



# Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirppalli-620014, TAMIL NADU, INDIA

Capital Purchase & Spare Parts / Materials Management / Mfg.

<b>ENQUIRY</b>		Phone: +91 431 257 79 39	
NOTICE INVITING TENDER		Fax : +91 431 252 07 19	
		Email : <a href="mailto:psivasub@bheltry.co.in">psivasub@bheltry.co.in</a>	
		Web : <a href="http://www.bhel.com">www.bhel.com</a>	
<b>NIT</b>	<b>Enquiry Number:</b>	<b>Enquiry Date:</b>	<b>Due date for submission of quotation:</b>
	2611200039	01.03.2012	16.04.2012
<p>You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order.</p> <p>Please note that under any circumstances both <b>delayed offer</b> and <b>late offers</b> will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the date of tender opening.</p>			

Item	Description	Quantity / Kg.	Dely.Date
10	Bare ferritic SAW wire Dia 4.0 mm as per specification WCPS 803 Rev 03 Batch testing at supplier's works.(to be downloaded from web site <a href="http://www.bhel.com">www.bhel.com</a> or <a href="http://tenders.gov.in">http://tenders.gov.in</a> )	9000	15.08.2012.
20	Bare ferritic SAW wire Dia 5.0 mm as per specification WCPS 803 Rev 03 Batch testing at supplier's works.(to be downloaded from web site <a href="http://www.bhel.com">www.bhel.com</a> or <a href="http://tenders.gov.in">http://tenders.gov.in</a> )	9000	15.08.2012
30	Ferritic SAW flux for wire as per specification WCPS 803 Rev 03 Batch testing at supplier's works.(to be downloaded from web site <a href="http://www.bhel.com">www.bhel.com</a> or <a href="http://tenders.gov.in">http://tenders.gov.in</a> )	30000	15.08.2012

**Important points to be taken care during submission of offer:**

1. Submit your offer in TWO PART BID system as per annexure enclosed.
2. BHEL reserves the right to go for a Reverse Auction (RA) instead of Opening the Price Bid submitted, which will be decided after techno-commercial evaluation.
3. Test Certificate, Guarantee Certificate and Third Party Inspection as per WCPI should be provided.

BHEL's General guidelines / instructions including Commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2611200039".

Tenders should reach us before 14.00 hours on the due date.  
Tenders will be opened at 14.30 hours on the due date  
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,  
For BHARAT HEAVY ELECTRICALS LIMITED

MANGER / SP & WC / MFG



ENQUIRY  
(IMPORTS)

# BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )  
HIGH PRESSURE BOILER PLANT  
PURCHASE DEPARTMENT - FOSSIL BOILERS  
THIRUCHIRAPALLI - 620014  
TAMILNADU (INDIA)

Page  
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PHONE :2577629  
GRAMS : BHARATELEC  
FAX NO: 2520719  
E-mail: srchandran@bheltry.co.in  
Web:

<b>Vendor Code :</b> 91013  <b>Vendor Name :</b> BOHLER WELDING GROUP INDIA PVT.LTD., B.201,UNIVERSAL BUSINESS PARK, CHANDIVLI FARM ROAD, OFF SAKI VIHAR ROAD, SAKI NAKA, MUMBAI India PIN- 400072	<b>Enquiry No</b>  2611200039 - 29	<b>Enquiry Date</b>  01.03.2012	<b>Due Date for Quotation</b>  16.04.2012
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	Bare ferritic SAW wire Dia 4.0mm as per the specification WCPS 803 Rev 03.Batch testing at supplier's works. Bare Ferrictic SAW wire Dia 4.0 mm	KG	9000.000	9,000.00	15.08.12
20	Bare ferritic SAW wire Dia 5.0mm as per the specification WCPS 803 Rev 03.Batch testing at supplier's works. Bare Ferrictic SAW wire Dia 5.0 mm	KG	9000.000	9,000.00	15.08.12
30	Ferritic SAW flux for wire as per the specifation WCPS 803 Rev 03 . Batch testing at supplier's works. Bare Ferrictic SAW Flux	KG	30000.000	30,000.00	15.08.12

**General Note:**


- 1) Please submit your detailed offer in TWO PART BID system as per annexure enclosed.
- 2) BHEL shall have the right to go for REVERSE AUCTION instead of sealed tender bid which will be decided after tender evaluation.
- 3) Test Certificate, Guarantee Certificate and Third Party Inspection as per WCPI should be provided.

**Enclosures:**

"LD clause has to be confirmed without fail."

"Payment to vendors will be made only thro E-Payment mode"

The offers should reach us 30 minutes before the time of opening of tenders.  
The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening.Late and delayed offers are liable to be rejected.

Yours faithfully,  
For **BHARAT HEAVY ELECTRICALS LIMITED**  
  
MANAGER / PURCHASE  
(FOSSIL BOILERS)  
Yours faithfully,

BHEL, Indhy



**BHARAT HEAVY ELECTRICALS LIMITED**  
**TIRUCHIRAPALLI-620 014.**

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**WCPS - 803**

**Specification For Bare (Cu - Coated) Ferritic Electrode  
 And Flux For Submerged Arc Welding(SAW) of  
 20MnMoNi 55**

**WCPS 803**

Rev. No.	00	01	02	03	04	05
Prepared By	* SIGNED 14/11/99	-Sd- V.S 02/10/09	-Sd- S.K 13/05/11	<i>S.K</i>		
Reviewed By	*	-Sd- S.S.R 21-10-09	-Sd- M.S 13/05/11	<i>M.S</i> 20/02/12		
Approved By (BHEL)	*	-Sd- S.C 21-10-09	-Sd- M.S 13/05/11	<i>M.S</i> 09/02/12		
Approved By (CUSTOMER)		"Approved -Sd- M.K.S (NPCIL) 10-11-09"	"Approved -Sd- M.K.S (NPCIL) 23/05/11"	<i>M.K.S</i> 14/02/12		

**न्यूक्लियर पावर कॉर्पोरेशन ऑफ इंडिया लिमिटेड**  
**NUCLEAR POWER CORPORATION OF INDIA LTD.**

- अनुमोदित / APPROVED
- टिप्पणी के अनुसार अनुमोदित / APPROVED AS NOTED
- संशोधन को आगे बढ़ाएं / रोकें ।  
PROCEED WITH / HOLD FABRICATION
- अंतिम ट्रांसपैरेन्सी एवं प्रतियां भेजें ।  
SEND FINAL TRANSPARENCIES & PRINTS
- संशोधन करें एवं अनुमोदन के लिए पुनः प्रस्तुत करें।  
REVISE AND RESUBMIT FOR APPROVAL

जांचकर्ता CHECKED BY	समीक्षकर्ता REVIEWED BY	अनुमोदन कर्ता APPROVED BY
<i>M.K.S</i> 14/2/12	<i>M.S</i> 20/2/12	<i>M.K.S</i> 14/02/12

किंवा जांचकर्ता कार्य का अनुमोदन आपूर्तिकर्ता को विनिर्देशनों के अनुसार आपूर्ति के उत्तरदायित्व से मुक्त नहीं करता ।  
 The Approval of the work to be done does not relieve the supplier of responsibility of supply according to specifications.



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### 1.0 Qualifying Criteria

- 1.1 Offers, from such vendors only, will be considered, who have manufactured, tested and supplied the SAW bare ferritic electrode, in the recent past five years period.
- 1.2 A test certificate of a batch, supplied within the last five years should be enclosed with the Offer. The test certificate should contain chemical analysis & mechanical properties for SAW bare ferritic electrode. Offers without such a test certificate will not be considered.
- 1.3 Notwithstanding the qualifying Offers without such a criteria, BHEL/NPCIL shall be allowed to visit the vendor's manufacturing and testing centre for further evaluation, if required.

### 2.0 SCOPE

- 2.1 This specification prescribes the requirements for bare (copper - coated) ferritic electrode and flux for submerged arc welding of 20MnMoNi 55 material.

### 3.0 ELECTORDE

#### 3.1 General requirements

- 3.1.1 The electrode shall be manufactured and controlled according to ASME Sec II - Part C and ASME Section III NB Div I.
- 3.1.2 Supply shall be tested and certified by the following inspection agencies:  
Inland sources -- BHEL and NPCIL  
Other sources --- TUV(Nodd),SGS,BVQ.
- 3.1.3 The entire quantity ordered shall be supplied in minimum number of melts only.
- 3.1.4 Batch test TC to be submitted to BHEL and only after BHEL's approval/acceptance of TC, the supply should be effected.
- 3.1.5 BHEL/NPCIL shall be allowed to visit the vendor's manufacturing and testing centre for further evaluation, if required.

#### 3.2 Chemical Composition

- 3.2.1 The chemical composition of the electrode shall generally conform to classification EG of SFA 5.23 of Section II Part 'C' of the current ASME Code with the following restrictions:

C	0.12 max%	Si	0.15% max
Mn	1.40 - 1.60 %	P	0.010%max
Ni	0.90 - 1.20%	S	0.010%max
Cu	0.06% max.	Mo	0.55- 0.70%

Elements Cr, Ti, Al, V, Ta, Sn, N & Co shall be analysed and reported.



### 3.3 Finish and Temper

#### 3.3.1 Finish

Electrodes shall have a smooth finish, free from slivers, depressions, seams, laps, scratches, scale or other foreign matter that would adversely affect the welding characteristics, the operation of the welding equipment, or the properties of the deposited weld metal.

#### 3.3.2 Temper

Electrodes shall be suitable for uniform uninterrupted feeding on automatic or semi automatic welding equipment

### 3.4 Winding Requirements

3.4.1 Liners used in coils with support are for the purpose of preventing damage or distortion during normal handling and use of electrode upon them. Liners shall be sufficiently clean and dry to maintain the cleanliness of the electrode.

3.4.2 Each coil shall be of only one heat and be of continuous length of electrode.

3.4.3 A spooled electrode shall be closely wound in layers with or without gap between layers and without kinks, waves, sharp bends which would interfere with the free feeding of the electrode or any unwinding of the spool. The free end of the spooled electrode shall be secured and identified to enable easy location.

3.4.4 The cast and helix of the electrodes shall be such as not to interfere with the uniform, uninterrupted feeding of the electrode on cast and helix shall be conforming to the following.

Cast	380 / 420 mm.
Helix	Max. 25 mm.

**3.5 Packaging****3.5.1 Coil Size**

Inner diameter	300 mm
Width	100 mm
Approx. weight	25 kg.

3.5.2 Each coil shall be wrapped with plastic sheet and packed in cardboard boxes coil. The boxes shall be packed in sea-worthy wooden cases.

3.5.3 An identification tag shall be attached to each coil in addition to the label put on every spool and cardboard box.

**3.6 Marking**

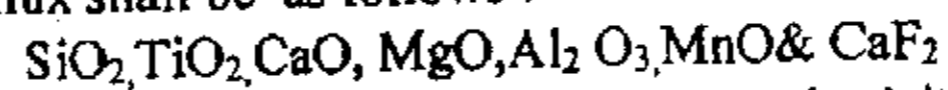
3.6.1 Each spool and the outside of each package shall be legibly marked with the following information.

1. Classification and specification numbers.
2. Supplier's name and trade designation.
3. Electrode size and net weight.
4. Lot, control or heat number.

**4.0 FLUX**

1 Fused and ground or Agglomerated.

2. The Flux shall be of appropriate composition, basicity, bulk density and Grain size so as to be suitable for multi-pass welding and buttering of 20MnMoNi 55 material. The main constituents of the flux shall be as follows :-



The percentage of above constituents of the flux, basicity and particle size shall be analysed and reported in the test certificate

3. The diffusible hydrogen content of weld metal deposited using this flux shall not exceed 5ml/100 grams.

4. The flux shall produce acceptable radiographic quality welds in 20MnMoNi 55 materials.

5. The Flux shall produce well contoured beads and shall exhibit excellent wetting characteristics ensuring smooth bead to bead as well as bead to sidewall merging. The Flux shall have high current carrying capacity suitable for currents up to 800 Amps. and shall exhibit excellent slag release allowing continuous multi-pass butt welding.

6. Supply shall be tested and certified by the following inspection agencies:

Inland sources -- BHEL and NPCIL

Other sources --- TUV(Nodd), SGS, BVQ.



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#### 4.1 General Requirements

- 4.1.1 The flux shall be manufactured and controlled according to ASME Sec II - Part C and ASME Section III NB Div I.
- 4.1.2 The entire ordered quantity shall be supplied in minimum number of batches only.

#### Tests

- 5.1 Test Coupons shall be prepared as per Section ASME IIC using the specified wire flux combinations.
- 5.2 The tests as mentioned below shall be carried out on specimen prepared from the weld test coupon.

#### 5.3 Composition of Pure Weld Metal

The chemical composition of pure weld metal shall be generally conforming to EG of SFA 5.23 Section II Part 'C' of the current ASME Code with the following limitations.

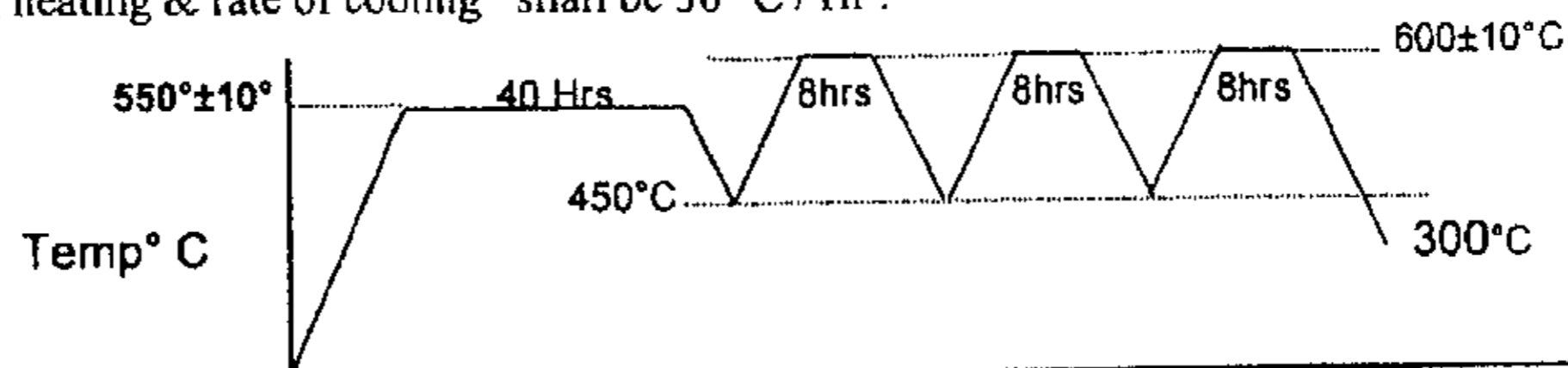
C	0.08-0.10 %
Mn	1.4 - 1.6 %
Si	0.50% max
P	0.015% max
S	0.008% max
Mo	0.50-0.60%
Ni	0.90 - 1.0%
Cu	0.06% max



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#### 5.4 Heat Treatment

The weld test coupons, shall be subjected to the following heat treatment. Maximum rate of heating & rate of cooling shall be 30 °C / Hr .



#### 5.5 Mechanical Properties of All Weld Metal

5.5.1 Mechanical tests prescribed in 5.5.3 shall be conducted on specimens which have undergone a heat treatment indicated in 5.4.

5.5.2 The weld test coupons shall be subjected to the following tests:

- a) One tensile test along welding direction, each at room temperature and at 350°C and one tensile test in the through thickness direction (test temperature to be reported).
- b) Charpy V - notch impact test shall be conducted at six different temperatures including -15°C and +18°C to fully define upper and lower energy shelves. The upper energy shelf shall have 100% shear fracture and lower energy shelf a maximum of 10% shear fracture. The test reports shall include absorbed energy, per cent shear fracture and lateral expansion plotted against temperature. The values shall meet the requirements of 5.5.3.
- c) The transverse side bend tests (full thickness).
- d) Drop weight test.

**5.5.3 Mechanical properties of all weld metal****5.5.3.1 Tensile Test**

	RT	350°C
Tensile strength N/mm <sup>2</sup>	580 - 700	510 min.
Yield strength N/mm <sup>2</sup> (0.2% proof stress)	430 min.	363 min.
% Elongation in 50 mm Gauge length	19 min.	16 min.
% Reduction in area	45 min.	To be reported.

**5.5.3.2 Impact Strength**

ISO-V impact specimens tested at -15°C and + 18°C shall exhibit following minimum properties.

a. Average of 3 specimen (at -15°C)	41J
Min. Single value (at - 15°C)	34J
b. At +18°C min. Impact strength	68J
Lateral expansion	0.9 mm min.

5.5.3.3 Charpy V transition curves shall be established using the minimum absorbed energy, lateral expansion and % shear fracture values against temperatures as specified in 5.5.2 (b). The Cv curves shall comply with the values in 5.5.3.2 (a) and (b).



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5.5.3.4 The Nil ductility transition temperature as determined by drop weight test as per ASTM-E-208-84a shall not be higher than -15°C.

5.5.4 **Side bend Test**

5.5.4.1 The specimen shall withstand being bent cold through 180° without cracking on the outside of the bent portion, using a mandrel of diameter of 4 x thickness.

5.6 The chemical and mechanical properties of the pure weld metal as specified above shall be obtained from a weld deposit made using the proposed flux in conjunction with a wire meeting the requirements of 3.2. The welding and testing procedures used shall be subjected to Purchaser's approval. The welding and testing specified herein are applicable to each batch/lot of welding consumable.

5.7 **Packaging and Storage**

5.7.1 Flux shall be suitably packaged to insure against damage during shipment or storage under normal conditions.

5.7.2 A flux in the original unopened package shall withstand storage under normal conditions for at least four years without such storage affecting its welding characteristics or the weld properties.

5.7.3 The flux shall be packed in water tight Plastic / Steel drum container of 50 kg(Max) per drum/container.

6.0 **GENERAL CONDITIONS**

6.1 The offers from vendors should contain a "LIST OF DEVIATIONS" in which the deviations against the technical specification, citing the clause number of the BHEL specification, should be explicitly listed.

6.2 The acceptance / non-acceptance of the deviations and the offers will be based on review by the customer or BHEL.

## INSPECTING AUTHORITIES ( As on 31/3/2011)

<u>NAME OF THE AUTHORITY</u>	<u>AREA OF OPERATION</u>
1. Director of Boilers, Andhra Pradesh	Andhra Pradesh
2. Chief Inspector of Boilers, Arunachal Pradesh	Arunachal Pradesh
3. Chief Inspector of Boilers Assam	Assam
4. Chief Inspector of Boilers Bihar.	Bihar
5. Chief Inspector of Boilers Chattisgarh	Chattisgarh
6. Chief Inspector of Boilers, Delhi.	N.C.T.D.
7. Chief Inspector of Boilers, Goa.	Goa
8. Director of Boilers, Gujarat.	Gujarat, Daman & Diu and Dadra & Nagar Haveli
9. Chief Inspector of Boilers, Haryana.	Haryana & Chandigarh
10. Chief Inspector of Boilers, Himachal Pradesh.	Himachal Pradesh
11. Chief Inspector of Boilers,, Jharkhand.	Jharkhand
12. Director of Boilers, Karnataka.	Karnataka
13. Director of Boilers, Kerala.	Kerala
14. Director of Boilers, Madhya Pradesh.	Madhya Pradesh
15. Director of Boilers, Maharashtra.	Maharashtra
16. Chief Inspector of Boilers, Meghalaya	Meghalaya
17. Chief Inspector of Boilers, Manipur	Manipur

18. Chief Inspector of Boilers, Mizoram	Mizoram
19. Chief Inspector of Boilers, Nagaland	Nagaland
20. Director of Boilers, Orissa	Orissa
21. Director of Boilers, Punjab	Punjab
22. Chief Inspector of Boilers, Labour Department, Government of Puducherry, Puducherry	Puducherry
23. Chief Inspector of Boilers, Rajasthan.	Rajasthan
24. Director of Boilers Tamil Nadu	Tamil Nadu
25. Chief Inspector of Boilers, Tripura	Tripura
26. Director of Boilers, Uttar Pradesh	Uttar Pradesh
27. Deputy Director of Factories & Boilers Uttarakhand	Uttarakhand
28. Chief Inspector of Boilers, West Bengal	West Bengal
29. M/s. TUV Nord Systems GmbH Co.KG. Langemarckstr 20 451141 Essen GERMANY.	All countries except India
30. M/s. Royal & Sunalliance Engineering, 17, York Street, Manchester, M2 3RS, ENGLAND	All countries except India
31. M/s. Japan Inspection Company Limited, No.10-7, 1-Chome, hatchobori, Chou-ku, Tokyo, 104-0032, Japan	All countries except India
32. M/s. S.G.S. Korea Company Limited, Industrial Division, 16 <sup>th</sup> FL, KT Pusan IT Center, 830-29, Beomil 2-Dong, Jung-Gu, Pusan, KOREA (601-706).	Korea & Japan

- |     |   |  |
|-----|---|--|
| 33. | M/s Bureau Veritas,<br>67-71, Boulevard du Chateau,<br>92200 Neuilly-sur-Seine,<br>FRANCE   | All countries except India.  |
| 34. | M/s. Lloyds Register of Verification Ltd.,<br>71, Fenchurch Street,<br>London EC 3M, U.K.   | All countries except India.  |
| 35. | M/s. Velosi Certificat ion Bureau Ltd.,<br>318a Kings Road, Clifton House,<br>Reading Berkshire, RG1 4JG,<br>United Kingdom                                     | All countries except India   |
| 36. | M/s TUV Rheinland Brandenburg P falz e.V.,<br>Am Grauen stein, D-51105 Klon,<br>Germany   | Europe, Japan, China &<br>Korea  |
| 37. | M/s Moody Interna tional Ltd.,<br>Cuckfield House, High Street,<br>Cuckfield, West Sussex,<br>RH 17 5EL, U.K.   | All countries except India   |
| 38. | Technischer Uberwachungs-Verein Saarland e.V.,<br>Am Tuev 1,<br>66280 Sulzbach,<br>Germany  | Europe   |
| 39. | M/s OOO "TekhnoLogicheskieEnergositime"<br>I. Kalinia St. Belgorod,308001<br>Russia   | Russia, China, Ukraine & USA   |
| 40. | M/s. Det Norske Veritas,<br>Veritasveien 1, P.O. Box 300,<br>N-1322, Hovik,<br>NORWAY   | Argentina, Australia, Austria, Belgium,<br>Brazil, Denmark, Finland, France,<br>Germany, Italy, Japan, Netherlands,<br>Norway, South Korea, Spain, Sweden,<br>Switzerland, U.K. and U.S.A. |
| 41. | M/s. Engi neering Bureau Franke<br>International,<br>55, Amurskaya St.,<br>Ukraine 49108  | Ukraine, Russia, Belarus, China ,<br>Uzbekistan, Poland, Belgium, Romania,<br>& Czech Republic   |
| 42. | M/ s. ARISE Boiler Inspection &<br>Insurance Company Risk Retention Group,<br>Grand Bay 1, 7000 South Edgerton Road,<br>Suite 100, Brecksville,<br>OH 44141 USA | Argentina, Austria, Canada, Brazil, France,<br>Germany, Italy, Malaysia, Netherlands,<br>Singapore, U.K. and USA   |
| 43. | Tata Projects Limited,<br>"Mithona Towers-I",1-7-80 to 87,<br>Opp. Wesley Co-Ed. Jr. College,<br>Prenderghast Road,<br>Secunderabad- 500 003, (India)           | All countries except India   |

44. M/s TUV SUD Industrie Service GmbH, All countries except India  
Wstendstr. 199,  
80686 Munich,  
Germany
45. M/s Germanischer Lloyd Industrial Services GmbH, All countries except India  
Steinhoeft 9,  
20459 Hamburg,  
Germany
- 46 M/s. TUV Thuringen e.V., Europe  
Business Division Steam and Pressure Technology,  
Melchendorfer Str. 64,  
99096 Erfurt,  
Germany

## GENERAL TERMS AND CONDITIONS OF RA

Against this enquiry for the subject item/system with detailed scope of supply as per enquiry specifications, BHEL may resort to "REVERSE AUCTION PROCEDURE" i.e., ON LINE BIDDING ON INTERNET.

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
3. BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact & get trained.
4. Business rules like event date, time, Start price, bid decrement, extensions etc. also will be communicated through service provider for compliance.
5. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to Participate in the event.
6. BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction.
7. Reverse auction will be conducted on scheduled date & time.
8. At the end of Reverse Auction event, the lowest bidder value will be known on the network.
9. The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.
10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice.

**Bharat Heavy Electricals Limited, Tiruchirapalli – 620 014**

**Capital Purchase & Spare Parts / MFG**

**(To be filled and submitted along with offer)**

<p align="center">BHEL Commercial Terms and Conditions for IMPORT SUPPLIES</p>	<p>Vendor's Confirmation / Comments (To be furnished along with offer copy (or) Technical Bid Copy (Part No -1)</p>
<p>Technical confirmation to BHEL's Specification as called for in BHEL format shall be furnished. If needed additional sheets shall be used.</p>	
<p>Prices shall be quoted item wise only as per the model format enclosed.</p>	
<p>Prices shall be quoted on " FIRM PRICE " basis only. The prices should be only on FOB / FCA basis inclusive of Packing &amp; Forwarding charges if any</p>	
<p>Validity of offer shall be for a minimum period of 120 days from the date of Tender opening.</p>	
<p>Delivery period from the date of Letter of Intent shall be clearly mentioned in the offer.</p>	
<p>Liquidated damages @ ½ % per week subject to a maximum of 15% of the order value shall be applicable for delay in deliveries.</p>	
<p>Following Risk Purchase Clause shall be applicable: The Purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss, which the Purchaser may sustain by reason of such risk purchases.</p>	
<p>Payment terms for Foreign vendor (Principal) : 90% value of the goods will be paid through an irrevocable Letter of credit established by our bankers. Balance 10% will be paid against acceptance of goods for which supplementary invoice 10% of total Purchase Order value shall be submitted. All bank charges outside India are to vendor's account only.</p>	

P.T.O

<p>Payment terms for Indian Agent :</p> <p>Indian Agency Commission, if any, shall be clearly specified in the offer and the same will be paid in Indian Rupees against acceptance of the materials.</p>	
<p>Part Shipment or Transshipment is not permissible.</p>	
<p>Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy basis.</p>	
<p>Materials will be inspected and proved at vendor's works prior to dispatch. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy.</p>	
<p>Offers should be submitted only in Sealed Cover super-scribing clearly the Enquiry reference and Due date.</p>	

NOTE :

- a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- b) The prices are to be offered only on FOB / FCA basis, inclusive of Packing & Forwarding charges if any.
- c) Your specific acceptance to our Payment terms, LD, Risk Purchase Clause are essential for consideration of your offer. Otherwise your offer is liable for rejection.

Signature & Office Seal of the vendor

**Bharat Heavy Electricals Limited, Tiruchirapalli – 620 014**

**Capital Purchase & Spare Parts / MFG**

**MODEL PRICE BID FORMAT FOR FOREIGN VENDORS**

BHEL Enquiry No. & Date:  
Bidder 's Offer No. & Date :

Sl No	Description of item	Unit	Quantity	Rate .	Value
	Ex-Works value				
	Packing & Forwarding charges (if any)				
	FOB / FCA Charges, if any				
	FOB Value				
	Approximate Freight Charges				
	Approximate Transit Insurance Charges				
	Approximate Gross Weight, Net Weight & Diemensions of the Consignment				

Signature & Seal of the Vendor

NOTE : The Price bid should submitted strictly in line with the above FORMAT

CAPITAL PURCHASE AND SPARE PARTS

COMMERCIAL TERMS AND CONDITIONS

1.0 QUOTATIONS

The Bidders shall submit the offer in TWO INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.

**Envelope I:** This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "Part I - Technical and commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.

**Envelope II:** This sealed envelope should contain price details. This envelope should be clearly marked "Part II - Price bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, superscribing as Part I and Part II of Enquiry No., due date of opening and the address and reference of the Bidder.

The above offer should reach this office on or before the due date by 14.00 Hrs (IST). Late offers will not be considered.

Tender should not be addressed to any Individual's name but only by designation to:

MANAGER / CAPITAL PURCHASE / MM / FB  
BHARAT HEAVY ELECTRICALS LIMITED  
HIGH PRESSURE BOILER PLANT  
TIRUCHIRAPALLI - 620 014  
TAMIL NADU, INDIA

Tenders should be free from CORRECTION AND ERASURES, Corrections if any, must be attested. All amount shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

Offers should be in ENGLISH and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in ENGLISH or otherwise, the offers will not be considered.

2.0 OPENING OF TENDERS

The Part I - Technical & commercial bid alone would be opened on the Tender opening date.

The Part II - Price bid of technically suitable Bidders alone would be opened. The Technically suitable Bidders would be informed about the tender opening date.

Clarifications if any required by BHEL for Technical evaluation would be sought from Bidders before opening of Part II - price bid.

For any queries / clarifications the bidders may contact us through our FAX NO. +91 431 2520719 or through e-mail [psivasub@bheltry.co.in](mailto:psivasub@bheltry.co.in), [srchandran@bheltry.co.in](mailto:srchandran@bheltry.co.in)

**Bharat Heavy Electricals Limited, Tiruchirapalli – 620 014**

**Capital Purchase & Spare Parts / MFG**

**(To be filled and submitted along with offer)**

BHEL Commercial Terms and Conditions for INDIGENOUS SUPPLIES	Vendor's Confirmation / Comments (To be furnished along with offer copy (or) Technical Bid Copy (Part No -1)
Technical confirmation to BHEL's Specification as called for in BHEL format shall be furnished. If needed additional sheets shall be used.	
<b>Prices shall be quoted item wise</b> only as per the model format enclosed.	
Prices shall be quoted on " <b>FIRM PRICE</b> " basis only. The prices should be only on FOR /Despatching station basis inclusive of Packing & Forwarding charges if any. Applicable % of ED & Sales Tax, Freight & Insurance, Installation & Commissioning Charges should be clearly indicated.	
<b>Validity of offer</b> shall be for a minimum period of 120 days from the date of Tender opening	
<b>Delivery period</b> from the date of Letter of Intent / Purchase order shall be clearly mentioned in the offer.	
<b>Liquidated damages @ ½%</b> per week subject to maximum of 15% of the order value shall be applicable for delay in deliveries.	
<b>Following Risk Purchase clause</b> shall be applicable: The purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.	
<b>Submission of Performance Bank Guarantee (PBG):</b> Vendor shall provide a performance bank guarantee (PBG) for 10% of the total Purchase Order value valid for a period of 12 months from the date of commissioning (or) 18 months from the date of dispatch whichever is later with an additional claim period of 2 months. This PBG shall form one of the documents for effecting payment. The PBG shall be submitted in non-judicial stamp paper value of not less than Rs.80/- issued by any one of the following banks who is a member bank in our consortium of banks.  <b>1) State Bank of India 2) State Bank of Hyderabad 3) State Bank of Travancore 4) State Bank of Mysore 5) Canara Bank 6) Bank of Baroda 7) Punjab National Bank 8) Deutsche Bank 9) HDFC Bank 10) Standard Chartered Bank 11) Citi Bank 12) Standard Chartered Grindlays Bank 13) Bank of America and 14) Any one of the Nationalised banks.</b>	
<b>Payment terms for supply portion :</b>  • 100% payment will be made within 45 to 90 days after receipt and acceptance / commissioning of goods at BHEL against submission of PBG for 10% of Order value with required validity (or)  * 80% value of the goods will be paid within 45 to 90 days against dispatch documents negotiated through bank. Balance 20% will be paid within 45 to 90 days from the date of acceptance / commissioning of goods against submission of supplementary invoice and also against submission of PBG for 10% of Order value with required validity. All bank charges are to vendor's account only.	
<b>Erection / Commissioning</b> Erection / Commissioning shall be done at free of cost	
The equipment shall be guaranteed for a period of 12 months from the	

date of commissioning.	
Equipment will be inspected and proved at vendor's works prior to dispatch. However, final inspection and acceptance of equipment will be after installation at BHEL, Trichy.	
The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost.	
Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL TRICHY basis.	
<b>Offers should be submitted only in sealed cover super-scribing clearly the Enquiry reference and due date.</b>	
<b>DETAILS REQUIRED FOR CONDUCTING REVERSE AUCTION</b>	
% of Excise Duty with cess	
% of TAX (CST/VAT)(TNGST with FORM-17 or CST with C-form)	
Packing & Forwarding Charges (in % only)	
Percentage of Freight & Transit insurance charges (if any lumpsum) Freight Charges from Dispatching station to BHEL, Tiruchirapalli (Note. If the delivery terms is Ex Works, the materials has to be sent through BHEL Approved Carrier only, in this case freight will be borne by BHEL.)	
As per Clause 5.17 of Commercial terms and conditions (Annexure-II) Acceptance of participation in Reverse Auction (RA) Yes / No to be indicated.	
<b>Name of the person for participating reverse auction</b>	
<b>Land Line Number</b>	
<b>Fax Number</b>	
<b>Mobile Number</b>	
<b>E-mail ID</b>	

**NOTE :-**

- a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- b) Your specific acceptance to the BHEL Payment terms, LD, Risk Purchase Clause & Submission of PBG for 10 % of the order value are essential for consideration of your offer. Other wise your offer is liable for rejection.
- c) Your offer should be indicating applicable if any P&F Charges, % of ED, Sales Tax, CST or VAT, Service Tax, Freight, Insurance and Installation and Commissioning charges etc., as per our Price Format.
- d) No row shall be left blank. Please indicate NA, in case the item is "not applicable"

**Signature & Office Seal of the vendor**

**MODEL PRICE BID FORMAT FOR INDIAN BIDDERS**

Enquiry No & Date:

Bidder's Offer No & Date:

Sl.No	Description of item	Unit	Quantity	Rate in Rs.	Value in Rs.
*FOR Trichy (BHEL – STORES) OR Ex Works value in Rs.					
Packing & Forwarding charges (indicate in %)					
Excise Duty (Indicate in %)					
A) TNGST – VAT (%)					
B) CST with C – FORM (%)					
C) CST without C – FORM (%)					
Approximate Net weight of the total consignment					
Approximate Gross weight of the total consignment					
Approximate Dimensions of the Consignment					
The price indicated shall be inclusive of all accessories, spares etc. as given in the scope of supply. Individual item – wise break – up price shall be attached as an annexure to this price bid format.					

Signature & Seal of Vendor

**NOTE:**

1. The price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is “not applicable”
2. Price shall be quoted item – wise only as per the above format.
3. If price quoted is Inclusive of ED, the included ED Value and Base Value shall be indicated item – wise.