



भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
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Government of India-Ministry of Railways
Research Designs & Standards Organisation
Lucknow - 226 011
DID (0522) 2450115
DID (0522) 2465310



पत्र सं.: धा.र./एन.डी.टी./1 /8

दिनांक: 5.10.2016

Chief Mechanical Engineer:

1. C.Railway,Mumbai CST-400 001.
2. E. Railway, Fairlie place, Kolkota.-700 001.
3. N. Rai,way,Baroda House, New Delhi-110 001.
4. N.E. Railway,Gorakhpur-273 012.
5. N.F. Railway,Maligaon, Guwahati-781 011.
6. S. Railway,Park Town, Chennai-600 003.
7. S.C.Railway,Rail Nilayam,Secunderabad- 500371.
8. S.E. Railway, Garden Reach, Kolkota-700 043.
9. W. Railway, Church Gate, Mumbai-400 020
10. E.C. Railway, Hajipur-844101
11. East Coast Railway, Chandrasekharpur,
Bhubaneswar-751016
12. S.W. Railway, Hubli- 580023.
13. W.C. Railway,Jabalpur-482001
14. N.C. Railway, Allahabad-211001
15. S.E.C. Railway, Bilaspur- 495004.
16. N.W. Railway, Jaipur-302006
17. C.L.W. Chittarangan-713 331.
18. D.L.W. Varanasi-221 004.
19. I.C.F. Chennai-600 038.
20. R.C.F. Kapoorthala,
Hussainpur(Punjab).
21. Rail Wheel Factory, Yelahanka, Bangalore-
560064.
22. D.M.W.Patiala-147 001.
23. Metro Railway, Metro Rail Bhavan, J.L.Nehru
Road, Kolkata-700071.

विषय: Technical Audit of Ultrasonic testing procedure of Rolling stock axles.

सन्दर्भ: Member (Rolling Stock)'s letter no. 2014/M(N)/951/36 dated 04.10.2016.

In reference to above, please find enclosed proforma for Quality Assessment of Ultrasonic Testing of Axles .

Encl.- One

(सी. सेनगुप्ता)

अपर कार्य.निदेशक / धा.र.

Copy for information to-

1. EDME/Freight, Railway Board, Rail Bhawan, New Delhi.
2. EDME/Coaching, Railway Board, Rail Bhawan, New Delhi.
3. ED/Carriage, RDSO, Lucknow.
4. ED/Wagon, RDSO, Lucknow.

(सी. सेनगुप्ता)

अपर कार्य.निदेशक / धा.र.

PROFORMA FOR QUALITY ASSESMENT OF ULTRASONIC TESTING OF AXLE ON RAILWAYS

A. GENERAL:

1. Shop:
2. Railway:
3. Date of inspection:
4. Type of axles being tested:
5. Code of procedures followed:
6. Record of testing maintained or not :
7. Record of 2% cross checking by Sr. CMT/CMT/ACMT/CMS/Others and method of corrective action:

B. ULTRASONIC FLAW DETECTOR:

1. Number and Type of Model available:
2. Action taken to replace over aged Equipment:
3. Characteristics of the unit with model and serial number:
 - i) Sensitivity:
 - ii) Linearity:
 - iii) Penetration power:
 - iv) Resolution:

C. ACCESSORIES AVAILABLE:

- i) Standard bar / block for calibration:
- ii) Standard axle having simulated saw cut for sensitivity Checking:
- iii) Probe:
- iv) Cable:
- v) Paint for marking:
- vi) Couplant:

D. TESTING TECHNIQUE IN VOUGE:

- i) Far end scanning:
- ii) Trace delay:
- iii) Near end low angle scanning:
- iv) High angle scanning:

E. IDENTIFICATION OF PROCEDURE FOLLOWED:

- i) Stamping as per RDSO sketch No. WB-81089/ S-1:
- ii) Any other process followed:

F. PARTICULARS OF OPERATORS:

- i) Name:
- ii) Designation:
- iii) Whether trained in ultrasonic testing of axle in RDSO or not (in regular & refresher course or both). If yes, date of validity of certificates:

G. Procedure for control on non-Conforming product:

H. Whether A-Scan saving practice is followed or not if yes date from which started & indexing/ traceability system adopted for record keeping:-

I. Any other observation:

Signature of Auditing Officer

Name:

Designation:

**PROFORMA FOR QUALITY ASSESMENT OF ULTRASONIC TESTING OF
AXLE ON RAILWAYS (PUs)**

A. GENERAL:

1. Shop:
2. PU:
3. Date of inspection:
4. Type of axles being tested:
5. Specification followed:
6. Record of testing maintained or not :
7. Record of 2% cross checking by Sr. CMT/CMT/ACMT/CMS/Others and method of corrective action:

B. ULTRASONIC FLAW DETECTOR:

1. Number and Type of Model available:
2. Action taken to replace over aged Equipment:
3. Characteristics of the unit with model and serial number:
 - i) Sensitivity:
 - ii) Linearity:
 - iii) Penetration power:
 - iv) Resolution:

C. ACCESSORIES AVAILABLE:

- i) Standard bar / block for calibration:
- ii) Standard bars for sensitivity setting/ drawing DAC:
- iii) Probe:
- iv) Cable:
- v) Paint for marking:
- vi) Couplant:

D. TESTING TECHNIQUE IN VOUGE:

- i) Longitudinal Penetration Test:
- ii) Discontinuity Detection Test using DAC:
- iii) Longitudinal Discontinuity Detection Test (Radial scanning):
- iv) Magnetic Particle Test:

E. IDENTIFICATION OF PROCEDURE FOLLOWED:

- i) Stamping as per corresponding specification:
- ii) Any other process followed:

F. PARTICULARS OF OPERATORS:

- i) Name:
- ii) Designation:
- iii) Whether trained in ultrasonic testing of axle in RDSO or not (in regular & refresher course or both). If yes, date of validity of certificates:

G. Procedure for control on non-Conforming product:

H. Whether A-Scan saving practice is followed or not, if yes, date from which started & indexing/traceability system adopted for record keeping:-

I. Any other observation:

Signature of Auditing Officer

Name:

Designation: