the one hand, the machines remained idle for want of operators, on the other hand the labour remained idle for want of jobs, material etc. Again on the

one hand there was dearth of orders to fully utilise the capacity, on the other hand the orders in hand could not be executed for want of operators, materials, mechanical and electrical repair of machinery etc. As a result of these, the production performance remained unsatisfactory in all the units of HMT, particularly in Units III, IV and V.

The Committee find that the Company are now taking a number of steps to eliminate idle hours and improve productivity. Diversification of production in order to secure adequate orders, supply of requisite quantity and quality of materials, reduction of absenteeism, introduction of preventive maintenance and repair systems in order to minimise machine breakdown, and introduction of incentive schemes are the steps in the right direction. The Committee, therefore, recommend that all these measures should be pursued vigorously in order to increase productivity and production.

The Committee were informed that the machinery in Units I and II of HMT are getting old. They, therefore, recommend that the programme of gradual replacement and provision of balancing equipment, wherever necesary, should be finalised in time and steps should be taken to ensure smooth running of the plant as a whole, that the requisite machinery and equipment become available as per scheduled programme.

18 7.31 to

7.32

The Committee are surprised to note that Government/Management have not made any analysis of the requirement of staff in relation to the available/developed capacity in all the units of HMT. The standard force was initially fixed on the basis of working of the units at full installed capacity. The Committee have already

pointed out that in the past the actual production was far less than the installed capacity. In financial terms the loss due to surplus labour during the years 1968-69 to 1970-71 has been assessed Rs. 118 lakhs.

The Committee feel that the employment of staff far in excess of the actual requirement not only means payment of excessive wages and salaries but results in low productivity, labour troubles affecting the cost of production and lowering of morale generally. The Committee therefore recommend that a review of the standard force taking into account the expansion programmes launched by the Company and the actual strength should be undertaken without any delay so that the staff may be usefully and economically deployed.

19 7.37 to 7.39 The Committee view with concern that there is a large scale out-go of trained personnel from the HMT. It has been stated that "retention of staff who have been trained and brought up by the Company to man managerial posts, in the face of severe competition including higher emolument offered by the private sector for trained personnel, continues to pose a problem to the Company".

The Committee feel that the recruitment, training and promotion policy should be so devised as to encourage persons of merit to get themselves absorbed with an assurance for further advancement.

The Committee consider that for improving work-efficiency, welfare schemes, within and outside the establishments should be introduced. In this connection the Committee would like to invite the aftention of the Government/Manage-

ment to their recommendations contained in Chapter XI of their Seventeenth Report (Fifth Lok Sabha) on Personnel Policies and Labour Management Relations in Public Undertakings."

20 8.29 to 8.34 The Committee find that while the strength of the Sales Organisation has increased by more than 3 times i.e., from 66 in 1966 to 212 as on 31-3-1972. The value of sales has increased only by 100 per cent i.e. from Rs. 1222.74 lakhs in 1966-67 to Rs. 2444.46 lakhs in 1971-72. The Committee are informed that the Management are in the process of recruiting more personnel for sale of Tractors, Printing Presses etc.

The Committee need hardly stress that the Sales Organisation should not be unduly multiplied simply with the addition of new products. They recommend that the cost of sales organisation should be commensurate with the sales turnover.

The Committee note that HMT have set up a Market Research Department in order to study market trends and made demand surveys. The Committee have already stressed the need for making a thorough study about the item-wise demand for the machine tools in the country so that the future production programme is planned on a realistic basis. The Committee hope that with the setting up of this Department, the demand survey with regard to machine tools would be expedited. The Committee recommend that the Company/Market Research Department should make a special study about the requirements of the small scale sector as they feel that HMT has an important role to play in the growth and in the modernisation of machinery and equipment in the small scale industries.

The Committee also note that the Company has introduced new techniques of marketing. The Committee hope that the 'Total Plant Engineering Service' and the 'integrated approach to the requirement of machine tool customer' will pay dividends as the schemes intended to help the customers to purchase the right type of machines with full guidance about the production process.

Committee would, however, stress that in order to sustain the confidence of the costomers in the products of HMT the best form of sales management especially in sale of machinery would be in having an efficient after-sales service and providing already response to the difficulties of customers in the maintenance of machinery. The Committee also suggest that the sales marketing organisation should develop, a system of feed back of information to the management regarding the types, and pattern of machine tools needed by the customers so that the programme of production is reoriented to the latest market trends consistent with the needs of customers.

The Committee also note that in order to project a better image of HMT products, the company have held a number of demonstrations of their machine tools in the country and have also participated in a number of International Fairs Exhibitions. The Committee find that in most of the International Fairs and Exhibitions the Company could not secure even a single order. In this connection the Management have stated that the effect of participation in the exhibition cannot be gauged only by the orders booked during the exhibition as the participation in these exhibitions is also intended to create a very high impression about the high quality of products in the minds of machine tools users who visit these exhibitions. The Committee, however, feel that the Company should be able to clearly state the end results of such participation in monetary terms so as to justify the huge expenditure incurred on such exhibitions. As far as possible the results achieved in procurement of orders should be commensurate with the expenditure incurred by the Company on foreign tours and on participation in exhibitions.

21 8.39 to

8.40

The Committee find that the Company appointed M/s. R. G. Gardner Machinery Co. in April, 1969 as their agents for the sale of Company's products in the Western Hemisphere but the same was terminated in December, 1970 as the foreign firm did not fulfil a number of contractual obligations. The agreement untered into in May, 1969 with another firm M/s. Vernick Machinery for the Western Territory of USA was also terminated in September, 1969 as the firm gave up all lines of machines tool distribution.

The Committee were informed that M/s. R. G. Garnder Machinery Company claimed damages of the order of \$6.5 million from the Company representing estimated loss of profits which they claimed they have suffered due to termination of the contract. HMT had also preferred

counter-claim of Rs. 32.50 lakhs plus the sale proceeds of machines sold by the agent, cost of legal action etc., and the case regarding claims and counter claims is stated to be pending in the Supreme Court of Toronto. M/s. Vernick Machinery Co., had executed promissory notes in favour of HMT for \$11,983.81 in respect of sale proceeds of 3 machines sold by them during the currency of the agreement. The question of recovery of the amount was being pursued by the Sale Office of HMT in U.S.A.

Committee, therefore, recommend that the circumstances in which the agreements were entered into should be thoroughly investigated and responsibility for the lapse in the process of fixing up the agencies should be fixed. The Committee would like to be kept informed of the settlement of the claims preferred by the Company. The Committee also urge that Government/Company should evolve an effective procedure for selection of and entering into agreements with agents/foreign firms so as to avoid recurrence of such mistakes in future. The Committee suggest that such agreements should be finalised with the help of Indian Missions abroad only after full knowledge about the firms concerned.

22 8.44 to

8.45

The Committee note that whereas the Company appointed M/s. American Machine Tool Works as their agents for the sale of the Company's product in the Western Hemisphere consisting of North, South and Central America in February, 1971 and the American firm placed a blanket purchase order for 304 machines valued at \$1.475 millions, only 109 firm orders had been received by HMT and out of these only 77 have been executed so far. HMT could not adhere to

the delivery schedule as many modifications had to be carried out in the existing products. Certain items procured locally and supplied along with the machines were not acceptable as per American practice. The foreign firm had to specially procure and change these items at their end which resulted in delays in delivery of machines by the firm to their dealers and customers. As the introduction of HMT machines in American Market was delayed M/s. American Machine Tool Works could not release further orders.

The Committee feel that complete manufacturing details and specifications should have been settled in advance before the orders had been accepted for execution so as to obviate the difficulties in acceptance of the products by the customers at the time of delivery. The Committee would also urge that once the orders are accepted the Company should ensure timely delivery of the machines and honour the commitments.

23 8.48 to 8.50

Committee note that against 440 en-The quiries received in 1971-72 quotations were submitted only in respect of 385. Even out of this only 51 orders could be confirmed. The Committee are surprised to note that only 12.8 per cent of the quotations submitted by the Company for special purpose machines were confirmed as orders during 1971-72. The Committee are not satisfied with the explanations offered by the Management that "even if 20 per cent of quotations materialise into orders, the same should be considered as very satisfactory for special purpose machines". Even on the basis of this statement the position is unsatisfactory. The Committee therefore recommend that the exact reasons for rejection of enquiries by customers

should be carefully analysed in depth so that the company can take adequate steps to satisfy the customers with regard to prices and working of the special purpose machines etc. The Committee also recommend that a complete record of orders received should be maintained so that further information is available to the management for taking appropriate action at the appropriate time.

In view of the idle capacity in Unit V due to low order position, the Committee recommend that HMT should take special steps including convassing and advertising in order to attract more buyers. The customers should be offered special payment terms and after sale service should be guaranteed.

The Committee hope that with the introduction of computer system an effective control would be exercised over the follow up action on the quotations submitted by the Company.

24 8.60 to 8.61

The Committee find that there has been an accumulation of stocks in regard to established products such as lathes, grinders, radial drills, milling machines etc. During the years 1967-68 to 1969-70 such an accumulation has been attributed to recession and during 1970-71 and 1971-72 it has been stated to be "due to drop in the order position." The Committee also note that whereas the Company was short of orders for the established machines, they could not execute the orders for sophisticated machines within the prescribed dates of delivery as according to the Company the manufacture of such machines involved more technical and production problems than in the case of General Purpose Machines (e.g., lathes, radial drills, milling machines, etc.)

Committee were informed that a number of initial production difficulties in the manufacture of sophisticated machines have now been solved and action has also been taken to increase the indigenous content in these machines. The Committee would also like that the reasons as to why the Company went on manufacturing standard machines without any orders therefor should be investigated. It has also been stated that a number of steps towards sales promotion by means of participation in exhibitions, by conducting demonstration in snowrooms, by improving the after sale servicing facilities are now being taken in order to improve the order position in respect of established products. The Committee hope that as a result of such steps the orders position both in regard to established products and sophisticated machines would improve.

25 8.77 to 7.79

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The Committee find that out of the pending orders for 1285 machines (excluding consignment orders) as at the end of March, 1972, 340 orders could not be executed although the promised delivery dates had expired. As on 1st January, 1973, 106 orders valued at Rs. 43.99 lakhs were still pending execution. The Committee also find that orders worth Rs 52.72 lakhs were cancelled as the Company could not supply the machines on the due date of delivery.

The delay in the execution of orders in respect of new products was stated to be mainly due to the initial production difficulties.

The Committee need hardly stress that the delay in the execution of orders acts as an inhibiting factor in securing further orders as well as in the cancellation of orders already secured. They recommend that effective steps should be

taken by the Company to ensure that the delivery dates are adhered to.

Committee note that during 1966-67 to 1971-72 orders worth Rs. 686.31 lakhs were cancelled. Besides delay in the delivery of machines. the orders were cancelled due to change in customer's requirement subsequent to placement of orders, financial difficulties faced by the customer, difficulties experienced by the customers in getting the projects sanctioned from Government, cancellation of letters of intent earlier booked as orders but later on removed as orders could not materialise for several reasons. The Committee feel that many of the problems quoted could however be solved if the Government/ Management had taken suitable steps at the appropriate time. Financial difficulties faced customers due to delay in getting loans or difficulties experienced by the customers in getting the project sanctioned from Government can be solved by the Ministries concerned. The Committee recommend that appropriate steps to help the customers to lift the machines should be taken as soon as such difficulties come to the notice of Government/Management.

26 8.87 to

8.88

The Committee are surprised to note that as on 31st March, 1972 the Company had in stock 1075 machines valued at Rs. 644 lakhs. Out of these 433 machines valued at Rs. 245 lakhs were without orders. It has been stated that 194 machines valued at Rs. 125 lakhs were manufactured in Unit III merely to utilise the idle capacity in that Unit. One hundred machines valued at Rs. 411.50 lakhs were not lifted by the customers during 1969-70 to 1971-72 due to financial difficulties. Among these customers mentioned by the management are the reputed firms with sound

financial position. The Committee fail to understand as to how the Company could not evolve a rational machinery for guarantee of payment from such customers. The Committee would like that the manufacture of 433 machines without a firm order for them should be investigated as the machines remaining unsold only block the Capital.

The Committee recommend that effective procedure should be evolved for ensuring prompt payment by customers who have placed firm orders. The question of imposition of penalty should be considered in the light of past experience. The Committee also recommend that the orders for the machines which were manufactured in anticipation of orders should be secured without delay so that undue accumulation of stock is avoided.

2/ 8.101 to ዓ 103

The Committee find that throughout the past years (except in respect of Unit V for 1967-68 and 1971-72 and Unit III for 1968-69 and 1971-72) the acutal sales were far less than the budget framed by the Company on the basis of the sales forecast. In Units III and V the sales performance was not even 50 per cent in 1966-67 the sale budgets. It has been stated that the Sales budgets had to be revised keeping in view the order position and other relevant factors. It has also been stated that the shortfall in actual sales with reference to original estimates was also owing to the fact that the Company at the beginning of the financial year had to budgets to fix the somewhat enhanced sale targets for sales field staff.

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The Committee are not convinced with the arguments put forward by the Management with regard to to fixing the sale budgets on the high They would like that realistic should be fixed keeping in view the order position and other relevant factors and the reasons for the non-achievement of targets should be analysed every year so as to improve the system of sales. Likewise export targets should also be fixed as realistically as possible keeping in view the sales prospects and the order position after a careful study of the export market. The Committee have already stressed the need to up exports in order to fully utilise the capacity of the units of HMT and in order to bring about technological improvements in the machines tool industry in the country. The Committee would also stress that prices of machines for export should be competitive and delivery schedule of machines should be adhered to.

The Committee recommend that the Management/Government should keep themselves in touch with the other public sector undertakings in order to find out their perspective demand so as to ensure that orders are secured for HMT well in advance as it takes a lot of time in designing and in the development of skill for a job which is not already within the production profile of HMT. This will also to a great extent avoid such imports which are resorted to only in view of urgency.

28 9.6

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The Committee note that the selling prices are fixed in respect of (a) established machines with reference to cost of production and landed cost of equivalent imported machines; (b) machines manufactured out of Company's own design with reference to cost of production including venture allowance at a fixed percentage

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and (c) sophisticated and tooled up machines with reference to cost of production or landed cost equivalent imported machines and in there cases, the prices are subject to the constraint of what the market can bear. The Committee have found that in regard to sophisticated machines, the selling prices in several cases. did not cover even the factory cost of production and have thus resulted in loss. The Committee feel that with the experience now gained and the expertise acquired over a period of years, it should not be difficult for the Company to effect economies in working, improve efficiency and reduce the cost of production, so as to obviate the necessity of selling its products at less than the cost prices on the plea of "what the market can bear", and incur losses in transactions.

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9.28 to 9.30 The Committee note that the Company is following standard costing system in all the units. The Committee find that the standard costs are varied from year to year even in established products like lathes, grinding machines, drills etc. Even then the over-all costs are higher than standard costs due to under utilisation of capacity, low batch production, variation in efficiency etc.

In regard to actual costs, the Committee find that these are collected under batch work orders except in the case of SPMs in Unit V where they are based on job orders. The job orders in Units I & II are closed annually, costs ascertained collectively and distributed pro-rata to each machine.

In Unit III, the Factory costs for some type of machines vary from batch to batch. The Committee would like that the reasons for the various situations should be carefully analysed and suitable remedial measure; taken to put the costing on scientific lines.

The Committee feel that as standard/planned time estimates are based on techincal exercises conducted in detail by competent technical personnel, there should not be wide flucutations. The Committee feel that present system of not affording credit for components, to relevant job orders an loading all the costs of common components to one work order is not on scientific lines.

The Committee also recommend that the Company should take suitable measures to effect economies in costs by improving the efficiency of men and machinery fixing norms for consumption of materials and bringing down the percentage of rejections.

9.36

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The Committee regret to note that out of 250 SPMs manufactured in the Unit V upto 1971-72, the Company incurred losses aggregating Rs. 71 lakhs in respect of 123 machines (about 50 per cent of the total) and in 50 cases the company could not even recover the factory costs, and the loss on this account alone amounted to Rs. 18.44 lakhs. The Committee find that the losses were mainly due to estimates not being realistic taking into account the actual inefficiency, designing and engineering difficulties The Committee suggest that the reasons for the tosses should be more critically analysed suitable remedial measures taken to effect economies in cost of production by improving efficiency and maximising output. The Committee also suggest that preparation of estimates system of costing should be on scientific lines and on realistic basis so that a comparison actual cost with estimates is always possible to locate the areas of deficiencies and to enable the management to take timely corrective action.

31 10.5

The Committee note that while HMT have brought down the stock of raw materials and

components, stores, spares etc. from 7.3 months' consumption in 1966-67 to 6.3 months' consumption in 1971-72, the stock of finished goods terms of value of sale has increased from months' in 1966-67 to 3 months' in 1971-72. The increase has been quite appreciable from Rs. 523 lakhs in 1970-71 to Rs. 728 lakhs in 1971-72. As admitted by the Management, closing stock of machines is on the higher side and the value of machines held without orders as on 31-3-1972 amounted to Rs 245 lakhs. The Committee were informed that efforts were being made to reduce the inventory of finished goods to Rs. 5 crores by 31-3-1973. The Committee also find that 26 machines worth Rs. 10.51 lakhs are lying in stock for more than 3 years. The Committee are at a loss to understand as to why machines worth more than 2 crores were manufactured without any orders therefor and why 25 machines are lying in stock for over 3 years. The Committee recommend that this matter should be thoroughly investigated. The Committee are convniced as earlier observed in this Report that the production of the mathines has not been related to the demand projections with the result that the Company has been accumulating stock for years unnecessarily loading the inventory. The Committee that the company would ensure that at least, in future, production of machinery would be related to the actual demands and assured off-take. The Committee recomend that the company should take suitable steps to clear the existing stock of finished goods as early as possible.

32 10.9

The Committee note that the value of slow-moving and non-moving stores as on 31-3-72 is of the order of Rs. 45.26 lakhs out of which stores of the value of Rs. 26.23 lakhs have not moved for over 3 years. The Committee are of the view that this situation would not have arisen if only

purchase of stores had been made on the basis of actual requirements of production. The Committee recommend that the stores should be reviewed and items really surplus to requirements should be indentified and disposed of in the best interests of the company, as accumulation these stores is only blocking the capital. Committee recommend that a thorough review of all the slow moving/non-moving stores should be undertaken immediately, reasons for non-moving analysed and suitable remedial measures taken to prevent recurrence of the same. The Committee also recommend that stores really surplus to requirements should also be identifled and action taken to transfer them to other public undertakings where they may be useful.

33 11.20 to 11.22

The Committee regret to note that HMT could not achieve the targets in regard to the manufacture of watches mainly due to delay on the part of Government in releasing the requisite foreign exchange. It has been stated that "due to difficult foreign exchange position the factory had to restrict the production just to keep it going." With the result that in 1965-66 it produced only 1,96,110 watches against the targets 2,40,000 watches. Though the necessity for the addition of a few balancing machines and equipment estimated to cost of Rs. 6 lakhs to attain the target of 3.60,000 watches per year from 1968. 69 onwards was felt by the Management in 1966 foreign exchange for them was released by Government only between September. January, 1970, with the result that HMT could produce only 3,00,000, 3,30,000 and 3,45,000 watches during 1968-69, 1969-70 and 1970-71 respectively against the target of 3,60,000 watches per year. The Committee are given to understand that the present requirement of foreign exchange for the first watch factory for the production of 3,60,000 watches per year is of the order of its. 55 lakhs, and that the Company are still experiencing difficulty in getting the foreign exchange.

The Committee feel that the needs of foreign exchange for HMT for production of watches should be met on a priority basis in order to enable HMT to work to full capacity and meet the growing and pent up demand for watches in the country.

The Committee are glad to note that in order to reduce the foreign exchange content the company are now making efforts to enter into a collaboration agreement with M/s Citizen Watch Co. Ltd., Japan in order to get additional know-how on para-shock, hair-spring, main-spring and escapement etc. The Committee recommend that the process of indigenisation in the manufacture of watches should be so that HMT may become self-reliant in the manufacture of watches.

34 11.35 to 11.38

The Committee find that the construction and. commissioning of the watch factory III at Srinagar has been delayed mainly on account of avoidable factors such as non-availability of constructional steel, cement, and some other building material. There have also been delay in regard to the acquisition of land, approach road, water supply, drainage system and electricity. though a Review Committee was set December, 1971 by the State Government with the commissioner of Planning and Development as its Chairman, no significant progress has been made in regard to the finalisation of outstanding matters. According to the Chairman, "they made promises but had not implemented them."

The Committee recommend that Government should positive and effective steps to resolve the outstanding issues with the State Government. The Committee also recommend that Government should give priority for allotment of commodities like steel and cement etc. to public sector undertaking so as to avoid delays in the construction and commissioning of Plants. In view of the growing demand for watches in the country, the factory at Srinagar should be completed without any further delay. Production programme should be chalked out on a realistic basis and concerted efforts should be made to adhere to the targets.

The Committee would like the undertaking to determine on a realistic an dscientific basis the requirements for personnel keeping in view the production programme for the new watch fact-tory so as not to repeat the mistake of over-staffing which occurred in other factories of HMT.

The Committee need hardly stress that arrangement should be made in time to provide adequate training to the recruits so that they can take up their production role in right earnest and achieve a high degree of efficiency.

35 11.46 to 11.49 The Committee find that the original estimates of Rs. 250 lakhs approved by the Government in August, 1960 for the Watch Factory I at Bangalore had to be increased by Rs. 108.80 lakhs in April, 1966 due to change in location, extra expenditure on the purchase of Plant and machinery/equipment due to increase in custom duty, addition of interest on yen credit and due to provision for township requirement not contemplated in the original estimates. The estimates were again revised in February, 1967 and the increase of Rs. 39:70 lakhs was mainly due to de-

valuation of rupee and further increase in custom duty. As on 31st March, 1972 and expenditure of Rs. 333.34 lakhs had been booked.

The Committee are surprised to note that although the increase in estimates in 1967 was more than 10 per cent of the original estimate the management have not approached the Government for according the necessary sanction as required in the instructions of the Bureau of Public Enterprise in this regard. The Committee are not convinced about the justification for rot obtaining the approval of Government. The Committee are doubtful whether this matter was taken cognisance of by the the Board and if so why sanction of Government was not insisted on. The Ministry have stated that "this is a slip on the part of the company."

The Committee need hardly stress that approval of the revised estimates should be obtained from the competent authority irrespective of the reasons for such excess or the source from which such excess can be met.

The Committee recommend that the correct position should be clarified to the Company and strict instructions should be issued to avoid a recurrence of such lapses.

36. 11.53 to 11.56

The Committee find that according to the Detailed Project report as approved by Government in June, 1970, the Watch Factory II at Bangalore was to cost Rs. 416 lakhs. This was later revised to Rs. 421 lakhs. It has now been stated that the estimates are again likely to increase by Rs. 23 lakhs due to additional cost to be incurred in respect of Plant and machinery and payments towards licence rights based on the current exchange parity rates and customs duty.

The original estimates of Rs. 425 lakhs in respect of Watch Factory III at Srinagar has been revised to Rs. 470 lakhs. The increase in estimates is due to statutory increase in prices for construction steels, increase in custom duty, revaluation of currency by Japan & Switzerland unforeseen inland costs for transportation, local taxes, duties and certain unforeseen items of expenditure as a result of the recent war.

The Committee feel that delay in the construction and commissioning of the projects is a major factor contributing to the increase in the original estimates. The Committee would like Government to ensure that the estimates are prepared accurately in the first instance and that the completion of the Projects are not delayed as it results in substantial increase in the expenditure and ultimately effects the profitability.

37. 11.61 to 11.62

The Committee regret to note that the service facilities with regard to the repair of HMT watches are very inadequate and the process of getting the defective watches repaired is quitetedious and time consuming as more often then not the watch has to be sent to Bangalore for a thorough check-up. The Committee feel that with the gradual increase in the sale of watches, provision of adequate service facilities on decentralised basis is an imperative necessity. The Watch Factory I at Banagalore is at present producing more then 3,60,000 watches per year. Watch factory III in Kashmir is likely to produce about 3,00,000 watches within the next two or three vears. The Watch Factory II at Banagalore has already started production of automatic watches and is likely to produce 2,00,000 automatic calendar type watches per year.

The Committee, therefore, recommend that in order to attract customers and in order to im-

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prove the image of HMT, repair and service facilities should be arranged in all the principal cities of India so as to ensure prompt service to the customers.

38 11.76 to

The Committee find that the selling prices for the watches manufactured by HMT were originally fixed at Rs. 89, Rs. 94 and Rs. 99 respectively for Janta, Citizen and Sujata types of watches. There have been an upward revisior in prices on three occasions and the price of eac category of watch is Rs. 23 more than the original price.

The Committee recommend that concerted efforts should be made to reduce contain the cost of production so that there is no occasion to increase the prices further.

39. 12.6 to 12.7 The Committee note that against the accepted norm of 1.1 for debt-equity ratio for public undertakings, the debt-equity ratio in respect of Hindustan Machine Tools Ltd. excluding of deferred credits has been 1:1.47 as on 31.3.1972. The Bureau of Public Enterprises issued a Circular in November, 1970, wherein it was provided that the entire township cost should be met by equity capital and the balance investment should be apportioned between debt and equity in the ratio of 1:1. The sanction of Government for conversion of loans amounting to Rs. 347.00 lakhs (which represented the capital expenditure incurred on township) was however conveyed on the 29th March, 1972.

The Committee hope that by the time a decision is taken about the organisational structure of the commany, the imbalance in the debt-equity ratio will also be set right after examining the financial implications.

40. 12 21 to

The Committee are surprised to note that the records containing the item-wise break-up

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of the project estimates in respect of Unit I and the break-up of actual expenditure separately against project cost and new items in respect of Unit II were neither available with the Management nor with the Government. The expenditure on new items alone aggregate Rs. 290.45 lakhs during the period 1962-63 to 1970-71. The Committee were informed that the bulk of the new items relate to Plant and Machinery and factory equipment which were required for balancing the capacity required for meeting the diversified production programme as well as for replacements.

The Committee fail to understand as to how an effective control was exercised by the Management with reference to the Project Estimates in the absence of item-wise break-up of Project estimates and the break-up of the actual expenditure being available. The Committee are not satisfied with the statement that "It has been ensured that the capital expenditure is always within the approved budgetary limits only." In the absence of relevant records it cannot be ascertained as to whether the expenditure incurred against each and every item was within the limit sanctioned for each unit. The Committee, therefore, recommend that responsibility for the missing records should be fixed and steps should be taken to trace all the records without any delay.

The Committee also take a very serious note of the fact that in spite of excesses on the estimated cost being more than 10 per cent in individual cases, the management did not obtain the approval of Government prior to the incurring of such expenditure. The Committee have also noted this lapse in the case of project cost in respect of Watch Factory I & II at Bangalore.

The Committee need hardly stress that incurring of expenditure in excess of sanctioned estimates without even bringing the excess to the notice of the competent authority is irregular and the Committee recommend that responsibility for the lapses may be fixed. Government should also ensure that such lapses do not recur.

Since the Government have advised the Management to correct the situation, the Committee hope that the Management would now get the approval of Government to the revised estimates according to the prescribed procedure without any delay. The Committee would like to be informed within three months of the presentation of the Report about the action taken by the Management Government in this regard.

41. 12.42 to 12.45

The Committee find that whereas the Company incurred a net loss of Rs. 154.53 lakhs during 1967-68 to 1969-70, it showed a net profit of Rs. 53.34 lakhs and Rs. 122.51 lakhs during 1970-71 and 1971-72 respectively. The Committee, however, note that it is the watch factory that has mainly and substantially contributed towards profitability and economic viability of HMT. As against the total profit of Rs. 9.53 crores made by the watch factory, during 1966-67 to 1971-72, the machine tool units incurred a net loss of Rs. 9.42 crores during this period. The bulk of the loss was contributed by unit IV (Kalamassery) and Unit V (Hyderabad) Unit IV incurred a loss of Rs. 312.84 lakhs during 1967-68 to 1971-72 and Unit V incurred a loss of Rs. 467.52 lakhs during 1966-67 to 1970-71. Recession in the country resulting in low order position, increase in the expenses on salaries, wages and other expenses particularly the interest liability from year to year and the expenditure incurred on excess staff resulting in high cost of production, disturbed industrial relations resulting in strikes and lockout have been cited as the reasons for the losses in the machine tool units.

As explained in the preceding Chapters of the report, the Committee need hardly point out that there has been lack of proper planning right from the beginning in not having made a clear and realistic assessment of the demand for the various types of machine tools in the Country, not fixing the capacities of the units on a scientific basis taking into account the relevant factors affecting production, not improving the productivity and labour efficiency resulting in high cost of production, in not having a broad blue print for diversification etc.

The Committee have at the relevant places made suitable recommendations in order to increase the productivity and production performance of HMT. They hope that the recommendations will be considered and implemented by the Government Management in the best interest of HMT.

The Committee also hope that with the remedial measures already introduced by the Management, it should be possible to improve profitability of HMT and maintain its dominant role as producer of machine tools in the country.

42 12.73 to 12.74 The Committee find that the value of book debts increased from Rs. 336.14 lakhs in 1966-67 to Rs. 690.78 lakhs as at the end of the year 1971-72. During the same period sales increased from Rs. 1504.65 lakhs to Rs. 2953.51 lakhs. The percentage of debtors to sales worked out to 22.3 per cent in 1966-67 and 23.4 per cent in 1971-72. The Committee have been informed that with effect from 1967-68, the Company has been discounting the bills with its bankers. The bills so discounted and outstanding as on 31st March, 1972 aggregated Rs. 670.13 lakhs. The figures of sundry debtors as on 31st March, 1972 are exclusive of these outstanding bills. But for the

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discounting of these bills, the sundry debtors as on 31st March, 1972 should have gone up by Rs. 670.13 lakhs and the percentage of debtors to total sale as on 31-3-72 would come to 46 per cent (approx.) as against 22.3 per cent in 1966-67.

The Committee note that while the turnover is inclusive of the sale of watches which is almost made on cash basis, the book debts pertain to machine tools. If this fact is taken into account. the percentage of book debts to turnover will be still higher than the figure of 46 per cent. Owing to the increase in the working capital requirements partly contributed by the heavy book debts and finished stock, the company had avail of large cash credit and bill discounting facilities from the banks. The incidence of interest and commission on these facilities amounted to Rs. 98.36 lakhs in 1971-72 which is quite heavy. The Committee recommend that the Management should evolve an effective system of follow up of all outstanding debts to ensure their quick realisation and also take concerted measures to bring down the inventory of finished stock within reasonable limit.

The Committee also find that in respect of bills outstanding for more than one year, the major portion relates to Government Departments. The Committee recommend that this problem should be tackled at the level of the Ministry so that the outstandings are cleared without any delay. The Committee also suggest that the procedure for the clearance of bills for supplies to Government Departments should be reviewed so as to ensure that such delays are avoided in future.

43 12.80

The Committee regret to note that although the units of HMT have been functioning for almost 10 years now, there was no effective system of internal audit till 1969-70. The Committee find

that even now, the internal audit organisation has not been built up in a full measure. The Committee feel that management is still going slow in the process. The Committee need hardly stress that internal audit being one of the essential tools of management control, the Company should activise the internal audit cells in various units and make use of the reports of internal audit to set right the deficiencies and plug loopholes, if any, in the working of the units. The Committee would also reiterate their earlier recommendation contained in para No. 206 of their Fifteenth Report (1967-68) Fourth Lok Sabha that the functions of the Internal Audit should also include a critical review of the system procedures and operations of the Company as a whole.

44. 13.13 to 13.14

The Committee understand that ment propose to form a holding company with each of the units as subsidiaries. It has been argued that HMT had grown in size and structure so vast that it needed a very highly decentralized organisational set up with various subsidiaries coming under the holding Company. In reply to Starred Question No. 335 on 6th December. 1972 it was stated that it was expected that proposed reorganisation of Hindustan the Machine Tools would optimise efficiency, foster initiative at the different management levels and ensure overall economy by utilising accountability. It was also expected that the Holding Company, in course of time, could be forged into an effective instrument for shaping and implementing Government's policy in regard to the development of the machine tools industry.

The Committee have been informed that a final decision in regard to the formation of a holding company is yet to be taken. The Committee would suggest that all the implications of the holding company should be gone into care-

fully before taking a final decision in the matter. The Committee urge that while taking a decision it should be ensured that the accountability of the company to the Public and Parliament is not in any way reduced.

45. 13.22 to 13.24

The Committee find that the multiplicity of trade unions particularly in Units I & II at Bangalore and Unit IV at Kalamessary has led to inter union rivalries adversely affecting industrial relations and thereby production performance. Lock out had to be declared twice in Units I & II during 1972-73 resulting in loss Rs. 3.5 crores. The Committee have been informed that due to the existence of multi unions and inter-union rivalry the industrial relations continue to be difficult in Unit IV. There was labour troubles in this unit during March-April, 1972 resulting in a strike which lasted for days. The Committee recommend that in the best interests of the Company so that the production in the company may not suffer, an early settlement of the disputes should be arrived and better labour management relations established.

The Committee have dealt at length with the problem of labour management relations in their 17th Report on 'Personnel Policies and Labour Management Relations in Public Undertakings' (Fifth Lok Sabha) and would like to reiterate that the company should spare no efforts to give the workers in the undertaking a sense of participation and involvement in the challenging task of greater production for the good of the country.

The Committee understand that a new code of conduct or a new pattern of relations for public sector is under the active consideration of Government. They hope that all the aspects affect-

ing labour relations such as recognition of unions; amenities to workers and incentive schemes etc. will be thoroughly examined by the Government in order to find a lasting solution to the problem of labour management relations.