(9)

West Central Railway

G.M. Office,
Engg. Branch,
Jabalpur.
Date: - 16/11/2018

No. W-HQ/W-4/Track-II/CTE safety drive

CTE Safety Drive No. 3

Sr. DEN (Co) JBP/BPL/KOTA.

Sub.:- USFD inspection/supervision by AEN & SSE/JE.
Ref.:- Rly. Board letter No. 2016/Track-I/29/1(1)/TMS Impl. Dated 06.11.2018.

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1. As per Manual for Ultrasonic testing of rails and welds-2012 – Para 4.3 – " Sectional AEN should spent at least few hours(min. two hours) each month during his routine trolley inspection with USFD team and cross check the working including accuracy/ sitting/ calibration of USFD machines. In addition, the SE and SSE (in-charge) should also associate themselves occasionally." Instructions as per Bd letter under reference must be followed.

   AEN must cross check USFD work (Peaks recorded in register) **already done by SSE/USFD** and **guide** SSE for the **latest instructions on USFD**. **Result** of the AEN inspection must be **recorded** in the register (to be kept/ available with the SSE/USFD) .

2. In the monthly PCDO of division USFD inspection by AENs must be mentioned in Forwarding letter of PCDO. This should be ensure by SrDEN/CO of divisions.

3. As per the existing instructions , while doing initial testing USFD of new welds , even for **Good welds % age peak** flaw should be recorded by SSE/USFD. Also in all AT weld initial testing where percentage is **more than 30%,** it must be **cross checked** by **sectional AEN.** This record(where percentage is more than 30%) should be kept in **AENs folder** and available during inspection of Senior officers.

DA : As above.

16/11/1

(Rajesh Arora)
CTE /WCR

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(32) PCE (12)

14/11

भारत सरकार/GOVERNMENT OF INDIA
रेल मंत्रालय/MINISTRY OF RAILWAYS
(रेलवे बोर्ड)/(RAILWAY BOARD)

सं/No. 2016/Track-I/29/1(1)/TMS Impl. दिनांक/Date: 06.11.2018

The Principal Chief Engineer(s) | WCR
All Indian Railways.

विषय/Sub: Regular supervision of USFD work- recommendation of Commissioner of Railway Safety/South Central Circle.

The para 4.3 of 'Manual For Ultrasonic Testing of Rails and Welds, (Revised-2012)' is quoted as under:-

" Sectional AEN should spent at least few hours(min. two hours) each month during his routine trolley inspection with USFD team and cross check the working including accuracy/sitting/calibration of USFD machines. In addition, the SE and SSE (in-charge) should also associate themselves occasionally."

In a case of derailment, the Commissioner of Railway Safety/South Central Circle, has recommended that, the work of USFD supervisors should be regularly checked at officer's level and proper record of such checks should be maintained, as per para 4.3 of 'Manual For Ultrasonic Testing of Rails and Welds, to ensure effectiveness and quality of USFD testing so that defects in rails/welds do not go undetected.

In view of the above, Zonal Railways are advised to strictly adhere to the instructions given in para 4.3 of 'Manual For Ultrasonic Testing of Rails and Welds.

Dr PR/II
Dr CTE discussed on 13/11

13/11

(Anurag Yadav)
Director/Track (P)
Phone: 011-23073358
Email: dtkprb@gmail.com

प्राप्ति क्रमांक Receipt No. 1537		दिनांक Date 13/11/18	
प्र.मु.इं. PCE		प्र.मु.अभि.नि. CAO(C)	
मु.इं. CTE		सचिव प्रमुइं. Secy.PCE	
मु.विइं CBE		उपमु.इंजी. Dy.CE	
मु.इं.टी.पी CETP		का.इंजी. XEN	
मु.इं. सा. CE(General)		स.का.इंजी AXEN	
मु.यो.अ.इंजी. CPDE			

ANNEXURE-VIII
(Para 4.3.1)

INSPECTION OF RAIL TESTER AND WORK OF PWI (USFD)

Name of SE/JE (P.WAY)/USFD, Grade & HQ.

Trained by RDSO during.

Last course attended at RDSO...

MACHINE INSPECTED BY SHRI .....
DATE OF INSPECTION.....

1. MACHINE

i) Make and Sr. No. of the machine
   a) SRT(ECIL/VIBRONICS/EEC/Paras/Others) ...
   b) DRT(EEC/PARAS/Others)

ii) Month & Year of procurement of machine

iii) Function of controls.
(On/Off, Gain, H. Shift, Depth,
Energy & Reject etc.)

iv) Brightness of the machine.
(Base line and flaw peaks)

v) Working of the junction box.
(All terminals)

vi) Condition of the probe cables
(Connected cables and BNC's).

vii) Condition of probes-0^0,
70^0F & B and $70^0$2 MHz,
$45^0$2MHz, $70^0$2 MHz SLP
(with respect to wear & sensitivity)

viii) Alignment of probes & lifting system.
(With respect of centre line.)

ix) Condition of shoes of probes (Un-even wear).
Provision of 0.2mm gap.

x) Watering arrangements.
(Proper and adequate supply
to different probes).

xi) Checking spares with machine
(Wheels-2, Normal probe – 1
70^0 F & B-1, $70^0$2 MHz-1, 45^o2MHz - 2 &70^0 2 MHz SLP – 1, probe shoe, probe holder, battery)

xii) Working condition of Batteries. (Voltage and Specific Gravity) & charging system

xiii) Year of procurement of Battery.

xiv) Condition of Trolley Wheels.

xv) Tools with machine.

xvi) General up-keep of machine and trolley

2. CALIBRATION & SENSITIVITY SETTING OF MACHINE:

i) Availability of IIW Block, multimeter, Standard rail piece with artificial flaws and Steel block.

ii) Checking of operating characteristics by IIW Block last done.

iii) Sensitivity setting of machine last done and gain level employed.

iv) Checking of calibration and sensitivity setting of machine.

3. QUALITY OF TESTING: Sec.-------To------LINE(Single/UP/DN.)
Kms/From--------To----------

i) Check of last days/week/month work (Comparison with last round testing) by SE/JE (P WAY.)/ (USFD)

ii) Checking of IMR/DFWR of Rails/Welds

4. TESTING KNOWLEDGE OF SE/JE (P WAY):

i) Criteria for marking defects and calibration and sensitivity setting of machine.

ii) Criteria for periodicity of USFD testing. (As per criteria laid down by Railway Board.)

iii) Policy and latest instructions of USFD.

Signature of Inspecting Officer

xi) Checking spares with machine
(Wheels-2, Normal probe – 1
70^0 F & B-1, $70^0$2 MHz-1, 45^o2MHz - 2 &70^0 2 MHz SLP – 1, probe shoe, probe holder, battery)

xii) Working condition of Batteries. (Voltage and Specific Gravity) & charging system

xiii) Year of procurement of Battery.

xiv) Condition of Trolley Wheels.

xv) Tools with machine.

xvi) General up-keep of machine and trolley

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