

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli - 620 014, TAMIL NADU, INDIA SUB CONTRACTING MACHINING / MFG

SCM / MFG, BHEL, TIRUCHIRAPALLI requires qualified vendors for heat treatment of Boiler Components in part or in full with free issue of materials by BHEL, Tiruchirappalli.

Phone: +91 431 257 4662 / 257 4552

Fax : +91 431 252 0333

Email: raja@bheltry.co.in

als@bheltry.co.in

Reference Number:	Enquiry Date:	Last date for submission of registration forms up to
Enquiry:		registration forms up to
SCM: NEW VENDOR	30-04-2014	29-04-2015

BHEL, Trichy invites Expression of Interest from new vendors for heat treatment (normalizing & tempering and solution annealing) of boiler components - circuits of re heater and super heater coils with free issue of raw materials.

Product profile and all annexure 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) under enquiry reference "SCM: NEW VENDOR"

		Yours faithfully
Last date for the submission of Vendor Registration forms up to 29-04-2015. Ph: 0431 – 2574662, 2574552, Fax: 0431 - 2520333 Email: raja@bheltry.co.in		For Bharat Heavy Electricals Limited
Last date for the submission of Vendor Registration forms up to 29-04-2015. Ph: 0431 - 2574662, 2574552, Fax: 0431 - 2520333 Email: raja@bheltry.co.in		
Registration forms up to 29-04-2015. Ph: 0431 - 2574662, 2574552, Fax: 0431 - 2520333 Email: raja@bheltry.co.in		SDGM / SCM / MFG
Ph: 0431 – 2574662, 2574552, Fax: 0431 - 2520333 Email: raja@bheltry.co.in		Building-53, BHEL, Tiruchirappalli 620 014.
Email: raja@bheltry.co.in	Registration forms up to 29-04-2015.	Ph: 0431 – 2574662, 2574552,
		Fax: 0431 - 2520333
als@bheltry.co.in		Email: raja@bheltry.co.in
		als@bheltry.co.in



427-300

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI 620 01 SCM (MFG)

SUBCONTRACTOR BIO - DATA

PHOTO OF 1. NAME OF THE COMPANY

PROPRIETOR /

2. **ADDRESS OF FIRM** MG.PARTNER

3. CONSTITUTION : PROPRIETORY / Partnership / Pvt. Ltd./Ltd.

4. NAME AND ADDRESS

OF PROPRIETOR / PARTNER / DIRECTOR/s

(IF REQUIRED SEPARATE ENCLOSURE SHALL BE ATTACHED)

5.	CONSTITUTION	% OF	TECHNICAL	DOCUMENTARY PROOF
		SHARE	QUALIFICATION	
a.	If Partnership Concern			 i) Copy of the latest registered partnership deed duly indicating the percentage of share. ii) Form-A Rule V issued by Registrar of Firms.
b.	For Private Limited Company i) Managing Director			Articles of Association
C.	ii) Technical Director For Proprietary Concern (Name of the proprietor)			

6. SSI No. from DIC

(Copy to be submitted)

7. Area available for Production

a) Covered shed area b) Open area with level

concrete floor

c) Area available for storage raw materials and finished

products

d) Total

8.	Clear Document regarding allotment (Copy to be furnished as Documentary prod	: of)	
9.	Connected Power & Name details (EB Card copy to be furnished)	:	
10.	Organisation for Production and Quality a) Production (No. of Employees) b) Quality (No. of Employees)	: :	
11.	Number of Employees available a) Permanent b) Temporary	:	
12.	Directors / Partners, if related to any BHEL	employ	ee.
	Name	:	
	Staff No.	:	
	Designation	:	
	Department	:	
	Relationship	:	
13.	If any ex-BHEL personnel is employed by the Mention his / her details of last posting.	e comp	any,
	Name	:	
	Staff No.	:	
	Designation	:	
	Department	:	
	Date of leaving service	:	
14.	Reference list for previous experience	:	
15.	Banker's Name and Address	:	
			SIGNATURE WITH SEAL (PROPRIETOR / MANAGING PARTNER)



BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI 620 014 SCM / MANUFACTURING SUBCONTRACTOR REGISTRATION FORM FOR- NORMALISING & TEMPERING

NAME : M/s

ADDRESS :

SL	DETAILS	MINIMUM	STATUS	REMARKS
NO		REQUIREMENT		
1	Company			
	a) Constitution	Private / Partnership / Public		
	b) Qualification of Proprietor / Partner / Supervisor	Degree / Diploma / ITI with experience		
2	c) Representative	Collection of materials, documents & coordination with Stores, QC, Shop & Accts		
3	Land Total Area	1 acre minimum		
	Closed shed for heat treatment and material storage excluding Office Room	8000 sq ft minimum		
	Land (Own / Lease / Rent)			
	Documents			
	a)			
	b)			
	c)			
4	Office Room with internet facility			
5	Handling – Crane Facility with stability certificate	10 T crane – 1 No. minimum		

SL	DETAILS	MINIMUM REQUIRED	STATUS	REMARKS
No.		,		
6	All round Fencing			
7	FURNACE DETAILS:			
	a) Length x Width x height	Length 8m to 20m, width -2.5m to 3.5m, height – 600 mm minimum.		
	b) Type of furnace	Batch type		
	c) Type of heating	Oil fired/ gas fired/ electrical		
	d) Type of loading			
	e) Maximum temperature achievable	Normalising 1040 to 1070 Deg C Tempering 730 to 760 Deg C		
	f) Facility for forced air cooling			
8	IBR approval for the firm			
	to conduct heat treatment			
9	Calibration Status of the furnace & instruments			
10	Hardness testing	facility to test upto 500 BHN		
11	Quality system in the firm			
12	a) Telephone / Mobile No.			
	b) PC with INTERNET facility			
	c) E-Mail ID			
13	Additional Facility if any			
14	1.Solvency Certificate (for new vendors)			
	2. Balance Sheets & IT Return (4 Years) for the existing vendors			
	3. Willingness to execute BG			

SL	DETAILS	MINIMUM REQUIRED	STATUS	REMARKS
No.				
15	Man power			
16	Other information			
	a) Organisation chart			
	b) Contact Person			
	c) IT PAN No.			
	d) EM/ SSI/ Corporate Identity No.			
	e) PF No.			
	f) ESI No.			
	g)Excise regn certificate			
	h) Power Connection details			
	i) Genset			

SIGNATURE WITH SEAL (PROPRIETOR / MANAGING PARTNER)

RECOMMENDATION	(for Assessor's report Additional sheets can be used)	

Evaluation Committee

Assessor 1

Assessor 2



BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI 620 014 SCM / MANUFACTURING SUBCONTRACTOR REGISTRATION FORM FOR SOLUTION ANNEALING

NAME : M/s

ADDRESS :

SL	DETAILS	MINIMUM	STATUS	REMARKS
NO		REQUIREMENT		
1	Company			
	a) Constitution	Private / Partnership / Public		
	b) Qualification of Proprietor / Partner / Supervisor	Degree / Diploma / ITI with experience		
2	c) Representative	Collection of materials, documents & coordination with Stores, QC, Shop & Accts		
3	Land Total Area Closed shed for heat treatment and material storage excluding	1 acre minimum 8000 sq ft minimum		
	Office Room Land (Own / Lease / Rent)			
	Documents a)			
	b)			
	c)			
4	Office Room with internet facility			
5	Handling – Crane Facility with stability certificate	10 T crane – 1 No. minimum		

SL	DETAILS	MINIMUM REQUIRED	STATUS	REMARKS
No.				
6	All round Fencing			
7	FURNACE DETAILS:			
	g) Length x Width x height	Length 8m to 20m, width -2.5m to 3.5m, height – 600 mm minimum.		
	h) Type of furnace	Batch type		
	i) Type of heating	Oil fired/ gas fired/ electrical		
	j) Type of loading			
	k) Maximum temperature achievable	For solution annealing 1150 to 1150 Deg C		
	l) Facility for forced air cooling			
8	IBR approval for the firm			
	to conduct heat treatment			
9	Calibration Status of the furnace & instruments			
10	Hardness testing	facility to test upto 500 BHN		
11	Quality system in the firm			
12	a) Telephone / Mobile No.			
	b) PC with INTERNET facility			
	c) E-Mail ID			
13	Additional Facility if any			
14	1.Solvency Certificate (for new vendors)			
	2. Balance Sheets & IT Return (4 Years) for the existing vendors			
	3. Willingness to execute BG			

SL	DETAILS	MINIMUM REQUIRED	STATUS	REMARKS
No.				
15	Man power			
16	Other information			
	a) Organisation chart			
	b) Contact Person			
	c) IT PAN No.			
	d) EM/ SSI/ Corporate Identity			
	No.			
	e) PF No.			
	f) ESI No.			
	g)Excise regn certificate			
	h) Power Connection details			
	j) Genset			

SIGNATURE WITH SEAL (PROPRIETOR / MANAGING PARTNER)

RECOMMENDATION	(for Assessor's report Additional sheets can be used)	

Evaluation Committee

Assessor 1

Assessor 2

CHECK LIST FOR DOCUMENTS SUBMISSION BY VENDOR- For Normaling & Tempering and Solution Annealing

SI No	Description	Remarks	# Page
			no.
1	Vendor Name & Address: (Firm & office address)		
2	Vendor Request Letter (Product to be specified)		
3	Bio data (In BHEL Format)		
3a	Vendor Application Form- Normalising & tempering, Solution Annealing (In BHEL Format)		
4	If vendor is already enlisted with BHEL, <u>provide the</u> <u>vendor code</u> , BHEL Unit and product details already enlisted.		
5	IBR Certificate of the Firm – for conducting heat treatment		
6	Contact Person name , Designation , Phone / Mobile Nos , email id.		
7	Registered Partnership Deed with Form-C with legal clearance.(Not Applicable for Proprietorship)		
8	PVT Ltd or Public Ltd Co - Certificate of incorporation, Memorandum of Assn , Articles of Assn (Not Applicable for Proprietorship)		
9	Land Doc on Company Name (minimum 1 acre* for PP) + Corporation Tax Certificate		
10	Lease Agreement of the land (min 5 yrs) with Firm + Land Owner's Basic Doc + Corp Tax Certificate (If the land Doc is not in the Company name)		
11	Encumbrance Certificate for land for 15 yrs from the land registration office (obtained within a month)		
12	Approved Organization chart		
13	No. of executives, supervisors, Artisans		
14	List of Machineries -make, capacity and No. of machines.		
15	List of Measuring Instruments with calibration staus		
16	Calibration certificate for all instruments of furnace		
17	Crane : if A Frame - Capacity in tons , Qty & Stability certificate		
18	Crane : if EOT crane - Capacity in tons , Qty & Stability certificate		
19	If Mobile mention crane Capacity, Enclose RC Book copy- own / lease with agreement Contract		

CHECK LIST FOR DOCUMENTS SUBMISSION BY VENDOR- For Normaling & Tempering and Solution Annealing						
SI No	Description	<u>Solution Annealing</u>	Remarks	# Dogg		
31 110	Description		<u>Kemarks</u>	# Page no.		
20	3 Phase Electricity connection - Card in the name of Firm/ Land lease - Xerox copy					
21	Gen set Power Capacity availab					
22	Entrepreneur Memo No (EM N No (Cl No)- Xerox copy					
23	VAT Certificate / TIN allotment - Xerox copy					
24	Excise Reg certificate - Xerox copy					
25	IT PAN card the Firm - Xerox co					
26	Solvency certificate (issued by I					
27	IT Return (last 4 yrs)					
28	Audited Balance Sheet for latest 4 years					
29	Required ratios from balance sheets					
	b)Sales growth % over previou c)Debt equity ratio (last 4 yrs) d)Current ratio (last 4 yrs) e)PBT % of growth over previou f)PAT % of growth over previou	us year(last 4 yrs)				
30	Bankers Loan sanction advice c					
31	e-payment Form with Bankers MICR code , BSR code & Account No. (After vendor Enlistment e-payment Form with Bankers with a cancelled cheque leaf shall be submitted)					
32	PF code					
33	ESI No.					
34	ISO - Certificate -if available.					
Note 1	English version to be submitted, If the certificate/Doc other than in English.					
Note 2	Original certificates/Doc will be verified during spot evaluation.					
Note 3	All Xerox copies shall be attested by Notary Public / Gazetted officer					
#	Provide the page no's as mentioned in the submitted documents.					
The above documents are enclosed Recommendation (For BHEL Use)						
Vendo	r Signature with Firm's seal.	TCA sign & seal for doo	cument verification.			

NORMALISING & TEMPERING OF ALLOY STEEL(T91, T92, T23) BENDS

Tube Grade : SA213 T91, SA213T92, SA213 T23.

Tube Diameter : 63.5mm.

Tube Thickness Range : 3.99mm to 5mm.

Normalising & Temperature : 1040-1070 °c, 15 Min Soaking minimum. The Tube ends have to be

covered by SS end caps during Normalising. Normalising should be done in an

encompassed condition.

Tempering Temperature : $745 \pm 15^{\circ}$ c, 30 Min Soaking minimum. Tempering should be done in an

encompassed condition.

Heating Rate : 220 °C/Hr Max at Temperature above 400°C.

Cooling Rate : After Normalising the cooling shall be as follows,

1. T91 & T92

Cooling shall be in Air.

2. <u>T23</u>

The Component has to be cooled rapidly and continuously (Forced Air

Draft) to 205 °C before Tempering.

After Tempering the cooling shall be as follows,

1. <u>T91, T92 & T23</u>

Cooling shall be in Air.

Type of Furnace : Batch Type

Product Configuration

Only Bends will be supplied. The overall dimension of the bends may

during N&T : be 8 m X 3.3m.

Vendor Qualification : IBR approved vendor.

SOLUTION ANNEALING OF STAINLESS STEEL BENDS

Tube Grade : SA213 TP347H.

Tube Diameter : 54 mm.

Tube Thickness Range : 4 mm to 6.3 mm.

Sol Annealing Temperature : 1100-1150 °c, 30 Min Soaking minimum. The Tube ends have to be

covered by Stainless Steel end caps during Solution Annealing.

Heating& Cooling Rate : 220 °C/Hr Max at Temperature above 400°C. Cooling shall be fast as

Possible after Solution Annealing.

Type of Furnace : Batch Type.

Product Configuration during Solution Annealing

The Coil will be supplied in intermeshed form after Bending. The overall dimension of the intermeshed coil may be 20 m X 3.3m.

Vendor Qualification : IBR approved vendor.