



BHARAT HEAVY ELECTRICALS LIMITED
HEEP: HARDWAR-249 403 (UK)
Fax: 01334-226462, Phone: 01334-285304
E-mail: pkbansal@bhelhwr.co.in;

Tender no: PPX-F&HE/EOI/WT/2016-17/010

Due Date: 09/07/2016

Notice for Expression of Interest for empanelment of New Vendors

The Heavy Electrical Equipment Plant (HEEP) located in Haridwar, is one of the major manufacturing plants of BHEL. The core business of HEEP includes design and manufacture of large steam and gas turbines, turbo generators, hydro turbines and generators and so on.

We are looking for reputed vendors having capability for supplying following materials-

Sl.	Description	Probable Sizes	Annual Requirement	Unit	Pre-Qualification Requirements
1	Nodular Cast Iron Electrode	Dia 2.5 mm	1000	NO	Annexure- I
		Dia 3.2 mm	2100		
		Dia 4 mm	1250		

Contact persons:

Mr. Vinay Kumar Soni
Designation: Sr. Engr (PPX-F & HE)
Email: vinaysoni@bhelhwr.co.in
Phone No: +91 1334-281478
Mobile: +91 8194081110

Mr. Ran Singh Chauhan
Designation: Sr. Mgr (PPX-F & HE)
Email: rschn@bhelhwr.co.in
Phone No: +91 1334-281478
Mobile: +91 9410395890

The offers received will be technically evaluated by BHEL & successful short listed parties will be asked to submit their detailed Techno-Commercial offers through formal NIT/Enquiry for our future requirements. Vendors shall confirm that there is no deviation with respect to BHEL Specifications. However deviations, if any are to be listed as a separate attachment. The offers that do not meet the substantial requirements of our specifications are liable to be ignored.

Following documents are to be necessarily filled and submitted along with the technical offer:

1. Details/ Documents in support of Specification/PQR (**Annexure-I up-loaded**)
2. Supplier/Vendor Registration Form- Go through online supplier registration portal <https://supplier.bhel.in>. After filling the online registration form send the copy of same along with your offer within due date.
3. Details of Manufacturing Facility
4. Company Profile.
5. Financial report of the company.
6. Past experience along with documentary proof.



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Only Technical BID along with the documents mentioned above should be sent and the envelope containing the offer shall be duly sealed and super scribed as **“Technical Offer for (ITEM NAME) AGAINST Tender No. PPX-F&HE/EOI/WT/2016-17/010”**

Due Date-09.07.2016, SUBMITTED BY (Name of company)”

- This notification shall be published on www.bhel.com, www.tenders.gov.in and www.bhelhwr.co.in
- Last date for downloading tender documents shall be 08.07.2016 till 1700 Hrs.(IST). Tenders will be received up to 13:45 Hrs. (IST) on 9.07.2016 will be considered and opened on the same day at 14:00 Hrs. (IST) in the Tender Room BHEL HEEP, Haridwar.
- Technical Offers complete in all respect must be addressed to “Shri P K BANSAL, AGM (PPX-F)”.
- EMD & Tender fee are not applicable.
- The Quotation should be from the Principal / Original Manufacturer, failing which the quotation may likely to be ignored. In Case the quotation is submitted through agent, the quotation must accompany original authorization letter.
- Late offers will not be considered in any case. BHEL will not be responsible for any type of postal delay / incomplete information from vendor.
- Amendments / Corrigendum, if any, will be hosted on our web site only.

For any further details please log on to www.bhel.com or www.tenders.gov.in or www.bhelhwr.co.in

(P K BANSAL)
AGM (PPX- F & HE)



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Pre Qualification Requirement

Nodular Cast Iron electrode E NiFe-CI as per specification WTX-0014 (Dia-2.5mm,3.15mm, 4.0mm)

- a. Vendor to submit sample of electrode to BHEL, WRI, Trichy for chemical & mechanical testing as per specification WTX-0014. However for testing method ASME SEC-IIC will be followed. Vendor to submit this successful test report to BHEL, Hardwar.
- b. Based on successful chemical & mechanical test at WRI, BHEL, Trichy, development order will be placed for checking usability of electrode at shop floor.
- c. After satisfactory shop performance feedback of the electrode based on development order, vendor will be enlisted as approved vendor at BHEL, Hardwar.

Note: All documents submitted must be in English language only.

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SMAW ELECTRODE FOR NODULAR CAST IRON REPAIR WELDING

1.0 SCOPE

This specification covers the requirements of SMAW Electrodes used for weld repair of Nodular Cast Iron Castings.

2.0 CODIFICATION

Dia 2.5 X 350mm	HW7799992174
Dia 3.2 X 350mm	HW7799992182
Dia 4.0 X 350mm	HW7799992190

3.0 COMPLIANCE WITH NATIONAL & INTERNATIONAL STANDARD

Assistance has been taken from ASME Sec. II-C in preparing the specification.

4.0 CHEMICAL COMPOSITION

Chemical Composition of deposited weld metal, when tested in accordance with ASME SEC II-C, SFA 5.15 shall conform to the following requirement.

Element	Min.(%)	Max.(%)
C	-----	1.50
Si	-----	4.00
Mn	-----	1.00
S	-----	0.03
Ni	45.00	60.00
Al	-----	1.00
Cu	-----	2.50
Fe	Balance	

5.0 MECHANICAL PROPERTIES

The following all weld mechanical properties shall be obtained after welding and slow cooling to room temperature.

- Yield strength (at 0.2 offset) - 300 MPa(Min)

			Name	Sign	Date
		Worked	B.S.Arora	B.S.A.	12.4.08
AgreeDeptt	Name	Sign & Date	Checked/Supervised	A.K.Garg	12.04.08
		Approved	Head of Welding Technology (I.Ram)		
		Prepared	Issued	Date	
		WTX	WTX	12.04.2008	

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- Tensile Strength - 400 MPa(Min)
- % Elongation - 15% (Min)
- Hardness - 150-220 BHN at Room Temp.

6.0 FREEDOM FROM DEFECTS

Weld-metal shall be free from inclusions and cracks.

7.0 TEST CERTIFICATES

The supplier shall submit 5 copies of test certificates giving the following information along with delivery.

7.1 BHEL REFERENCE

- 7.1.1 PO Number.
- 7.1.2 Specification No.

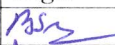
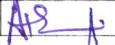

7.2 SUPPLIER REFERENCE

- 7.2.1 Supplier Name and Emblem.
- 7.2.2 Chemical Analysis
- 7.2.3 Mechanical Properties.
- 7.2.4 Freedom from defects as per clause 6.0
- 7.2.5 Size/Length
- 7.2.6 Batch No.
- 7.2.7 Date of manufacture.
- 7.2.8 Others.

8.0 SELECTION AND PREPARATION OF TEST SAMPLE

The selection of test samples for chemical composition and mechanical properties shall be done as follows:

- Electrodes of each size shall be taken from one or more than one packet from each batch no. for carrying out chemical and mechanical properties testing.

			Name	Sign	Date
		Worked	B.S.Arora		12.4.08
AgreeDeptt	Name	Sign & Date	Checked/Supervised	A.K.Garg	 12.04.08
			Approved		
			Head of Welding Technology (I.Ram)		
		Prepared	Issued	Date	
		WTX	WTX	12.04.2008	

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- Test sample for chemical analysis shall be made and tested according to ASME Sec II-C.
- Weld metal shall be deposited on Nodular Cast Iron test plate in the groove for preparing all weld tensile sample for mechanical properties testing.
- General guidance of ASME Sec II-C shall be followed for carryout All weld Tensile sample testing and weld deposit undiluted hardness measurement.

9.0 MARKING:

Party shall print following information on each carton.


- Brand Name
- Standard Size.
- Batch No. and Date of manufacture.
- Quantity and net weight.

10.0 PACKING

Electrodes shall be supplied in a seaworthy & tight packing to avoid any damage / exposure to atmosphere during handling, transit & storage.

11.0 ACCEPTANCE

At the option and the expense of the purchaser any or all of the Test requirements of this specification may be used as a basis for acceptance of the products covered by this specification.

			Name	Sign	Date
		Worked	B.S.Arora		12.4.08
Agree Deptt	Name	Sign & Date	Checked/Supervised	A.K.Garg	12.04.08
			Approved Head of Welding Technology (I.Ram)		
			Prepared WTX	Issued WTX	Date 12.04.2008

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RECORD OF CHANGES

			Name	Sign	Date
			Worked	B.S.Arora	12.4.07
AgreeDeptt	Name	Sign &Date	Checked/Supervised	A.K.Garg	12.04.08
			Approved		
			Head of Welding Technology (I.Ram)		
			Prepared	Issued	Date
			WTX	WTX	12.04.2008