



**BHARAT HEAVY ELECTRICALS
LIMITED
CENTRAL FOUNDRY FORGE PLANT
RANIPUR, HARIDWAR - 249403
NOTICE INVITING EXPRESSION OF INTEREST**

Date: 29.03.2022

Sealed Expression(s) of Interest (EOI) are invited through registered post/speed post/courier/by hand/through Email on or before **01.05.2022** from **capable and interested parties** for the under-mentioned work.

Last date of **SUBMISSION** of EOI

: **01.05.2022**

Place of **SUBMISSION** of EOI

: **Dy. General Manager**

ESR & M&S

Central Foundry Forge Plant

Bharat Heavy Electricals Limited

Ranipur, Haridwar – 249403,

Uttarakhand, India

Email : anuragkk@bhel.in

Phone No. : +91-9412070548

SUBJECT: Reconditioning/ Revamping of 50T Moving Collar Mould ESR Furnace installed in Forge Shop, CFFP

1. Introduction:

This Expression of Interest (EOI) seeks response from organizations/companies/industries that are willing to and are capable of designing, engineering, manufacturing, assembling, reconditioning/retrofitting, erection, commissioning, testing, servicing and providing spare parts 50T Moving Collar Mould ESR at CFFP, BHEL Haridwar.

1.1 About Bharat Heavy Electricals Limited (BHEL):

BHEL is a leading state owned company wherein Government of India is holding 63.06% of equity. BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing company of its kind in India engaged in core sectors of the economy, viz. Power, Transmission, Industry, Transportation (Railways), Renewable Energy, Oil & Gas, Water and Defence with over 180 products offerings to meet the needs of these sectors. A widespread network of 17 Manufacturing Divisions, 2 Repair Units, 4 Regional Offices, 8 Service Centres, 6 Overseas Offices, 6 Joint Ventures, 15 Regional Marketing Centres and current project execution at more than 150 project sites across India and abroad corroborates the humungous scale and size of its operations. BHEL also has a widespread overseas footprint in 80 countries with cumulative overseas installed capacity of BHEL manufactured power plants nearing 10,000 MW including Belarus, Bhutan, Egypt, Indonesia, Iraq, Kazakhstan, Malaysia, New Zealand, Oman, Rwanda, Sudan, Tajikistan and UAE. The high level of quality & reliability of BHEL products is due to adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the world including General Electric Company,

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Alstom SA, Siemens AG and Mitsubishi Heavy Industries Ltd., together with technologies developed in its own R&D centres.

1.2 About Central Foundry Forge Plant (CFFP):

Incepted in 1976, CFFP is a strategic business unit of BHEL. CFFP is catering to the needs of steel castings and forgings mainly for the power plant equipment along with other industries such as steel, cement plants, defence, ship building etc. CFFP has received various accolades and certificates such as ISO-9001 from BVC, ISO 14000 and ISO 18000 from TUV-SUD and ISO 50001 from BSI.

CFFP has Steel Melting Shop (SMS) with capacity to pour 130 T liquid steel to cater to the needs of foundry and forge divisions. It has ability to melt and process wide variety of steel grades right from plain carbon grades to creep resistant, super critical and high chromium stainless steels. Steel Foundry (SF) of CFFP makes steel castings from 500 kg to 63 MT single piece weight and cast fabricated castings up to 120 MT weight. It caters to various needs of power plant manufacturing, steel industry, ship building, defence, infrastructure etc. Heavy Forge Shop (HFS) and Medium Forge Shop (MFS) have facilities

to manufacture heat treated and machined forgings up to 34 MT piece weight with product range including shafts, discs, rings and sleeves. Major facilities in the Forge Shop include:

- 2650 MT and 7500/9000 MT Forging Press with 25/50 mT and 32/65 mT manipulator respectively
- Reheating and Heat Treatment furnaces
- Vertical Shaft Furnaces and air/oil/water & mist quenching facilities
- Vertical oil quenching facility
- Thermal stability equipment for rotors
- Turning gears
- Cranes up to capacity of 200 T
- ESR Furnace

2. Scope of Cooperation:

BHEL is seeking Expression of Interest (EOI) from experienced vendors for reconditioning revamping of 50T Moving collar Mould Electro Slag Remelting Furnace to meet its operational requirements. Interested vendors of repute with proven credentials of having executed similar work or manufacturer of the ESR Furnace are invited to respond to this EOI, as per indicative scope of work provided in **Annexure – 1**.

Before submitting the offer interested parties/ vendors are requested to visit the site for first hand appraisal of work

Upon receipt of responses against EOI from such vendors, BHEL will review the responses to ascertain suitability of the offer made by the prospective contractor/ vendor and shortlist the contractor/ vendor for further discussions. Detailed discussions on commercial and other



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terms and conditions to float the tender enquiry and subsequently, finalise the Work Order shall be held with shortlisted vendors. The detailed terms and conditions for such a contract shall be mutually agreed upon.

3. Brief Description of EoI Process:

The response shall necessarily be accompanied with details on company background, product profile, system proposed along with its technical details, reference list of customers, performance certificate from customers, product data sheet (if any) and annual audited financial reports for last 3 (three) years including auditor's report.

In case any further information is needed, vendors can contact CFFP.

The applicant shall submit their offer with all annexures duly signed and stamped. Your response is to be sent to the following address:

**Dy. General Manager
ESR , M&S
Central Foundry Forge Plant
Bharat Heavy Electricals Limited
Ranipur, Haridwar – 249403,
Uttarakhand, India
Phone: +91 1334 281299
Mobile : +91-9412070548
Email: anuragkk@bhel.in**

Annexure – 1

Indicative Scope of Work

S. No.	Work Description
1	Study of design of 50MT Moving Collar Mould ESR including all assemblies, sub-assemblies, items. CFFP intent to keep the all mechanical parts as it is .
2	Designing renovated Cycloconverter by replacement of old or worn out cycloconverter by replacement with new parts and/or upgradation to state-of-art technology. All Drives and motors to be replaced.
3	Getting the new/renovated design (vendor to submit complete part list of all assemblies and sub-assemblies indicating sub-vendors wherever applicable) approved by BHEL
4	Supply and Installation of all electrical system, PLC and new control Desk
5	Supply and erection & commission of Automatic Melt Rate controller, Immersion Depth Controller
6	Any other part of assembly essentially required to be replaced (which can be discussed during the technical discussion)
7	Modification of all water and air pipeline. The work will be completed by BHEL in-house, however the design will be provided by the contractor/ vendor)
8	Transportation of material from origin to CFFP, BHEL Haridwar
9	Dismantling of existing Cycloconverter, Electrical & Electronic Equipment
10	Erection and commissioning (including supervision and manpower) of new/renovated system
11	Supply of 2 Nos. each Moving Collar Mould of Ø800mm, Ø1000mm & Ø1300mm
12	Testing and proving of the new/renovated system to meet BHEL's operational requirement and testing parameters
13	Applicant will provide list of mandatory and optional spares separately clearly indicating price of the same
14	Applicant will also provide guarantee of the established system and provide service for the same (period of guarantee/service to be specified)
15	Training of BHEL engineers to enable them to operate and maintain the Electrical/ Electronic/ PLC system