



MAHARATNA COMPANY

MATERIAL MANAGEMENT (PURCHASE)
CENTRAL FOUNDRY FORGE PLANT, BHEL HARDWAR

RANIPUR, HARIDWAR (INDIA) – 249403

Phone No.+91-1334-281724/284060, FAX No. .+91-1334-281862

e-mail : manoj26@bhel.in; akaithal@bhel.in; amit.shrivastav@bhel.in

Sub: Notification for Expression of Interest.

Tender Reference Number: 20203007

Tender ID: 2020_BHEL_280_1

Dear Sir / Madam,

We are pleased to invite offer in **E-Tender** as per enclosed notification for Expression of Interest for the under mentioned items.

Material Description	Opening date and time.
1. Chromite Sand Separator (Capacity approximately 5 TPH) 2. Thermal Reclamation for Silica Sand (Capacity approximately 3 TPH) 3. Thermal Reclamation for Chromite Sand (Capacity approximately 1 TPH)	16.12.2020 at 2:00 PM (IST)

Please visit www.bhel.com or www.hwr.bhel.com or <https://eprocurebhel.co.in/nicgep/app> for more details, & corrigendum if any for the tender enquiry.

Offers are to be submitted by vendor online in E-tender portal at <https://eprocurebhel.co.in/nicgep/app> . For issue regarding submission of bid in this site, Vendor can contact customer care of this site at email : support-eproc@nic.in ,addressed to 0120-4001002, 0120-4001005 and 0120-6277787.

Offer to be submitted only on e-procurement portal. Hard copy of offer is not required to be submitted to CFFP. Any offers received in Hard copy shall not be accepted and straightaway rejected by CFFP.

Before proceeding for submitting quotation in e-portal, supplier to ensure that they are having a valid Digital Signature Certificate (DSC).

Unregistered vendors can fill the SRF (Supplier Registration Form) of their company **online** at our website www.bhel.com or www.hwr.bhel.com. They can fill the SRF of their company at this link: <https://supplier.bhel.in/>

Yours Faithfully,
For & On behalf of CFFP, BHEL, Hardwar

(Manoj Kr. Yadava)
Manager (Purchase)

Note:

1. Corrigendum if any shall not be published, kindly refer websites for any changes.
2. Details of Notification for Expression of Interest (EOI) enclosed.



FOUNDry TECHNOLOGY
CENTRAL FOUNDRY FORGE PLANT
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR, UTTARAKHAND
INDIA-249403
Phone No. +91-1334-281699
e-mail: ansudhakar@bhel.in

Date: 10.11.2020

NOTIFICATION FOR EXPRESSION OF INTEREST

EOI for THERMAL RECLAMATION PLANT FOR SILICA AND CHROMITE SAND WITH CHROMITE SAND SEPARATOR

Central Foundry Forge Plant (CFFP), BHEL, Hardwar manufactures variety of jobs/castings having different level of complicity in various types of steel grades like Plain carbon, Alloy Steel, Stainless steel, Super critical grades etc. The Manufacturing of a casting broadly includes two major activities namely moulding and upgradation. CFFP has an extensive set up for molding operation and uses silica and chromite sand for moulding purpose. The silica sand is mostly used for backing whereas chromite sand is used for facing operation. The binder is alkaline phenolic binder alongwith ester based catalyst.

Once the casting is poured and the same is shaken out of the sand, the knocked-out sand consists of (a) sand lumps which is mostly from the backing region of mould (b) loose sand containing a mix of silica and chromite. CFFP has a mechanical reclamation unit for retrieving the silica sand from **knocked out sand lumps**. On an average, annually around 14000 MT (1200 MT/month) of loose sand is generated from the knocked-out molds. The approximate content of Chromite sand in knocked out loose sand is 14-16%.

Hence, CFFP proposes to set up a thermal sand reclamation plant along with chromite sand separator to thermally reclaim both chromite and silica sand to make them useful as fresh sand.

A) Brief description of proposed plant:

1. Chromite sand separator (Capacity approximately 5 TPH):

The knocked out loose sand will be transferred to a storage silo of proposed plant from where it will be fed to a chromite separator for separation and subsequent feeding of chromite and silica sand to respective reclamation plants.

2. Thermal reclamation for Silica sand (Capacity approximately 3 TPH):

The separated silica sand from the chromite separator will be the input for this unit for further processing to obtain reclaimed fresh silica sand into the designated bunkers.

3. Thermal reclamation for Chromite sand (Capacity approximately 1 TPH):

The separated chromite sand from the chromite separator will be the input for this unit for further processing to obtain reclaimed fresh chromite sand into the designated bunkers.

B) Generic conditions and inputs:

- 1) All sand transport mechanism shall be pneumatic only.
- 2) The proposed plant shall comply with all the legal and environmental norms as specified by the Government of India.
- 3) Necessary safety features must be incorporated.
- 4) BHEL will be able to supply natural gas for thermal reclamation plants.
- 5) The total setup of the plant shall be confined to the designated area in the attached layout.
- 6) Vendor to specify the following requirements:
 - a) Input power supply
 - b) Natural Gas requirement

- c) Compressed air requirement
- d) Water requirement
- e) Any other requirements, vendor to specify.

C) Pre-Qualification Criteria:

- 1) Vendor must be a manufacturer of chromite separator plant as well as thermal reclamation plant for silica sand & chromite sand.
Indian vendors to specify whether belongs to class I or class II supplier for thermal reclamation plant, as per government of India order NO.45021/2/2017-pp(BEII) DATED 4th June 2020 (copy enclosed).
- 2) Vendor must have supplied all the three units i.e. Chromite Separator, Silica Thermal Reclamation and Chromite Thermal Reclamation units as an integral plant and must submit the proof of its credentials

OR

Vendors who have supplied Chromite Separator, Silica Thermal Reclamation and Chromite Thermal Reclamation Units (independently) to different customers, but satisfying all other conditions of the technical specification within twelve years from the date of tender enquiry.

- 3) Vendor must provide proof of successful installation and operation of all the three units (chromite separator+ Thermal Reclamation of chromite and silica sand) for a minimum period of one year from the date of commissioning in line with point 2.

Interested parties are requested to submit their expression of interest along with the following:

- a. Documents related to (C) Pre-Qualification Criteria for evaluation of their offer in line of point A & B.
- b. Organization setup.
- c. Planning & Designing for execution of State of the art thermal sand reclamation plant as described in introduction above.
- d. Budgetary quote for carrying the entire work making first silo for collecting used sand to deposition of silica sand & chromite sand at separate location through thermal reclamation.

Arjun