

WELDING TECHNOLOGY & EQUIPMENT

BACKGROUND:

CEFC Pratham Foundation is a national facility for imparting training in high end technology, which was initiated by **Heavy Engineering Corporation Limited (HEC), Ranchi, India**. It is founded under the scheme of “Enhancement of competitiveness in the Indian capital goods sector of the Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises, Govt. of India”. HEC has tied up with **CNIITMASH** to support CEFC Pratham Foundation for developing and imparting the various application oriented training courses in the area of metal processing and manufacturing. CNIITMASH is the state research centre of Russian Federation to conduct the training programme and provide technical support to industries.

The courses offered by CEFC Pratham Foundation have been developed by the scientists and experts of CNIITMASH, supported by highly experienced domain experts from Indian industry as well as faculty of premier institutes of India like, **Indian Institute of Technology (IIT), Kharagpur & National Institute of Foundry & Forge Technology (NIFFT), Ranchi**. The scientists and experts of CNIITMASH will also be the lead trainers for these courses.

The Welding Technology & Equipment is one of the various training courses offered at CEFC Pratham Foundation.

AIM:

The course is aimed at developing the knowledge and skill of participants in the different aspects of welding process and methods to ensure "Quality Welding" in various applications in Indian Industries. The theoretical lectures covered in the course will be supplemented with adequate discussions & seminars.





COURSE CONTENTS:

- Physical basics of Welding Process.
- Metallurgical basics of arc Welding.
- Various Welding Methods used like- MMAW, SAW, TIG, MIG/MAG, and ESW.
- Requirements to corrosion resistant cladding and corrosion resistant cladding technology used.
- Corrosion resistant cladding equipment.
- Selection of welding process & materials.
- Welding capacity estimation of various groups of structural materials
- Specific aspects of pearlite steel welding, austenite steel welding , martensitic & ferritic steel welding.
- Welding of dissimilar steel & steels of various grades.
- Specific technology aspects of welding for various applications like casing & pipelines, equipment made of steel and special steel, steam turbine motor, etc.
- Conditions necessary to perform welding and cladding in the course of manufacturing, installation and repair of equipments and pipelines etc.

ELIGIBILITY FOR PARTICIPATION:

Candidate should possess a degree in engineering or equivalent or diploma engineering with minimum 2 years of experience in the area of metal processing, fabrication, manufacturing, maintenance, project implementation, quality control, etc. in various sectors like Steel, Mining, Power, Oil & Gas, Construction & Engineering, Shipbuilding, Equipment Manufacturing, Railways, Nuclear Engineering, Automobile etc.

COURSE DURATION : 6 Weeks



CEFC PRATHAM
FOUNDATION

COURSE ENROLLMENT FORM



Please refer to the details given overleaf before filling up the Enrollment Form.

COURSE TITLE _____

COURSE CODE _____

COURSE DURATION _____

NAME OF THE CANDIDATE _____

QUALIFICATION _____

DESIGNATION _____

ORGANIZATION _____

RELEVANT EXPERIENCE _____

Accommodation Required* - YES / NO

PAYMENT DETAILS – AMOUNT : Rs. _____

DD No. : _____

Bank : _____

ADDRESS OF COMMUNICATION :

Phone No. : _____

Email Id : _____

Fax : _____

Place : _____

Date : _____

COURSE DETAILS



S. No.	COURSE TITLE	COURSE CODE	COURSE DURATION	COURSE FEES *	
				NON RESIDENTIAL	RESIDENTIAL
1.	Steel Melting & Secondary Refining for manufacturing purposes	HEC011a	1½ Weeks	Rs 20,000/-	Rs 45,000/-
2.	Steel Ingot Casting Technology and Equipment	HEC011b	1½ Weeks	Rs 20,000/-	Rs 45,000/-
3.	Blank Forging & Stamping Technology and Equipment	HEC011c	1½ Weeks	Rs 20,000/-	Rs 45,000/-
4.	Foundry Technology for Production of Cast Products	HEC011d	1½ Weeks	Rs 20,000/-	Rs 45,000/-
5.	Heat Treatment Technology and Selection of appropriate heat-treatment cycle for steel	HEC011e	1½ Weeks	Rs 20,000/-	Rs 45,000/-
6.	Electro-Slag Re-melting Technology and Equipment	HEC011f	4½ Weeks	Rs 55,000/-	Rs 1,30,000/-
7.	Welding Technology and Equipment	HEC012	6 Weeks	Rs 75,000/-	Rs 1,80,000/-
8.	Quality Assessment Technology and Criteria for Destructive and Non-Destructive Quality Control	HEC013	9 Weeks	Rs 1,00,000/-	Rs 2,50,000/-
9.	Design and Manufacturing Technology of Gear Trains	HEC014	8 Weeks	Rs 90,000/-	Rs 2,30,000/-

* The Course Fee indicated are exclusive of taxes. The taxes will be extra as per rules.

The filled up enrollment form may please be sent to :-

The CEFC Pratham Foundation

Room No. 146, 1st Floor, 100 Building, Foundry Forge Plant

HEC Ltd., Dhurwa, Ranchi - 834004 (Jharkhand)

Tel. : 0651-2401210 | E-mail : cefcpratham@gmail.com