



BHARAT HEAVY ELECTRICALS LIMITED
HEEP: HARDWAR-249 403 (UK)
Fax: 01334-226462, Phone: 01334-284570
E-mail: ajaykumar.gupta@bhel.in

Tender no: PPX-F&HE/EOI/WT/2019-20/003

Due Date: 21/08/2019

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-

SN	MAT.CODE	Description	Average annual Consumption
1	HW7711297980	NICKEL AND NICKEL ALLOY COVER D WELDING ELECTRODE SPEC: HW7711297 REV: 02 SIZE: 3.15X350 DIM.: DXL	10000 No
2	HW7711297971	NICKEL AND NICKEL ALLOY COVER D WELDING ELECTRODE SPEC: HW7711297 REV: 02 SIZE: 4X350 DIM.: DXL	4000 No
3	HW7711297963	NICKEL AND NICKEL ALLOY COVER D WELDING ELECTRODE SPEC: HW7711297 REV: 02 SIZE: 5 X350 DIM.: DXL	5000 NO
4	HW7711297998	NICKEL AND NICKEL ALLOY COVER D WELDING ELECTRODE SPEC: HW7711297 REV: 02 SIZE: 2.50 X 350	5000 nO
5	HW7799991364	NICKLE & NICKLE ALLOY FILLER WIRE (IN SPOOL) GMAW PROCESS- ER NICR-3 AS PER ASME SECTION II-C , SFA 5.14/DIN 1736, SG-NICR20NB. OR K TYPE WITH ADOPTOR. SPEC: ASME SECTION-IIIC REV: ?? SIZE: 1.2 DIM.: DIA IN MM GRADE: -	300 kg

Contact persons:

Mr. Vinay Kumar Soni
Designation: Dy. Mgr
(PPX-F & HE)
Email: vinaysoni@bhel.in
Phone No: +91 1334-281478

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.



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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.



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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/2019-20/003**

Due Date-21.08.2019, SUBMITTED BY (Name of company)”

- This notification shall be published on www.bhel.com, and www.bhelhwr.co.in
- Last date for downloading tender documents shall be 20.08.2019 till 1700 Hrs.(IST). Tenders will be received up to 13:45 Hrs. (IST) on 21.08.2019 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 A K Gupta, AGM (AIX and 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.bhelhwr.co.in

(A K Gupta)
AGM (AIX & PPX-F)



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ANNEXURE-I

A. Specification HW7711297 (Welding Electrode- EN ISO 14172, E Ni 6082)

- a. This electrode is used for welding of various grades of creep resistant steels. Vendor must submit creep data in line with specification clause no 4(V). Creep testing must be carried out at NML, Jamshedpur/ BHEL R&D, Hyderabad / any other mutually agreed reputed agency.
- b. In case, vendor submits satisfactory creep data, vendor to submit sample of electrode to BHEL, WRI, Trichy for chemical & mechanical testing as per specification. Vendor to submit this successful test report to BHEL, Hardwar.
- c. In case of fulfilment of above two conditions, development order will be placed for checking usability of electrodes at shop floor.
- d. After satisfactory shop performance feedback of the electrode based on development order, vendor will be enlisted as approved vendor at BHEL, Hardwar.

Pre-Qualification Requirement (PQR)

(PMD: WT031)

**GMAW filler wire "ER NiCr-3 (In Spool) as per AWS 5.14 or
"SG-NiCr20N" bas per DIN 1736**

- a. This welding wire is being used for welding of various grades of creep resistant steels. Vendor must has to submit creep data as following:
Creep Rupture Strength: 112 N/mm² at 600°C for 10,000 Hrs
160 N/mm² at 600°C for 1000 Hrs
Creep testing must be carried out at NML, Jamshedpur/ BHEL R&D, Hyderabad / any other mutually agreed reputed agency.
- b. In case, vendor submits satisfactory creep data, vendor to submit sample of welding wire to BHEL/ WRI/ Trichy for chemical & mechanical testing as per specification. Vendor to submit this successful test report to BHEL, Hardwar.
- c. In case of fulfillment of above two conditions, development order will be placed for checking usability of electrodes at shop floor.
- d. After satisfactory shop performance feedback of the electrode, vendor will be enlisted as approved vendor at BHEL, Hardwar.

[Signature] 16/03/19
Ritender



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16/05/19
(Pitendra .kv)
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दिनांक एवं हस्ताक्षर SIGN & DATE		संस्थान मानक (हीप - हरिद्वार)		HW7711297																												
		PLANT STANDARD (HEEP - HARDWAR)		पृष्ठ का Page 1 Of 2																												
SUPERSEDES INVENTORY	<u>NICKEL AND NICKEL ALLOY COVERED WELDING ELECTRODE</u>																															
सामग्री सूची संख्या को	1.0 SCOPE This Specification covers the quality of general purpose nickel alloy covered welding electrode as per EN ISO 14172-ENi6082 (NiCr20Mn3Nb).																															
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.	2.0 CODIFICATION																															
	i) Dia 2.50 x 350 HW 7711297998 ii) Dia 3.15 x 350 HW 7711297980 iii) Dia 4.00 x 350 HW 7711297971 iv) Dia 5.00 x 350 HW 7711297963																															
	3.0 CHEMICAL COMPOSITION.																															
	<table border="1"> <thead> <tr> <th>Elements</th> <th>Percent (Maximum)</th> </tr> </thead> <tbody> <tr><td>Carbon</td><td>0.10</td></tr> <tr><td>Manganese</td><td>2.0 to 6.0</td></tr> <tr><td>Iron</td><td>4.0</td></tr> <tr><td>Silicon</td><td>0.80</td></tr> <tr><td>Copper</td><td>0.50</td></tr> <tr><td>Phosphorus</td><td>0.02</td></tr> <tr><td>Sulphur</td><td>0.015</td></tr> <tr><td>Nickel</td><td>63.0 (Min.)</td></tr> <tr><td>Titanium</td><td>0.50</td></tr> <tr><td>Chromium</td><td>18.0 to 22.0</td></tr> <tr><td>Nb</td><td>1.5 to 3.0</td></tr> <tr><td>Molybdenum</td><td>2.0</td></tr> <tr><td>Other elements</td><td>0.50</td></tr> </tbody> </table>					Elements	Percent (Maximum)	Carbon	0.10	Manganese	2.0 to 6.0	Iron	4.0	Silicon	0.80	Copper	0.50	Phosphorus	0.02	Sulphur	0.015	Nickel	63.0 (Min.)	Titanium	0.50	Chromium	18.0 to 22.0	Nb	1.5 to 3.0	Molybdenum	2.0	Other elements
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स्वत्वाधिकार एवं गोपनीय इस प्रलेख में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की संपत्ति है। इसका प्रयोग एवं प्रसारण के बिना कम्पनी के हित में हानिकारक हो न सके। This document is the property of Bharat Heavy Electricals Limited. Its use and dissemination without the permission of the company is prohibited.	4.0 MECHANICAL PROPERTIES(AS WELDED)																															
दिनांक एवं हस्ताक्षर SIGN & DATE	i) Tensile strength : 600 MPa (Min.) ii) Yield strength at 0.2 % off-set : 360 MPa (Min.) iii) Elongation : 35% iv) Charpy V-notch Impact : 90 J (at 20 °C)																															
सामग्री सूची संख्या INVENTORY NO.	अनुवादक TRANSLATED BY	नाम NAME																														
	TSX	B. CHOUDHARY	निर्माणकर्ता WORKED BY	V K VERMA																												
	QAX	MALVINDER SINGH	जांचकर्ता CHECKED BY	B S ARORA																												
	सहमत विभाग AGREED DEPTT	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE	पर्यवेक्षणकर्ता SUPERVISED BY	H P ROY																											
P-3512	स्वीकृति : संस्थान मानक समिति			GP NO.																												
	APPROVED			2.62																												
	REV.NO. 02 Dt.08.03.2010	(SUPERSEDES)	निर्माण : PREPARED : WTX	जारी : मानक विभाग ISSUED : STANDARDS DIVISION	दिनांक : DATE : Jan 95																											

विनिर्माक एवं हस्ताक्षर SIGN & DATE		संस्थान मानक (हीप - हरिद्वार) PLANT STANDARD (HEEP - HARDWAR)		HW7711297 पृष्ठ का Page 2 of 2									
SUPERSEDES INVENTORY सामग्री सूची संख्या को	v) Creep Rupture Strength - 112 N/mm ² At Temperature 600°C for 10,000 hours. OR 160 N/mm ² At Temperature 600°C for 1,000 hours.												
COPYRIGHT AND CONFIDENTIAL The information on this documents is the property of Bharat Heavy Electrical. Limited It must not be used directly or indirectly in any way detrimental to the interest of the company	5.0 TEST CERTIFICATES The supplier shall submit 3 copies of test certificates, giving the following information's alongwith dispatch documents.												
	i) Our purchase order number. ii) Suppliers name. iii) Chemical composition. iv) Mechanical properties. v) Size/ length. vi) Consignment Identification.												
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	7.0 PACKING : It should be dispatched in seaworthy and suitable packing to avoid any damage during handling, transit and storage.												
हस्ताक्षर एवं दिनांक SIGN & DATE	8.0 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.												
	9.0 REMARK The requirement is based on electrode NICRO-82 of M/S Thussen, Germany or its equivalent.												
सामग्री सूची संख्या INVENTORY NO.	REV. NO. 02	<table border="1"> <tr> <td>निर्माणकर्ता WORKED BY</td> <td>V K VERMA</td> <td></td> <td>08.03.10</td> </tr> <tr> <td>जांचकर्ता CHECKED BY</td> <td>B S ARORA</td> <td></td> <td>9.3.10</td> </tr> </table>				निर्माणकर्ता WORKED BY	V K VERMA		08.03.10	जांचकर्ता CHECKED BY	B S ARORA		9.3.10
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