

अधिसूचना/NOTIFICATION

All SSE/Ch.OS/OS concerned :

Sub: Selection for Ex-cadre posts in Advanced Welding Training Institute (AWTI)

It is proposed to conduct selection for Ex-cadre posts in AWTI of Mechanical Engineering Department as detailed below.

Sl	Category	LEVEL/VI PC GP	No. to be empanelled
1	Chief Instructor/Mech	7 / 4600GP	1
2	Senior Instructor/Mech	7 / 4600GP	8
3	Instructor/ Mech	6 / 4200GP	6
4	Senior Instructor/ Metallurgy	7 / 4600GP	2
5	Instructor /Metallurgy	6 / 4200GP	2
Total			19

The vacancies notified are subject to the change, if necessary.

पात्रताशर्त /Eligibility Condition:

Chief Instructor/Mech/Ex-cadre, Level-7

Employees working as SSE in Mechanical workshops seniority units having regular cadre status in same LEVEL i.e., 7 are eligible to apply .

Sr.INSTRUCTOR/Mech/Ex-cadre, LEVEL -7 (₹4600 GP)

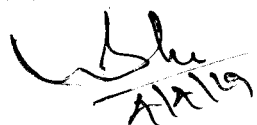
Employees working as SSE in Mechanical workshops seniority units having regular cadre status in same LEVEL i.e., Level- 7 are eligible to apply .

INSTRUCTOR (Mech) /Ex-cadre, LEVEL -6 (₹4200 GP)

Employees working as JE, Sr.Tech., Tech.Gr.I, and Tech.Gr.II of Mechanical workshop seniority units are eligible to apply. In terms of Board's letter No.E(MPP) 2002/13/2 dated 04/01/2007, where selection of trainers should be done from identical grades only, in case no willing candidates apply from the same Grade/Level, candidates below one / two grades can be considered, provided the post at the training centre is either downgraded matching with the scale of pay of the selected candidates or transfer the element of the post in which the incumbent was working in his parent cadre. Only when adequate volunteers in same LEVEL do not apply, employees who volunteer from one/two grades/levels below will be considered for the post of Instructors/Mech/Ex-cadre.

Sr.INSTRUCTOR(Metallurgy)/Mech/Ex-cadre, LEVEL -7 (₹4600 GP)

Employees working in Mechanical LAB Organisation having regular cadre status of C "&"M Supdt in LEVEL-7 are eligible to apply


A.A.19

INSTRUCTOR(Metallurgy)/Mech/Ex-cadre, LEVEL -6 (₹ 4200 GP)

Employees working in Mechanical LAB organisation having regular cadre status of C "&"M Asst in LEVEL- 6 are eligible to apply

QUALIFICATION AND SERVICE CONDITION

The requisite qualification, experience & service condition prescribed for the five posts are detailed below:

Sl No.	Name of the post	Qualification	Experience	Service Conditions	Area of Experience
1	Chief Instructor/ Mech/ Ex-cadre in Level-7 (In 6 th PC 9300-34800 +4600 GP)	Diploma/Degree/PG Degree in Mechanical/Production / Manufacturing Engineering Or equivalent	10 years of working experience as SSE in the Mechanical Dept.	Employees working as SSE in the Mechanical department	1.Field experience in MMAW, MIG/MAG 2.Practical Knowledge of the physical properties of metals 3.Familiarity with codes and specifications used in welding 4.The candidates should have good oral communication skills to deliver lecture in English
2	Sr.Instructor (Mech) Ex-cadre Level 7 (In 6 th PC 9300-34800 +4600 GP)	Diploma/Degree/PG Degree in Mechanical/ Production/Manufacturing Engineering or Equivalent (OR) Employees selected as Intermediate Apprentice Mechanics against Serving Employees Quota	8 years of working experience as SSE in the Mech. Dept.	Employees working as SSE in the Mechanical department	1.Field experience in MMAW, MIG/MAG 2.Practical Knowledge of the physical properties of metals 3.Familiarity with codes and specifications used in welding 4.The candidates should have good oral communication skills to deliver lecture in English
3	Instructor (Mech) Ex-cadre Level 6 (In 6 th PC 9300-34800 +4200 GP)	Diploma in Mechanical/ Production/Manufacturing Engineering or Equivalent OR Employees selected as Intermediate Apprentice Mechanics against Serving Employees Quota (OR) ITI/NCVT/SCVT/ Act Apprentice	3 years working experience in Mech. Dept.	1. Employees working as JE in Mechanical Department (OR) 2.Sr.Technician In Level 6 (OR) 3. Tech.Gr.I in Level 5 (OR) 4. Tech. Gr.II in Level 4	Practical experience in performing MMAW, MIG/MAG, Oxy-Acetylene Welding and Cutting


AT/119

4	Sr.Instructor/ Metallurgy/ Mech/ Ex-cadre in Level-7 (In 6 th PC 9300-34800 +4600 GP)	Graduate in Engineering Metallurgy/Chemical) or equivalent (OR) M.Sc (Chemistry or Applied Chemistry) (OR) B.Sc (Chemistry / Physics)	a) 2 year experience in Testing of Metals and Welding Parameters for Graduates in Engineering/MSC b) 5 years of experience in the field of testing of Metals and Welding parameteres/B.S c	Employees working as CMS in the Mechanical department/Lab organisation	Testing of Metals & Welding parameters
5	Instructor (Metallurgy) (Ex-cadre) Level 6 (In 6 th PC 9300-34800 +4200 GP)	Graduate in Engineering Metallurgy/Chemical or equivalent (OR) M.Sc (Chemistry or Applied Chemistry) (OR) B.Sc (Chemistry /Physics)	a) 1 year experience in Testing of Metals and Welding Parameters for Graduates in Engg/M.Sc. b) 3 years of experience in the field of testing of Metals and Welding parameters/ B.Sc.	Employees working as CMA in the Mechanical department/ Lab organisation	Testing of Metals & Welding parameters

चयन पद्धती /Mode of selection:

The eligible volunteers will be subjected to a WRITTEN TEST & VIVA-VOCE in terms of Railway Bd's letter No.E(MPP) 2005/3/14 dated 03/10/2005. Question paper for written examination will consist of both objective and descriptive type questions.

In terms of Railway Board's letter No. E(MG)I-2006/PM1/4 Dt.22/03/2006 and Para 219(j) of IREM Vol-I, the distribution of marks is furnished below:

Factor/Headings	Maximum Marks	Qualifying Marks
Professional ability		
a) Written Test	35	30
b) Viva-voce	15 **	
The written test will be for 100 marks and 60 will be the qualifying marks. The marks secured out of 100 marks would be converted for 35 marks.		
Record of service(Perusal of SR & APAR)	30	
Total	80	48

** 1) For the post of Instructor/Mech/Ex-Cadre, the Viva-voce including Teaching ability test and Welding test as prescribed in Sec.4 of IS 817. This test will be conducted in two welding positions.

2) For the post of Chief Instructor, Senior Instructor/Mech, Sr. Instructor/Metallurgy and Instructor/Metallurgy, the Viva-voce includes Teaching Ability Test.


AA/19

The question paper will be in English. In terms of Railway Board's letter No. E(NG)I-8/PM1/7 dated 20/10/1999, the employees who are willing to write the exam in Hindi may submit their option in written request.

The written examination is fixed on 11/06/2019 at 10.00 hrs at TTC.

The empanelled employees will be required to prepare a lesson plan through Power Point Presentation and deliver a lecture for a minimum period of half an hour.

अवधि /Tenure & Lien:

- 1) The tenure of posting of selected staff shall not exceed 8 years under any circumstances. The employees selected and posted to these posts are liable to be transferred only on completion of the tenure period of 8 years in terms of Board's letter NO.E (MPP)2001/19/3-RECOMM.37 dated 29/06/2001. However, they will be allowed to return to their parent cadre earlier than 8 years only on promotion or after a minimum period of 3 years.
- 2) As and when they are repatriated from ex-cadre post to parent cadre, they will be repatriated to their position which they would have occupied in their parent cadre but for their posting in ex-cadre.
- 3) They will retain their lien in their parent cadre and will be considered for promotion to higher grades along with others according to their seniority position in the parent cadre.
- 4) They are clearly given to understand that their posting in ex-cadre would not confer on them any prescriptive right or claim for promotion / seniority or selection in ex-cadre.
- 5) The administration reserves the right to repatriate the selected employees to their parent cadre even before the completion of their tenure period.

प्रशिक्षण भत्ता/Training Allowance:

The Railway servants who are selected to the above mentioned posts at AWTI will draw training allowance at 12% of their basic pay as long as they work in AWTI in their existing capacity in terms of Board's letter No.E (MPP) 2012/3/28 dated 06/10/2017.

Other conditions

Employees who have worked earlier in ex-cadre posts are eligible to apply only after a cooling period of 3 years in the shop floor/3 years in ICF after Repatriation from Deputation.

If any of the employees selected and are already working in Ex-cadre post will be allowed to continue in AWTI till they complete the remaining tenure period of 8 years put together. The tenure period will be counted from the date of posting to the earlier ex-cadre post.

कैसे आवेदन करें एवं अंतिम तिथि /How to apply and last date :

Applications should be submitted in the proforma as in **Annexure A** to their controlling Officers / Supervisors on or before 03/05/2019. The supervisory officials will forward the applications to APO/WS in one lot on or before 04/05/2019 certainly. Applications received after the last date and sent individually by the employees will not be entertained under any circumstances.


21/5/19

The duties and responsibilities for the above posts are enclosed as Annexure B to F. The syllabus for the examination is enclosed as Annexure –G to J.



सहायक कार्मिक अधिकारी/कर्म.

Assistant Personnel Officer/WS

Copy forwarded for information to:

CME, CPM, CME/QA, CME/Plg., CWE/Shell & Fur., Dy.CME/Plt, Dy.CME/S / F,
Dy.CME/ Prod., Dy.CME/Plg, Dy.CME/QC, Dy.CME/Bogie, Ch. OS/CON Section,
Chief S & W/G/S & F: for exhibiting in the Office Notice Board.

Principal /TTC : He is requested to kindly provide accommodation for conducting written exam on 11/06/2019.

ANNEXURE – A

Application for the post of.....
In LEVEL _____ in response to the notification No. PB/S2/5/AWTI (Ex-cadre) Vol.II
Dt. 04/04/2019.

1. Name of the employee :
(In Block letters)
2. Emp.No./T.No. :
3. Designation/ Level/ Trade :
4. Shop/Office :
5. Date of Birth :
6. Date of appointment :
7. Educational Qualification :
 - a. Academic :
 - b. Technical :
8. Experience as Instructor in TTC: From: To:
(If any in other Ex-cadre post)
9. Phone/Mobile No. :
E mail id :
(If any) for communication

Date:

Signature of the candidate

Forwarded to SPO/WS

SSE/Shop

Chief Instructor (AWTI) (Level - 7)

Responsibilities:

A Training

- i Formulation of Training module /calendar compilation.
- ii Planning the formulated training modules.
- iii Monitoring theory & practical training.
- iv Planning Field Visit.
- v Delivery of lecture in welding as per training schedule .
- vi Arranging seminars at national and International level.
- vii Arranging the Accommodation/Hostel facility for the outstation Faculties/Trainees.

B. M & P

- viii Custodian of Fixed assets under his purview(M & P, Class room, Seminar Hall , AV AIDS etc.,)
- ix Monitoring Repair & Maintenance of M & Ps at AWTI.
- x Controlling R.M, Tools, equipment and consumables.
- xi Arranging Calibration /Maintenance of the welding training Equipments inside AWTI.
- xii Infrastructure proposals related to WP & M&P programmes.

C. Administration

- xiii Managing the Institute day to day activities like Attendance closing, Authorising man & material movements.
- xiv Liasoning with Zonal Railways and Pus for welding training.
- Xv Liasoning with Welding Institutes for upgrading course contents and training of instructors.
- Xvi Monitoring Engineering Repairs, House Keeping, Gardening etc.
- Xvii Arranging Welding training for Non Railway Institutions on cost basis as per Railway Board Directives.
- Xviii Consultancy services
- Xix Providing data for preparation of PCDO statements.
- Xx Enforcing discipline
- Xxi Assisting Director, Dy. Director in the areas assigned by them whenever required.

D. Standards Formulation & Certification

- xxii Setting the standards for welders performance and certifying authority for issue of certificates
- xxiii Preparation of standards& Specifications
- x xiv Coordinating project study and presenting reports on welding problems
- xxv Formulation of Welding codes related to Railway Standards.
- Xxvi Addressing vendors performance on welding quality
- Xxvii releasing of monthly & quarterly Journal on rotation basis.

U. S. He
/ATA/19

DUTIES AND RESPONSIBILITIES REQUIRED FOR THE EX-CADRE POSTS IN AWTI
Sr. INSTRUCTOR/MECH – AWTI (level 7)

Responsibilities:

A Training

- i Formulation, compilation & Conducting, of Training module as per training calendar
- ii Planning the formulated training modules conducting & Preparation of course materials/ handouts, PPTS, Videos etc.
- iii Delivery of lectures in welding as per training schedule
- iv Assessing and grading the performance of trainees
- v Arranging Field Visit
- vi Conducting Seminars as per directives
- vii Maintaining discipline among trainees

B. Machinery & Plant

- viii Custodian of Fixed assets under his purview(M & P, Class room, Seminar Hall , AV AIDS etc.,)
- ix Repair & Maintenance of M & Ps at AWTI – Assisting Chief Instructor.
- x Arranging, Allotment & maintenance of R.M, Tools, equipment and consumables
- xi Arranging Calibration /Maintenance of the welding training Equipments inside AWTI
- xii Monitoring Machine utilization book
- xiii Follow up for the infrastructure proposals with other departments
- xiv Arranging welding Consumables and Tools for examination and regular practical classes

C. Administration

- xv Managing the Institute day to day activities – Assisting Chief Instructor
- xvi Assessing the training needs for Instructional staff and fulfilling their needs by sending them to proper training.
- Xvii EMS/QMS/OSHAS Implementation & Co-ordination.
- xviii Arranging Section computer maintenance
- xix Monitoring of training session and reporting to Chief Instructor
- xx Misc and general works & Assisting Chief Instructor
- xxi Arranging Welding training for Non Railway Institutions on cost basis as per Railway Board Directives.
- xxii Consultancy services
- xxiii Arranging Engineering Repairs, Up keeping library & Audio visual equipments, House Keeping, Gardening etc
- xxiv Enforcing discipline
- xxv Assisting chief Instructor in the areas assigned by them whenever required.

D. Standards Formulation & Certification

- xxvi Setting the standards for welders performance and certifying authority for issue of certificates
- xxvii Conducting Examinations, setting of Question papers, arranging invigilation & evaluation for welders performance and assessment for Grades
- xxviii Preparation of standards & Specifications, Preparation, formulation and review of Procedures, work instruction etc.
- xxix Preparation of Welding Procedure Specification (WPS) & Procedure Qualification Report /Record (PQR)
- xxx Formulation of Welding codes related to Railway Standards.


AT/19

Instructor/Mech/AWTI (Level 6)

Responsibilities:

A. Training

- i. Conducting Practical Training module as per training calendar
- ii. Conducting Practical Demo to trainees
- iii. Preparation of course materials, PPTs, Videos etc.
- iv. Accompanying Field Visit along with trainees
- v. Delivery of lecture in welding as per time table
- vi. Assisting the movement of RM & Tools for Training Session
- vii. Conducting practical tests and assessing their performance
- viii. Maintenance of trainees attendance
- ix. Assisting the Sr. Instructor for conducting seminars
- x. Maintaining shop floor discipline

B. Machinery & Plant

- xi Custodian of Fixed assets under his purview
- xii Upkeeping of machine utilization book
- xiii Assisting the Sr. Instructor in Repair & Maintenance of M & Ps
- xiv Allotment of R.M. Tools, equipment and consumables
- xv Arranging for Calibration and Maintenance of the welding Equipments
- xvi Upkeeping of House and surroundings

C. Administration

- xvii Managing the Institute day to day activities – Assisting Sr. Instructor
- xviii Implementation of EMS/QMS/OSHAS
- xix Section computer maintenance under his purview
- xx Feed back on Hostel & training session and reporting to Sr. Instructor
- xxi Assisting Sr. Instructor in all areas

D. Standards Formulation & Certification

Assisting the Sr. Instructor

=====

- xxii In Preparation, formulation and review of Procedures, work instruction etc.
- xxiii In setting the standards for welders performance
- xxiv In Preparation of standards and specifications
- xxv In Formulating Welding codes related to Railway Standards.


A.A.119

Sr. Instructor/ Metallurgy (AWTI) (Level - 7)

Responsibilities:

A Training:

- i Associating in conducting the training as per Training Calendar .
- ii Preparation of course materials, PPTs, Videos etc. with respect to M & C subjects.
- iii Maintaining Lab Discipline
- iv Delivering Lecture in Welding & NDT as per Training Schedule
- v Planning for the formulated Training Module
- vi Conducting practical demos to trainees related to Laboratory.
- vii Assisting the Chief Instructor in conducting seminars as per directives.

B Machinery and Plant

- i Custodian of Lab Equipments and other assets under his purview.
- ii Repairing and Maintenance of M & Ps of Laboratory .
- iii. AMC Proposal and implementation after warranty
- iv. Raw Materials , Tools , Equipments and consumables arrangement and maintenance pertaining to AWTI Lab.
- v. Calibration/maintenance of the Testing machines and Equipments of AWTI Lab

C. Administration

- i Carrying out the day to day activities of AWTI Lab
- ii. Coordinating EMS/QMS/OSHAS activities.
- iii Maintenance of Section Computers
- vi. Infrastructure proposal related to Works programme and M & P Programme of Lab
- v. Monitoring of Training sessions and reporting to Unit Head.

D. Standards Formulation, Testing and Certification:

- i Preparation of procedures and Work Instructions etc pertaining to Lab.
- ii Setting question papers , conducting Examinations , performing invigilation work and evaluation activities with respect to M & C Subjects .
- iii Assessing the performance of welders with suitable grades
- iv Monitoring of testing activities (including radiography) and reporting to unit head.
- v. Any other work assigned by the director of AWTI .


AWTI

Instructor/ Metallurgy (AWTI) (Level 6)

Responsibilities:

A. Training;

Assisting Sr. Instructor Metallurgy/Mech/AWTI in

- i. Conducting Training as per Training Calendar
- ii. Conducting Tests as per Module.
- iii. Preparation of Course materials, PPTs, Videos etc.
- iv. Maintaining Lab Discipline
- v. Associating with field visits, delivering Lecture in Welding, NDT as per Training schedule.
- vi. Conducting practical demos to trainees related to Laboratory.
- vii. Arranging RM, Tools for testing and training sessions related to AWTI Lab.
- viii. Maintaining Trainees attendance and performance.

B. Machinery and Plant

Assisting **Sr. Instructor Metallurgy/Mech/AWTI** in the following areas:

- i. Maintenance of Lab testing Equipments, Machinery and plants and other assets.
- ii. Calibration/maintenance of the Welding Testing Equipments of AWTI Lab

C. Administration

Assisting **Sr. Instructor Metallurgy/Mech/AWTI** in

- i. Carrying out the day to day activities of AWTI Lab
- ii. Implementing EMS/QMS/OSHAS activities.
- iii. Maintaining Section Computers
- iv. Monitoring of Training sessions and reporting to Unit Head.

D. Standards Formulation, Testing and Certification:

Assisting **Sr. Instructor Metallurgy/Mech/AWTI** in

- i. The Preparation of procedures and Work Instructions etc pertaining to Lab.
- ii. Assessing the performance of welders with suitable grades
- iii. Testing and Evaluation of weldments
- iv. Carrying out any other work assigned by **Sr. Instructor Metallurgy/Mech/AWTI**.


A.A.A.

**SYLLABUS FOR SELECTION TO THE POST OF Chief Instructor & Sr.Instructor/Mech
(Level 7) at AWTI**

Introduction to Welding – Basic electricity – Arc Physics, Arc welding power sources – Fundamental of materials, Classification and properties of steel Materials used in manufacturing of Shells.

Various Welding processes – SMAW – GMAW-FCAW – SAW- Resistance welding and their welding techniques.

Manufacturing of LHB coaches and FIAT Bogies

Welding consumables – Welding gases, electrodes, filler wires and their storage.
Cutting processes – Oxy acetylene cutting – Plasma Arc cutting – Metal gouging – Laser cutting.

Stainless steels – Types – Various welding processes for Stainless Steel – Weld defects pertaining to S.S. Welding

Weld quality control- Weld defects, causes and remedies – Non Destructive Testing – Visual Inspection.

Safety in Welding.

GENERAL TOPICS:

- IMS Policy
- Limits Fits and Tolerance
- Fastening Methods & Devices
- Tools, gauges and measuring instruments – least count
- Official language Act – Importance & Implementation



SYLLABUS FOR SELECTION TO THE POST OF Instructor/Mech (Level 6) at AWTI

General Welding Concepts:

Need & importance of welding, Types of welding, Types of weld joints, Edge preparations, Welding positions, nomenclatures of weld joints & safety in welding
Principles of Manual Metal Arc Welding (MMAW) parameters, welding techniques, accessories, welding electrodes, welding defects: causes & remedies.
Principles of GAS METAL Arc **Welding (GMAW)**, MIG/MAG, Welding techniques, accessories, shielding gas, welding Defects, causes & remedies

OXY- fuel cutting:

Types, Parts of gas cutting plant, flashback arrestor, plant set up, safety checks, parameters (nozzle size, pressure, speed) hazards of gas cutting, defects in cutting & remedies.

GENERAL TOPICS:

Safety Aspects at Workplace
IMS Policy
Official language Act – Importance & Implementation

Practical test

1. Selection of materials & Consumables
2. Joint preparation & Selection of Position
3. Selection of welding process
4. Machine setup
5. Parameter setup
6. Selection of suitable PPEs
7. Weld Practice
8. Weld on test coupon as per IS 817


AAT19

SYLLABUS FOR SELECTION TO THE POST OF Sr.Instructor/Metallurgy (Level - 7) at AWTI

1. Basics of welding: Types of welding, welding processes, fundamental principles and application in coach fabrication.
2. Welding Metallurgy: Welding metallurgy of low carbon steel and stainless steel welding. Concept of HAZ, carbon equivalent, Pre and Post Welding heat treatment. Welding defects, causes and their remedies.
3. Stainless steel welding: Types of stainless steel, applications, weld ability, processes for stainless steel welding, problems faced in SS welding and remedies, defects encountered in SS welding.
4. Welding consumables: Carbon steel electrodes and stainless steel electrodes for various welding processes. Classification of Electrodes, testing of electrodes to various standards. Shielding gases used in various welding processes.
5. Codes and standards: Awareness on codes and standards for preparation of WPS and welders qualification.
6. Testing: Various non destructive and destructive tests carried out for WPS preparation and Welders qualification.
7. Specification of materials: IRSM41, IRSM44, RDSO CK 201, AISI- Chemical & Physical properties.
8. Simple calculations like work, power, energy, Temperature conversion and metric conversion.

GENERAL TOPICS:

IMS Policy
Official language Act – Importance & Implementation



A handwritten signature in black ink, followed by a horizontal line and the date '21/11/19' written below it.

ANNEXURE-J

SYLLABUS FOR SELECTION TO THE POST OF Instructor/Metallurgy (Level 6) at AWTI

1. Basics of welding: Types of welding, welding processes, fundamental principles and application in coach fabrication.
2. Welding Metallurgy: Welding metallurgy of low carbon steel and stainless steel welding. Concept of HAZ, carbon equivalent, Welding defects, causes and their remedies.
3. Stainless steel welding: Types of stainless steel, applications, weld ability, processes for stainless steel welding, problems faced in SS welding and remedies, defects encountered in SS welding.
4. Welding consumables: Carbon steel electrodes and stainless steel electrodes for various welding processes. Classification of Electrodes, testing of electrodes to various standards. Shielding gases used in various welding processes.
5. Codes and standards: Awareness on codes and standards for preparation of WPS and welders qualification.
6. Testing: Various non destructive and destructive tests.

7. GENERAL TOPICS:

Safety Aspects at workplace

IMS Policy

Official language Act – Importance & Implementation

Tools, gauges and measuring instruments – least count



A handwritten signature in cursive script is written above a horizontal line, with the date '21/11/19' written below the line.