

**GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA**

UNSTARRED QUESTION NO:3322
ANSWERED ON:05.02.2004
ULTRASONIC TESTING OF MOVING PARTS
ALE NARENDRA

Will the Minister of RAILWAYS be pleased to state:

- (a) whether ultrasonic testing of all moving parts such as wheels, axles etc. is being conducted in Indian Railways periodically;
- (b) if so, the details thereof; (
- (c) if not, the reasons therefore;
- (d) whether the officials are keeping records of wheel profiles after each periodic overhauling since derailment also occur whenever there is a substantial variation in the thickness of wheel flanges and the wheel diameter;
- (e) if not, the reasons therefor; and
- (f) the measures taken by the Government in this regard?

Answer

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI BASANAGOUDA R. PATIL)

- (a) Axles are subjected to periodic ultrasonic testing but wheels are not subjected to ultrasonic testing periodically.
- (b) Ultrasonic testing on all wheels and axles for locomotives are done at the manufacturing stage by the manufacturers. Axles of Coaches, Wagons and Locomotives are periodically examined ultrasonically according to the following schedule:
 - (i) Locomotives (speeds 120 kmph or above) - once in 06 months
 - (ii) Locomotives (speeds less than 120 kmph) - once in 12 months
 - (iii) Coaches and EMU stocks - once in 12 months
 - (iv) Wagon stocks - once in 18 months.
- (c) Rolling stock wheels are examined ultrasonically initially at the manufacturing stage. Periodic ultrasonic examination of wheels is not carried out normally since the life of the wheels is considerably lesser than that of axles. Periodic visual examination in the open line establishments is carried out to find out defects developed on the wheels during service. Inservice ultrasonic examination of wheels is carried out only in exceptional circumstances.
- (d) Yes, Sir.
- (e) & (f) Do not arise.