

M&C DIRECTORATE

No. M&C/NDTTC/Gen.Policy

Dt.: 17.06.2020

**Sub.: Online training/certification of departmental and outsourcing
USFD operator.**

**Ref.: Track design Dte.'s note no. CT/USFD/Training, dated :
15.06.2020.**

With reference to above, the information sought are given as under:

(A) Refresher course for departmental candidates (29.06.20 – 03.07.20).

- (i) Training calendar attached as Annexure-I for Refresher course on UST of Rails & Rail welds.
- (ii) Platform - online platform **Cisco Webex Meetings** (www.webex.com).
- (iii) Checklist after recommendation of Nodal officer (Annexure II) along with duly filled format for competency certificate (Annexure III) shall be sent to M&C Dte. by email (sunita.jaiswara@gmail.com) within five days from evaluation. M&C dte. will issue competency certificate as per approved policy.
- (iv) Participant from Metro Rail Corporations & Private Organizations are also covered under this online course as per their eligibility.
- (v) Track Design is requested to invite nominations from Zonal Railways and prepare a group so that link for online training may be sent to Track Design Directorate for onward communication to participants & nodal officers. Track Design Directorate is also requested to send details of participants & nodal officers to M&C Directorate for preparing final result.

(B) For outsourcing USFD operators

(i) Recertification on UST of Rail (Date of Evaluation - 20.07.2020):

- (a) Intimation to all concerned firms for conducting recertification exam by M&C Dte. latest by 19.06.2020.
- (b) Firm will send their application along with required documents (copy of competency certificate, copy of valid UT level II certificate, eye certificate) to RDSO by 26.06.2020. M&C Dte. will scrutinize the documents and generate invoice for payment of fees & send it to concerned firm by email (sunita.jaiswara@gmail.com) by 08.07.2020 . After

payment of fees firm will send receipt by email to M&C Dte. (sunita.jaiswara@gmail.com) by 13.07.2020.

(c) M&C Dte. will send consolidated list of candidates from different firms to Track Design Dte. for conducting evaluation on 20.07.2020 for recertification of rail by respective Nodal officer of various Railways as per check list provided by RDSO .

(d) Checklist after recommendation of Nodal officer (Annexure IV) along with duly filled format for competency certificate (Annexure V) shall be sent to M&C Dte. by email (sunita.jaiswara@gmail.com) within five days from evaluation.

(e) M&C dte. will issue certificate as per approved policy.

(ii) Recertification on UST of AT & FB weld (Date of Evaluation - 21.07.2020):

(a) Intimation to all concerned firms for conducting recertification exam by M&C Dte. latest by 19.06.2020.

(b) Firm will send their application along with required documents (copy of competency certificate, copy of valid UT level II certificate, eye certificate) to RDSO by 26.06.2020. M&C Dte. will scrutinize the documents and generate invoice for payment of fees & send it to concerned firm by email (sunita.jaiswara@gmail.com) by 08.07.2020 . After payment of fees firm will send receipt by email to M&C Dte. (sunita.jaiswara@gmail.com) by 13.07.2020.

(c) M&C Dte. will send consolidated list of candidates from different firms to Track Design Dte. for conducting evaluation on 21.07.2020 for recertification of AT & FB weld by respective Nodal officer of various Railways as per check list provided by RDSO.

(d) Checklist after recommendation of Nodal officer attached as Annexure-VI along with individual duly filled format for competency certificate (Annexure-VII) shall be sent to M&C Dte. by email (sunita.jaiswara@gmail.com) within five days from evaluation.

(e) M&C dte. will issue certificate as per approved policy.

**M&C Directorate
NDT Training Centre**

Course: Online Refresher course on UST of Rails & Rail Welds (NDT 01/2020).

Annexure-I

App Used: Webex.com.

Programme for the week: 29-06-20 to 03.07-20

Days	Forenoon session (10:00 Hrs to 12 Hrs.)		Afternoon session (15:00 Hrs to 17:00 Hrs.)
Monday 29-06-20	Rail Metallurgy, Rail specification, Rail defects, failure investigation- case study.	R	Non-destructive testing of materials
Tuesday 30-06-20	Ultrasonic wave fundamentals Acoustics, Different types of ultrasonic waves and their properties, Transmission of ultrasonic beam from one medium to another , mode conversion, Snell's law, Types of probe.	E	Piezo Electric effect , Pulse Echo technique ,UST of Rails
Wednesday 01-07-20	UST of SEJ, Codification of rail defects.	C	Assessment of Ultrasonic Rail Tester & Probes
Thursday 02-06-20	UST of AT welded rail joints, Detection of Half-moon defects in AT welds	E	UST of FB Welded Rail Joints
Friday 03-06-20	Discussion on problems related to UST of Rails/ Welds (Open House)	S S	Open House- (contd.-)

**Check Sheet for Refresher Course on UST of Rails and Rail Welds
(Departmental candidates)**

Name of candidate	
Designation	
Place of Posting	
Division & railway	

S.N	Description	Competency (Satisfactory/Unsatisfactory)
1	Knowledge of Calibration of 0 ⁰ , 70 ⁰ , 45 ⁰ Probe for Rail testing.	
2	Knowledge of Calibration of 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing.	
3	Knowledge of Calibration of 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing.	
4	Knowledge of Sensitivity setting of 0 ⁰ , 70 ⁰ , 45 ⁰ Probe for Rail testing.	
5	Knowledge of Sensitivity setting of 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing.	
6	Knowledge of Sensitivity setting of 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing.	
7	Knowledge of procedure for Rail testing using 0 ⁰ , 70 ⁰ , 45 ⁰ Probe .	
8	Knowledge of procedure for AT weld testing using 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing .	
9	Knowledge of procedure for FB weld testing using 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing .	
10	Knowledge of Classification of defects using 0 ⁰ , 70 ⁰ , 45 ⁰ Probe for Rail testing .	
11	Knowledge of Classification of defects using 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing .	
12	Knowledge of Classification of defects using 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing.	
13	Knowledge of marking of defects for Rail testing, AT weld testing and FB Weld testing.	
14	Knowledge of frequency of Rail testing, AT weld testing and FB weld testing.	
15	Knowledge of 04 correction slips issued so far.	
16	Knowledge of procedure followed for Assessment of Rail testers and weld testers along with the Probes.	
17	Give your rating for online classes in the scale of 1 to 10.	

Recommendations: In view of above, candidate is found to be **satisfactory/unsatisfactory** and renewal certificate may be **issued/not issued**.

Signature of Recommending

Nodal officer (with seal)

Name:

Desination:

Mobile No.:

Format for Refresher Course of rail

Note: Please fill the format in capital letters with black colour ball point pen.

CERTIFICATE

RRF

RAIL

1. Name :
2. DOB :
3. S/D/O :
4. Name of Course : UST of Rails & Rail Welds.
5. Duration : -----to -----
6. Validity : _____ to _____
7. Postal Address with contact no.:

8. Employer Address :

Affix color
passport
size Photo

(Signature with date)

Note on the back side of the card is not to be printed.

Check Sheet for Recertification on UST of Rails for operators of outsourcing agencies (Regular competency certificate)

Name of candidate	
Designation	
Place of Posting	
Division & railway	

S.N	Description	Competency (Satisfactory/Unsatisfactory)
1	Knowledge of Calibration of 0 ⁰ , 70 ⁰ , 45 ⁰ Probe for Rail testing.	
2	Knowledge of Sensitivity setting of 0 ⁰ , 70 ⁰ , 45 ⁰ Probe for Rail testing.	
3	Knowledge of Awareness of procedure for Rail testing using 0 ⁰ , 70 ⁰ , 45 ⁰ Probe .	
4	Knowledge of Classification of defects using 0 ⁰ , 70 ⁰ , 45 ⁰ Probe for Rail testing.	
5	Knowledge of frequency of rail testing,	
6	Knowledge of 04 correction slips issued so far.	
7	Knowledge of procedure followed for Assessment of Rail testers along with the Probes.	

Recommendations: In view of above, candidate is found to be **satisfactory/unsatisfactory** and renewal certificate may be **issued/not issued**.

**Signature of Recommending
Nodal officer (with seal)
Name:
Desination:
Mobile No.:**

Format for Recertification of Rail

Note: Please fill the format in capital letters with black colour ball point pen.

CERTIFICATE

RCE

RAIL

1. Name :
2. DOB :
3. S/D/O :
4. Name of Course : Recertification of UST of Rail
5. Duration :
6. Validity : _____ to _____
7. Postal Address with contact no.:

8. Employer Address :

Affix Color
passport
size photo

(Signature with date)

Note on the back side of the card is to be printed.

Annexure-VI

Check Sheet for Recertification on UST of AT & FB Welds for operators of outsourcing agencies (Regular competency certificate)

Name of candidate	
Designation	
Place of Posting	
Division & railway	

S.N	Description	Competency (Satisfactory/Unsatisfactory)
1.	Knowledge of Calibration of 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing.	
2	Knowledge of Calibration of 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing.	
3	Knowledge of Sensitivity setting of 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing.	
4	Knowledge of Sensitivity setting of 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing.	
5	Knowledge of procedure for AT weld testing using 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing.	
6	Knowledge of procedure for FB weld testing using 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing.	
7	Knowledge of Classification of defects using 0 ⁰ Probe , 70 ⁰ Probe , 45 ⁰ Probe (for half moon defect), 45 ⁰ Probe (for lack of fusion in web of AT weld) for AT weld testing.	
8	Knowledge of Classification of defects using 70 ⁰ Probe , 45 ⁰ Probe (for lack of fusion in head of FB weld) for FB weld testing.	
9	Knowledge of marking of defects for AT weld testing and FB Weld testing.	
10	Knowledge of frequency of AT weld testing and FB weld testing.	
11	Knowledge of 04 correction slips issued so far.	
12	Knowledge of procedure followed for Assessment of Rail weld testers along with the Probes.	

Recommendations: In view of above, candidate is found to be **satisfactory/unsatisfactory** and renewal certificate may be **issued/not issued**.

Signature of Recommending

Nodal officer (with seal)

Name:

Desination:

Mobile No.:

Format for Recertification of AT & FB Weld

Note: Please fill the format in capital letters with black colour ball point pen.

CERTIFICATE

9. Name :

10. DOB :

11. S/D/O :

12. Name of Course : Recertification of UST of AT & FB Weld

13. Duration : ----- to -----

14. Validity : _____ to _____

15. Postal Address with contact no.:

16. Employer Address :

Affix color
passport
size photo

(Signature with date)

Note on the back side of the card is to be printed.

Annexure-A

**Draft Policy for Online Training and Certification of
Departmental and Outsourcing USFD operator**

A. For Departmental USFD operator: (For Refresher course only)

- a) M&C directorate shall start the Online training programme for departmental USFD operator on suitable online platform. Necessary requisites on the end of Zonal Railway will also be decided by RDSO
- b) Zonal Railway shall nominate list of candidates due for refresher course (including their mobile numbers and email ids). Zonal Railway shall check the pre-requisite of course to be fulfilled by the USFD operator before sending their nomination to RDSO. Also, Zonal Railway shall ensure that the details of the Nominated USFD operators are updated in the TMS.
- c) RDSO will finalise the number of trainee operators to be admitted for the particular training course and will communicate the list of admitted trainee to the Zonal Railways. RDSO can accommodate 100 nos. of participants for online training.
- d) Each Zonal Railway (CTE) shall nominate one officer (Not below the Rank of Senior scale, herein after called as **Nodal Officer**) for organising this online training at Zonal Railway itself. Details of Nodal officer viz. Name, Designation, mobile no. and email ID shall be provided to RDSO. It will be the responsibility of Nodal officer to ensure that all the participant attend the online training. Training will be imparted by NDT Training Centre/RDSO officials in co-ordination with Nodal Officer.
- e) After completion of training, Nodal officer will evaluate the candidates on the basis of check sheet (**Annexure -1**) provided by RDSO and communicate his recommendation to RDSO.
- f) Based on the recommendation of Nodal officer, RDSO will issue competency certificate to the departmental USFD operator signed by Principal NDT Training Centre/RDSO/LKO. Soft copy of the competency certificate will be send to the nodal officer on email, who will take printout of the competency certificate and distribute it to the USFD operator under his signature.
- g) RDSO will upload the competency certificate of the departmental USFD operator on TMS after getting confirmation from the Nodal officer regarding receipt of these competency certificate.



Annexure-A

h) Validity of competency certificate shall be 2 Years from the date of issue of the competency certificate.

B. For Outsourcing work USFD operator: - (For Regular competency /Recertification, Revalidation courses only)

- a) Outsourced agency shall contact RDSO on email for the Regular Competency Certification for their USFD operators and inform RDSO in writing regarding name of Zonal Railways where they want to recertify their USFD operator. Firm shall submit various details of their USFD operator as mentioned in Indian Railway Standard Specification for Ultrasonic Testing of Rails/Welds (Provisional), Revised- 2012, before recertification examination to RDSO on email.
- b) RDSO will scrutinize these submitted details of outsourced Agency USFD operator and only suitable USFD operator shall be nominated to Particular Zonal Railway for evaluation. Evaluation of USFD operator shall be carried out as per check sheets provided by RDSO (**Annexure-II & III** for Recertification of Rail and Recertification of AT& FB Welds respectively) for the Outsourced Agency USFD operator.
- c) Each Zonal Railway (CTE) shall nominate one officer (Not below the Rank of Senior scale, herein after called as **Nodal Officer**) for organising evaluation as mentioned in clause 'b' for the Outsourced Agency USFD operator. Details of Nodal officer like Name, Designation, mobile no. and email ID shall be provided to RDSO.
- d) Nodal officer will evaluate Outsourced Agency USFD operator on the basis of check sheet provided by RDSO as mentioned in clause "b" above and communicate his recommendation to the RDSO.
- e) Based on the recommendation of Nodal officer, RDSO will issue the competency certificate to Outsourced Agency USFD operator signed by Principal NDT Training Centre/RDSO/LKO. Soft copy of the competency certificate will be sent to the nodal officer on email, who will take printout of the competency certificate and distribute it to the Outsourced Agency USFD operator under his signature.
- f) RDSO will upload the competency certificate on the TMS after getting confirmation from the Nodal officer regarding distribution of the competency certificate to the Outsourced Agency USFD operator.
- i) Validity of competency certificate shall be 2 Years from the date of issue of the competency certificate.

