 <p>432-003</p>	<p>ENQUIRY VALVES</p>	<p>Bharat Heavy Electricals Limited (A Government of India undertaking) HIGH PRESSURE BOILER PLANT PURCHASE DEPARTMENT/VALVES TIRUCHIRAPPALLI-620 014.</p>	<p>Phone:04312577913 FAX :0431-2520383 Email: fayasmalik@bheltry.co.in npeswar@bheltry.co.in dvijay@bheltry.co.in</p>	
		<p>ENQUIRY NO.</p>	<p>DATE</p>	<p>DUE DATE FOR QUOTATION</p>
		<p>EN-SFV-128</p>	<p>20.08.2013</p>	<p>19.09.2013</p>
<p>Please quote Enquiry No., and due date in correspondences This is only a request for quotation and not an order.</p>				
<p>Supply of Electromatic Relief Valve for OPGCL Banharapalli 2x660MW as per the purchase specification enclosed.</p> <p><u>Date , Time & Venue of tender opening :</u></p> <p>19.09.2013 at 14.30 Hrs. at Valves Purchase Conference Hall , Building No 24, III Floor BHEL, Tiruchirappalli-620 014, Tamil Nadu State, India.</p>	<p><u>Scope of supply</u></p> <p>Supply of Super Heater Electromatic Relief Valve and Reheater Electromatic Relief Valve for OPGCL Banharapalli 2x660MW .</p> <p>-List of Annexures Annexure 1A- Scope of Supply Annexure 1B- SPEC:ERV:014-03 Annexure 1C- VDS:ER:1713-01 Annexure 1D- SPEC:CI:019-01 Annexure 2A- General terms & Conditions Annexure 2B- Tender terms and Conditions Annexure 2C- IBR approved inspection agencies Annexure 3A- PBG format Annexure 3B- List of Consortium Bank Annexure 4A- Schedule of Deviation Format Annexure 4B- Unpriced format Annexure 4C- Priced format</p>			
<p>The rate of Excise Duty and Sales Tax, Prevalent on the date of quotation, should be clearly indicated in the quotation itself.</p> <p>Please, submit your lowest quotation in duplicate subject to our terms and conditions , for the above materials, so as to reach us on or before the due date by 14.00 Hrs. (IST)</p> <p>Quotation will be opened at 14.30 Hrs. (IST) on the due date in the presence of tenderers who may like to be present.</p> <p>Late tenders are liable to be rejected.</p>			<p>Yours faithfully,</p> <p>For Bharat Heavy Electricals Ltd</p> <p>Fayas Malik K Engineer/Purchase/Valves</p>	

**SCOPE OF SUPPLY FOR ELECTROMATIC RELIEF VALVES -
OPGCL (2X660MW)**

ANNEXURE-1

Enq Sl. No.	MATL CODE	Desc	Tag no.	Qty. no.	Operating & Test Medium	IBR Inspn.	Specification - refer	C&I specification	Data Sheet- refer
10	974629130000	SHERV WITH CONTROL ACCESSORIES	LBA11AA201, LBA12AA201	4	STEAM	IBR FORM III-C	SPEC:ERV:014/03	SPEC:CI:019-01	VDS:ER:1713/01
20	974629140000	HRHERV WITH CONTROL ACCESSORIES	LBB11AA201, LBB12AA201	4	STEAM	IBR FORM III-C	SPEC:ERV:014/03	SPEC:CI:019-01	VDS:ER:1713/01
30	974629150000	HRHERV WITH CONTROL ACCESSORIES	LBB11AA202, LBB12AA202	4	STEAM	IBR FORM III-C	SPEC:ERV:014/03	SPEC:CI:019-01	VDS:ER:1713/01
				12					



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3.0	CONTROLS & INSTRUMENTATIONS	4
4.0	INSPECTION AND TESTING	5
5.0	ADDITIONAL REQUIREMENTS	7
6.0	DOCUMENT REQUIREMENTS	8
7.0	OFFER FOR ERECTION – COMMISSIONING SUPPORT AT SITE	9
8.0	SAMPLE IBR TEST FORMATS	10

03	SI no:03 revised and SI no:07 Erection and commissioning support added	S. MADHULINGAM	E. ATHIANNAVI	E. ATHIANNAVI	16.08.13
02	Performance requirements added.	S. MADHULINGAM	E. ATHIANNAVI	E. ATHIANNAVI	03.01.11
01	Revised based on vendor feedback	S. MADHULINGAM	E. ATHIANNAVI	E. ATHIANNAVI	12.10.10
00	FIRST ISSUE	S. MADHULINGAM	E. ATHIANNAVI	E. ATHIANNAVI	08.03.10
REV. NO	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY	DATE



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1.0 GENERAL

This specification, together with the applicable data sheets relevant for the specific project, covers the requirements for the design, materials, construction details, manufacture, nameplate marking, inspection, testing, painting, packing and shipment of Electromatic Relief valves. The offer shall be submitted along with all the documents required in this specification.

- 1.1 Data sheet indicates the type, size, relieving capacity etc. of the required valve. However, vendor shall be responsible to size and select the proper valve with orifice relieving area meeting the indicated operating conditions.
- 1.2 Data sheets specify the minimum acceptable materials for body and Inlet neck. Alternate superior material of construction shall also be acceptable, with prior written approval by us.
- 1.3 The design, material, construction, manufacture, inspection and testing of valves shall confirm to the latest applicable codes and standards.
- 1.4 Supplier shall attach the list of supplied projects with the parameters, for each safety valve models for the given flow parameters or higher, which are in service for more than two years to consider the technical suitability.
- 1.5 The valves covered under this specification shall be governed by the following standards. However the valves conforming to other International Standards may be acceptable provided they are equivalent or superior to those listed below:

ANSI	: American National Standards Institute
ASME	: American Society of Mechanical Engineers
ASTM	: American Society for Testing and Materials.
AWS	: American Welding Society
IEC	: International Electro technical Commission
ISA	: Instrument Society of America
IBR	: Indian Boiler Regulations
NEMA	: National Electrical Manufacturers Association
NEC	: National Electrical Code
NFPA	: National Fire Protection Association
OSHA	: Occupational Safety and Health Administration



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- 1.6 All welding procedures and welders shall be qualified in accordance with the appropriate sections of the AWS Code D14.6 or ASME Section-IX and AWS Code 1.1 or IBR. When welders and welding procedures are qualified in accordance with codes other than those specified the Seller must take exception at the time of quotation. The procedures and materials proposed must be submitted to the Purchaser with the quotation for review and approval.
- 1.7 All materials, construction and design of the pressure parts shall conform in all respects to the applicable requirements of ASME Section-I.
- 1.8 All pressure retaining parts of the valve shall be made of materials, including specific limitations on various materials that are in full compliance with PG-5 of ASME Code Section-I.
- 1.9 Only materials listed and rated in B16.34 are acceptable and materials offered shall be appropriate to the design conditions listed.
- 1.10 All materials shall be readily identifiable. Mill test reports shall be obtained for all pressure boundary parts. These test reports shall be available for review at the Seller's shops. Copies of these are to be supplied to the Purchaser, along with valve supply.
- 1.11 Nothing in this Specification shall be construed as relieving the Seller of his responsibility for compliance with all applicable codes and regulations.

2.0 DESIGN AND CONSTRUCTION

- 2.1 **FUNCTION:** The function of Electromatic Relief Valve is to provide automatic or manual overpressure protection that can be controlled by the plant operator from the control room.

DESCRIPTION: Electromatic Relief Valves (ERV) are used on the superheater and reheater outlet lead. The electromatic Relief Valve size is to be determined by the Seller. The inlet connection is to be a butt weld type. The outlet is to be a flanged type. The materials for the body, seat, disk or ball are to be determined by the Seller. The Electromatic Relief Valve shall be provided with controls such as valve operator, pressure controller, solenoid coil and limit switches and sub-panel suitable for remote mounting. Pneumatic actuator also accepted with the available air pressure of 4.0 kg/cm²g. The opening time of the valve should be within 2 seconds. Power assisted relief valves and Electromatic relief valves are means one and the same.

- 2.2 Sizing shall be carried out as per ASME Sec-I. The seller is required to accurately calculate and verify the sizes of the valves based upon the Valve Design conditions submitted by the Purchaser in the data sheet. Seller shall request any additional process data that may be required for proper analysis and sizing. Seller shall submit his calculations for Purchaser approval and record.



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- 2.3 Construction and Materials shall conform to ASME Section-I Code.
- 2.4 The design of valve seat and guiding arrangement shall insure consistent operation reseating and tightness over several successive operations.
- 2.5 Unless otherwise mentioned, end connections details shall be as below:
- a) Threaded end connections shall be NPT as per ANSI/ASME B1.20.1
 - b) Flanged end connections shall be as per ANSI/ASME B16.5.
 - c) Butt welding end connection as per ASME B16.25 (Welding End Detail for Joint Without Backing Ring).
- 2.6 Wherever stelling of Disc and Seat bushing has been specified, it stands for stelling of the seat area or the entire disc contour, unless otherwise specified.
- 2.7 The allowable tolerance in set pressure are as per ASME Section-I.
- 2.8 Nameplates shall be of white non-hygroscopic material with engraved black lettering and shall be suitably fixed on both front and rear sides. The nameplates shall have the following details minimum.
- a) Tag number as per purchasers data sheet.
 - b) Manufacturers Model number
 - c) Manufacturers Serial number
 - d) Size: Inlet & Outlet
 - e) Bore diameter
 - f) Manufacturers name/trade mark.
 - g) Blow down as percentage of set pressure.
 - h) Accumulation as percentage of set pressure
 - i) Lift
 - j) Certified capacity of steam in Kg/h (with Type test report to be submitted)
 - k) Set Pressure
 - l) Relieving Temperature.
 - m) Cold bench set pressure.
 - n) Date of manufacture.

3.0 CONTROLS & INSTRUMENTATIONS

- 3.1 Control and Instrumentation details shall be referred in the Specification No:SPEC:CI:019
- 3.7 ERV shall get power supply through a power contactor located in the controller, which is



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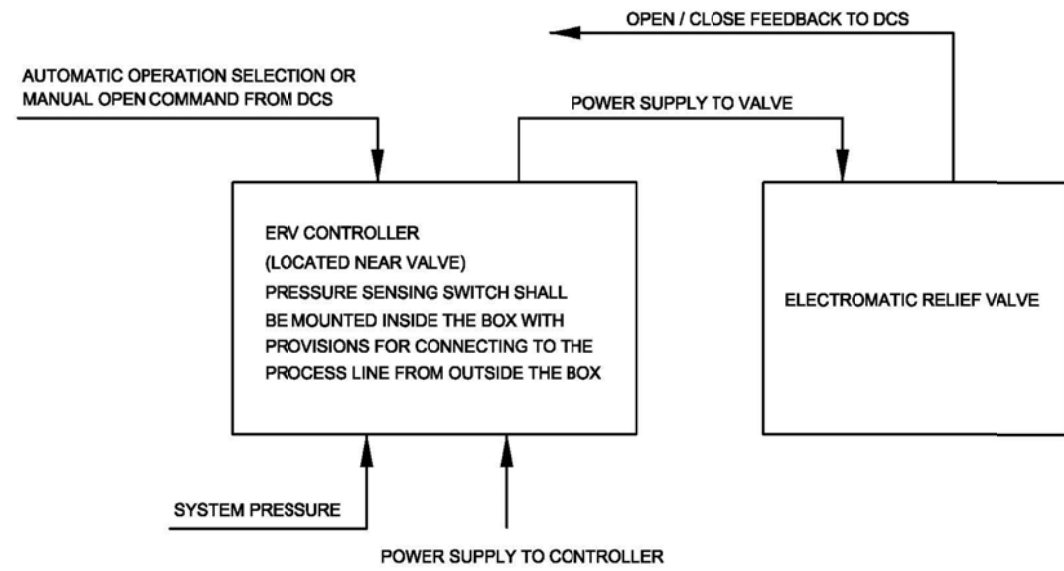
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energized / de-energized by the switch depending upon the pressure. Typical sketch indicating the controller and valve connections is enclosed for reference.

3.12 OPEN / CLOSE FEEDBACK DIAGRAM



4.0 INSPECTION AND TESTING

- 4.1 All Electromatic Relief valves shall be inspected, tested and stamped per applicable ASME codes. All valves shall be factory calibrated and set as per the process data submitted by the Purchaser and as per applicable ASME code.
- 4.2 Material, Mechanical and Chemical tests shall be performed in a manner as specified in the relevant codes.
- 4.3 All valve pressure retaining parts shall be subjected to hydrostatic test pressure as required by the IBR or other applicable standards. The contractor shall guarantee his work as capable of withstanding such hydrostatic tests and shall repair or replace, at his expenses, any item which fails to pass such tests at site.
- 4.4 Quality Assurance plan to be submitted for our review & approval. Sample quality plan attached.
- 4.5 The material test certificates (correlated to melt number) shall be furnished by the vendor with identification and correlation.
- 4.6 For components like Body, Inlet Neck, Seat Bushing, Disc, Spindle and Guide etc. Material test certificates (typical) shall be furnished for identification & correlation.



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- 4.7.0 Minimum NDT requirements extent of check for Pressure retaining parts/components shall be as follows.
- 4.7.1 Steel Castings: 100% RT on butt weld joints/ends and MPI on change in dimension/shape shall be carried out.
- 4.7.2 Steel Forgings: 100% MPI and 100% UT on all areas shall be carried out on all forgings for valves with rating 1500 and above. Also UT shall be carried where the thickness/diameter is greater than 40mm.
- 4.7.3 Dye penetrate test as per ASTM E165 shall be performed on all machined surfaces of critical components.
- 4.7.4 For butt-welding ends of all valves, dye-penetrate test as per ASTM E165 shall be carried out on 100% of the valves and the results shall show no defects.
- 4.7.5 Hardness testing shall be done on body seat, disc/wedge facing, spindle, backseat bushing, thrust plate etc. The Purchaser's representative shall also check hardness of random samples.
- 4.7.6 Casting Radiography: For pressure rating below 600 class, one out of ten or part there of the castings per foundry, (irrespective of size and melt) shall be radiographed. If any defects are found (beyond the acceptable level of ASME B16.34), further sample of double the size of initial sampling shall be radiographed. If all samples are within acceptable limit of ASME B16.34, the lot will be accepted. Even if one is found defective, 100% of the lot will be radiographed and castings will acceptable limits of ASME/ANSI B16.34 shall be accepted. For pressure rating of 600 class and above. 100% RT will be done in line with ASME B16.34.
- 4.7.7 100% MPI shall be done on base/body casting with pressure rating 1500 class and above in line with ASME B16.34.
- 4.8 Each ERV, pressure retaining parts shall undergo hydrostatic test as per IBR/ASME B16.34 code. There shall not be any visible leakage during this test. Form IIIC certificate to be furnished.
- 4.9 ERV shall be tested for opening at specified set pressure. Testing of ERV shall be with steam only. IBR Form IIIC to be furnished.
- 4.10 Seat Leakage test as applicable.
- 4.11 Type test report for capacity, shall be furnished for the selected valve series along with offer.
- 4.12 Joint welding of pressure parts to be RT entire length of weld with procedure and acceptance in accordance with ASME Section VIII paragraph UW-51 and Mandatory appendix 4.



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5.0 ADDITIONAL REQUIREMENTS

- 5.1 Machined surfaces shall be suitably protected.
- 5.2 Valve ends shall be protected by means of metallic covers/polythene caps/rubber and protectors to prevent damage to ends & also to avoid foreign material entering the valve while shipment & storage.
- 5.3 All the valves shall be packed suitably in wooden cases in order to avoid damage during transit and also during storage at site.
- 5.4 Valve Tag nos. shall also be incorporated in all the dispatch documents. In addition to the tagging requirements of ASME Section-I, each valve shall be assigned a unique valve number and have a permanent stamped metal tag bearing the "Valve Number" securely attached to the valve. (These valve numbers shall be provided to the Seller). Tags shall be attached either by welding or riveting to the valve body, if the body is large enough to do so. The method of attachment shall not degrade the pressure rating of the valve. Tag attachment to the smaller valve bodies shall be by minimum 20-gauge stainless steel wire. All tags shall be made of stainless steel plate and attached to the valve so as to be visible after valve installation. The tag number shall be punched or etched into the tag so that the tag number is recognizable even if the tag has been painted. Each valve accessory item furnished with the valve, but not securely attached to the valve, shall be provided with an identification tag also.
- 5.5 All painted surfaces shall be given a minimum coating 2.0 mils dry film thickness.
- 5.6 All unpainted surfaces shall be protected with a rust preventive, which can be removed by solvent washing.
- 5.7 Paint specifications are to be submitted for purchaser's review with bid.
- 5.8 All exposed machined surfaces shall be coated with suitable rust preventative coating prior to shipment.
- 5.9 The Seller shall adequately crate, block, anchor and protect equipment as required to prevent damage during overseas shipment and outdoor storage for a period of one (1) year at the site.
- 5.10 All threaded connections shall be plugged or capped with standard pipe plugs or caps.
- 5.11 List of Commissioning spares shall be quoted.
- 5.12 List of recommended spares for 5 years trouble free operation of valves shall be quoted.
- 5.13 Recommended List of special tools and equipment (required for assembling, complete dismantling and maintenance of all equipment supplied) to be provided and also to be supplied along with valve.



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- 5.14 Vendor has to furnish complete inputs required for the selection of silencer (i.e. Noise level data, recommended input/ outlet pipe size etc.) along with the quotation.
- 5.15 Electrical supply details at the electrical terminals on all control equipment such as actuating devices, transmitters, panel stations, and control cabinets with typical wiring diagram to be provided by the vendor.

6.0 DOCUMENT REQUIREMENTS

- 6.1 Materials of all parts & trim details to be furnished by vendor along with quote.
- 6.2 Valve sizing calculations as per IBR or ASME Sec I with valve model, inlet outlet size, orifice details, Rated/ Certified Capacity.
- 6.3 Recommended Inlet Stub End connection Edge preparation details for our approval.
- 6.4 Copy of type test report for capacity, for the selected valve series.
- 6.5 Sound Pressure Level calculations.
- 6.6 Valve Outlet Pressure While relieving.
- 6.7 Reaction force Calculations as per ANSI/ ASME B31.1.
- 6.8 General arrangement drawing with mounting details, BOM, Face to Face & overall dimensions, Marking for identification of recommended spare components.
- 6.9 Detailed QA plan for clients/BHEL approval.
- 6.10 Shipment weight & volume details.
- 6.11 Equipment preservation procedure during shipment, pre-erection storage period & Extended storage period.
- 6.12 Operation & maintenance manual 6 sets and one soft copy.
- 6.13 All GA drawings, Test Certificates (in the form of IBR form IIIC), Seat leakage test report, filled datasheets and Material test Certificates.
- 6.14 The following details should be submitted
- i) Special tool list
 - ii) Rust preservation schedule
 - iii) Painting schedule
 - iv) Lubrication list
- 6.15 Recommended discharge piping, allowable forces on connections, weight of valve, product catalogue, customer filled in data sheets.



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- 6.16 The welding procedure and materials proposed of pressure boundary joints must be submitted to the purchaser with the quotation for review and approval.
- 6.17 Valve opening time & typical exhaust piping details.
- 6.18 If the bid submitted has got any deviation from the technical stipulation in the tender document, the tenderer shall tabulate in the appropriate "schedule of deviation" furnishing full particular of such deviations. Deviations are to be furnished with specific mention to clause number. Only such deviations will be discussed and resolved. Reasons / explanation for such deviations shall be furnished. Any other notes / comments viz. "refer to forwarding letter" etc. is not acceptable.
- 6.19 Even if there is no deviation from the tender document, the tenderer shall submit the deviation form and indicate as "no deviations".
- 7.0 **OFFER FOR ERECTION – COMMISSIONING SUPPORT AT SITE**
- 7.1 The supplier shall depute their representative at project site for erection and commissioning support. Offer for providing erection and commissioning support shall be furnished by the supplier.
- 7.2 Special instructions which are required to be followed at site during erection and commissioning shall be furnished by the vendor.



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FORM III-C

Certificate of Manufacture and test of Boiler Mountings and Fittings (REGULATION 269)

Name of part.....
Maker's name and address.....
.....
Intended working pressure..... .kg./cm²
..... (lb./sq. inch) Hydraulic test
pressure..... .kg./cm²
..... (lb./sq. inch)
Main dimensions.....
Drawing Nos..... Identification
Marks.....
..... Chemical
composition..... Physical test
results.....
(i) tensile strength.....
(ii) transverse bend test.....
(iii) Elongation.....

Certified that the particulars entered herein by us are correct.

The part has been designed and constructed to comply with the Indian Boiler Regulations for a working pressure of _____ and satisfactorily withstood a hydraulic test using water or kerosene or any other suitable liquid to a pressure _____ on the _____ day of _____ 20__ in the presence of our responsible representative whose signature is appended hereunder:

Maker Representative
(Name and signature)

MAKERS_____

We have satisfied ourselves and the valve/fitting has been constructed and tested in accordance with the requirements of the Indian Boiler Regulations, 1950. We further certify that the particulars entered herein are correct.


Place_____

Name and signature of the
Inspecting Officer who
witnessed the tests.

Date_____ 20____.

Name and signature of the
Inspecting Authority Strike out
which is not applicable.

Note: In the case of valve chest made and tested by well known Foundries or Forges recognised by the Central Boilers Board in the manner as laid down in regulations 4A to 4H, particulars regarding the material as certified by them, in any form, shall be noted in the appropriate columns or paragraphs in the certificates and in case of certificates from Well Known Foundries or Forges is produced, such certificate may be accepted in lieu of the certificate from Inspecting Authority in so far as it relates to the testing of material specified in the Form.

 Bharat Heavy Electricals Ltd., Trichy-14, Valves Engineering 365-003/A			DATA SHEET		Sheet: 1 of 3
			ELECTROMATIC RELIEF VALVE		Date: 16.08.2013
			VDS:ER:1713 Rev: 01		Cust no: 1713&1714
Customer:			M/s OPGCL		Pre: S. Madhulingam
			Project: IB TPS 2x660 MW		Appd: E.Athiannavi
1	Serial no.		1	2	3
2	Tag no.		LBA11-AA201, LBA12-AA201	LBB11-AA201, LBB12-AA201	LBB11-AA202, LBB12-AA202
3	Location		SUPERHEATER OUTLET	REHEATER OUTLET	REHEATER OUTLET
4	Required quantity	nos.	2 nos. / Unit	2 nos. / Unit	2 nos. / Unit
5	Fluid to be handled		STEAM	STEAM	STEAM
6	Required Capacity	kg/h	211000 (for 2 valves)	338300 (for 4 valves)	
7	Set Pressure	kg/cm ² (g)	266.6	66.1	66.8
8	Relieving Temperature	°C	568±5° C	596±5° C	596±5° C
9	Valve Type		Power Control-Pneumatic Actuator	Power Control-Pneumatic Actuator	Power Control-Pneumatic Actuator
10	Orifice Designation		*	*	*
11	Calculated Orifice Area	mm ²	*	*	*
12	Selected Orifice Area	mm ²	*	*	*
13	Rated Capacity per Valve	kg/h	*	*	*
14	System Design Temperature	°C	573.0	601.0	601.0
15	System Operating Pressure	kg/cm ² (g)	255.0	55.14	55.14
16	System Design Pressure	kg/cm ² (g)	291.0	71.0	71.0
17	Imposed Back Pr.		Atmosphere	Atmosphere	Atmosphere
18	Allowable Over Pr.		As per ASME Sec-I	As per ASME Sec-I	As per ASME Sec-I
19	Blowdown	%	As per ASME Sec-I	As per ASME Sec-I	As per ASME Sec-I
20	Applicable Code		ASME Sec-I / IBR	ASME Sec-I / IBR	ASME Sec-I / IBR
21	Valve Model		*	*	*
22	Inlet Size & Rating		*	*	*
23	Inlet Type/Standard		Butt Weld/ASME B16.25	Butt Weld/ASME B16.25	Butt Weld/ASME B16.25
24	Outlet Size & Rating		*	*	*
25	Outlet Type/Standard		Flanged/ASME B16.5	Flanged/ASME B16.5	Flanged/ASME B16.5
26	Body Material		C12A/F91	C12A/F91	C12A/F91
27	Disc Material		*	*	*
28	Nozzle/Seat Material		*	*	*
29	Inlet Neck Material		C12A/F91	C12A/F91	C12A/F91
30	Guide Material		*	*	*
31	Spindle Material		*	*	*
32	Spring Material		*	*	*
33	Lift	mm	*	*	*
34	Weight	kg	*	*	*
35	Reaction Force	kgf	*	*	*
36	Opening/Raising Time	Seconds	*	*	*
37	Noise generated at source	dBA	*	*	*
38	Inspection/Certification		Hyd.Test (Form-IIIC as per IBR regulation 269)	Hyd.Test (Form-IIIC as per IBR regulation 269)	Hyd.Test (Form-IIIC as per IBR regulation 269)
39	Required Accessories		All control accessories (Available Air Pr. = 4.0 kg/cm ² g, Electrical supply = 220 Volts DC)	All control accessories (Available Air Pr. = 4.0 kg/cm ² g, Electrical supply = 220 Volts DC)	All control accessories (Available Air Pr. = 4.0 kg/cm ² g, Electrical supply = 220 Volts DC)

Notes:

* means Vendor to specify

- Offers received from vendor shall include the spares indicated in Annexure - I also. Offers without spares will be summarily rejected.
- BHEL reserves the right to change the spares requirements based on the customer need on PO.
- Valve inlet edge preparation style shall be as per Annexure - II.

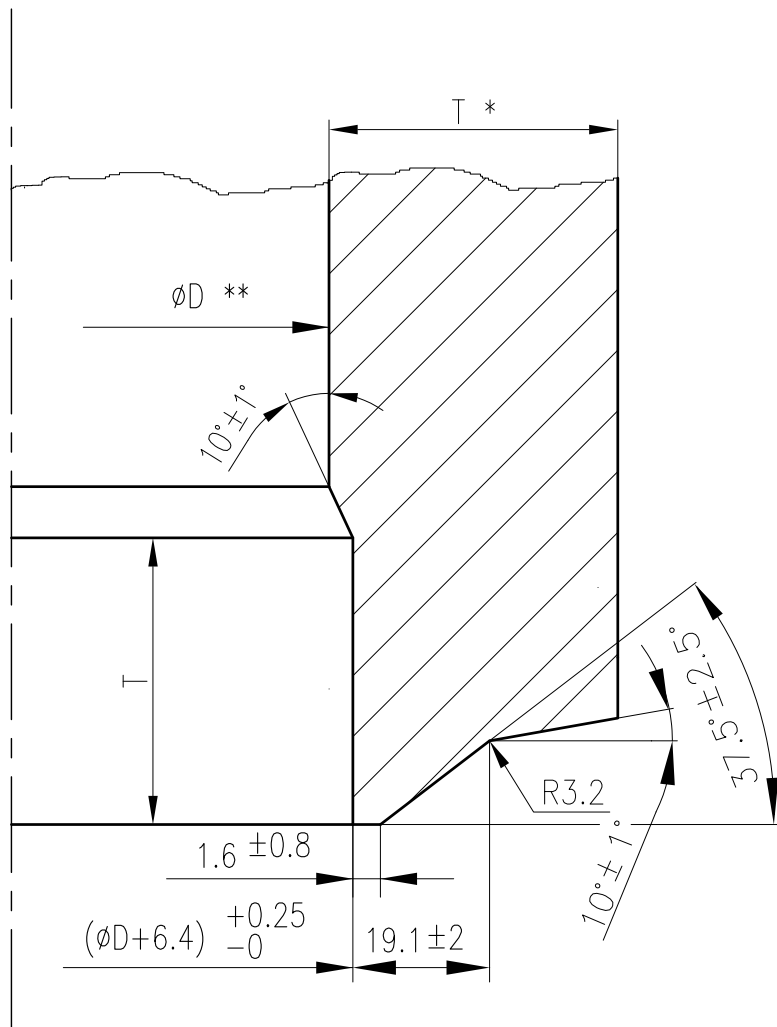
GENERAL NOTES for Power Assisted Relief Valves

1. Selected Valve model should be the same for one particular location.
2. Tag nos are given for one unit only, for other units will be furnished later.
3. BHEL approved procedures should be followed for inspection, testing and certification.
4. Test certificates should be in line with IBR form-IIIC.

ANNEXURE - I

The details of spares components and required quantity for a given material code are given below. Spares listed under A and B are provisional. Vendor shall list and offer all applicable operational spares for his valve.

A) Material Code for operational Spares for SHERV for OPGCL Project			
<i>S/no</i>	<i>Material Code</i>	<i>Description</i>	<i>Quantity</i>
1	974629160010	Body Seal	1 no.
2	974629160020	Spring	1 no.
3	974629160030	Gland Springs	24 nos.
4	974629160040	Packing	1 no.
5	974629160050	Seat	1 no.
6	974629160060	Ball	1 no.
7	974629160070	End Cap	1 no.
B) Material Code for operational Spares for HRHERV for OPGCL Project			
<i>S/no</i>	<i>Material Code</i>	<i>Description</i>	<i>Quantity</i>
1	974629170010	Body Seal	1 no.
2	974629170020	Spring	1 no.
3	974629170030	Gland Springs	24 nos.
4	974629170040	Packing	1 no.
5	974629170050	Seat	1 no.
6	974629170060	Ball	1 no.
7	974629170070	End Cap	1 no.
C) Material Code: 974629180000 - Complete Power Assisted Relief Valve without Actuator and Controls (SH ERV) for OPGCL Project			
D) Material Code: 974629190000 - Complete Power Assisted Relief Valve without Actuator and Controls (HRH ERV) for OPGCL Project			



* T – THICKNESS PROVIDED BY VENDOR

** øD – MINIMUM BORE DIAMETER PROVIDED BY VENDOR

VALVE INLET EDGE PREPARATION STYLE

ANNEXTURE – II

GIVEN DIMENSIONS ARE IN MILLIMETERS



**CONTROL & INSTRUMENTATION
SPECIFICATION FOR ELECTROMATIC
RELIEF VALVE (ERV)**

Spec No: SPEC:CI: 019

Rev No: 01

Date: 28.10.2011

Page 1 of 2

1. Valve shall be operable using single coil solenoid valve. Solenoid shall be energise to open and de-energise to close type.
2. ERV/controller shall be suitable for operating with 220VDC, as applicable for this contract.
3. One number local controller shall be provided near each ERV for controlling the operation of valve based on Process Pressure and Remote Commands.
 - a) Controller shall have capability for receiving the process pressure from pressure switch/ transmitter and open/close the valve accordingly.
 - b) Controller shall be suitable satisfactory operation at ambient temperature expected at the boiler (50°C) with dusty and humid conditions.
 - c) Controller shall be provided with degree of protection of IP55 as a minimum.
 - d) Controller shall have necessary in-built protection and controls necessary for valve as well as provisions for accepting the pressure signal from the switch/transmitter. Controller shall have provisions for isolating power supply with suitable MCCB/MCB with provision for locking at ON/OFF positions.
 - e) ERV controller shall operate based on the process pressure. However, in addition to the operation based on process pressure controller should have provisions to turn on the valve using command from DCS irrespective of process pressure. No local operation is envisaged.
4. Each controller shall be provided with one number of pressure switch / pressure transmitter for sensing steam pressure upstream of ERV. Switch/transmitter shall be supplied along with required accessories (such as siphon, connectors and manifold).
 - a) If switch is provided, the same shall have dual set point, one for open and second for closing valve. Pressure switch shall meet the following specifications
 - i. Accuracy of $\pm 0.5\%$
 - ii. Repeatability of $\pm 1\%$.
 - iii. If mounted separately, the same shall be suitable for IP:55 degree of protection with corrosion resistant coating
 - b) If transmitter is provided, the same shall meet the following specifications
 - i. Working principle : Capacitance / Piezoelectric / Silicon resonance / Digital Inductance
 - ii. Type : Micro processor based 2 wire type
 - iii. Output : 4 - 20 mA DC with power supply of 24V DC $\pm 10\%$
 - iv. Turn down ratio - 30:1
 - v. Stability : $\pm 0.25\%$ of calibrated span for six months
 - vi. Housing: Weather proof as per IP-55 with durable corrosion resistant coating
 - vii. Over pressure : The diaphragm of transmitters shall be designed to withstand static pressure of 1.5 times the max.span without damage or permanent deformation
 - viii. Zero & span adjustment: Easily accessible & adjustable continuously at field.
 - ix. Accuracy : $\pm 0.5\%$ of calibrated span
 - x. Sensitivity / dead band: 0.1 % of calibrated range.
 - xi. Repeatability: 0.2 % of calibrated range.
 - xii. Thermal Drift: Max. 0.04 % per Deg. C
 - xiii. Linearity: 0.2 % throughout the range irrespective of burden on the circuit.



**CONTROL & INSTRUMENTATION
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- c) Pressure port of switch / transmitter shall have 1/4" NPT (F) process connection and shall preferably have 3/4" BSC (F) electrical connection.
 - d) Make of pressure switch/ transmitter shall be subjected to BHEL approval. Make shall be indicated in the offer itself.
5. Open/close limit switches (potential free) with 2NO+2NC contacts to be supplied along with valve for feedback indication to DCS.
6. Documents :
 - a) Vendor to indicate all utility requirements for ERV and field controller such as power & air supply requirement / quantity/ rating etc. along with the offer for BHEL to arrange the same.
 - b) Detailed write up on the system to be furnished along with the offer.
 - c) Terminal details for ERV controller/valve showing all the signal interfaces required with BHEL's DCS.
7. BHEL Scope shall be limited to the following. Other than the below all necessary materials shall be supplied by the vendor.
 - a) BHEL will supply required instrument/service air (as indicated by vendor during offer stage) up to one common point for each ERV (within two meters from the valve) terminated with an Nb15 isolation valve. Further, it shall be vendor's responsibility to make arrangements for connecting air to their equipments. Necessary material also shall be in vendor scope only.
 - b) BHEL will provide power (220VDC) up to the local ERV controller supplied by vendor. Further any cables within the systems provided by vendor shall be in their scope only.
 - c) Pressure switch/transmitter shall be supplied along with required accessories (such as siphon, connectors and manifold). Necessary recommended erection drawings to be furnished by vendor. BHEL will do the necessary erection based on the drawings furnished by vendor. BHEL will terminate the process measurement connection with dual isolation valves.
 - d) Any interconnecting cables/ tubes/ other materials required for interconnecting with their system shall be in vendor scope only.
8. Erection
Erection of ERV controller will be done by BHEL based on the recommended drawings supplied by vendor.
9. Commissioning
Commissioning of the system shall be in vendor scope. Vendor shall ensure successful handing over of the system to customer and signing of handing over protocol.



BHARAT HEAVY ELECTRICALS LTD

Annexure 2A1

VALVES PURCHASE

Trichy - 620 014. India

GENERAL TERMS AND CONDITIONS-IMPORT

1. QUOTATIONS:

- a. **BID system:** The offers are invited in Three part bid system (Part I will be Prequalification bid, Part II will be Techno-commercial bid and part III will be Price Bid)
- b. **Submission of Tender:** Each offer should be sent in triple cover separately for each bid and the same should be sealed and super scribed with correct Tender No., description & due date of opening. The outer cover should only bear the address of this office and should not have any indication that a tender is within. Two or more quotations should not be sent in one cover. Tender should not be addressed to any individual's name but only by designation.
- c. **Late tenders:** Late tenders will not be considered under any circumstance.
- d. **Regulations:** Tenders should be free from CORRECTION AND ERASURES. Corrections if any must be attested. All amounts shall be indicated both in words as well as figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.
- e. **PVC:** Price Variation clause not acceptable. Prices should be firm.
- f. **Catalogue:** Manufacturer's name, Trade Mark or Patent No. if any should be specified. Illustrative leaflets giving technical particulars are required along with quotation.
- g. **Samples:** Samples should be submitted separately if specially requested in tender before due date of the enquiry. They should be clearly marked with the enquiry No and date on the outside cover to facilitate identification.
- h. **Deviation.** Any deviations from the specification are to be furnished separately as "Annexure 4A Schedule of Deviation". If there is no deviation vendor should indicate "No Deviation".
- i. **Confirmation:** Confirmation for compliance is to be given in the offer for all the techno commercial conditions specified in the specification.

2. COMMERCIAL TERMS & CONDITIONS:

- a. **Terms of Payment:**
Payment 100% against cash against documents through bank. Offers requesting for advance payment will be rejected. If LC is insisted 1.5% will be loaded on basic price during evaluation.
- b. **Liquidated Damage:** A sum equivalent to 0.5% of price for each week of delay up to a maximum of 15% of the delayed/ undelivered goods.
- c. **Delivery Terms:** Price should be quoted FOB nearest Seaport (mention seaport) or CIF as per ICC Incoterms 2010.
- d. **Validity of Offer:** Prices should be valid for 120 days from the date of opening of this tender.
- e. **Custom Duties:** As per FTP 2009-2014.
- f. **Risk Purchase:** Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of seller either the whole of goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefore. Supplier shall be liable for any loss which the purchaser may sustain by reason for such risk purchases in addition to penalty.
- g. **MODVAT/CREDIT:** If any Excise Duty is payable, the chapter head/sub-head reference and the rate of the duty should be quoted. If the tender is availing MODVAT credit for his input materials, the effect of proforma invoice should be passed on to the purchaser; tenderer under MODVAT shall be preferred.
- h. **Miscellaneous:** Any conditions which might have been quoted by the seller and are in contravention to the terms prescribed in order and which have not been specifically accepted by Purchaser will not be applicable to the contract.
- i. **Delivery period:** Delivery schedule shall be strictly as per BHEL tender requirement which are as indicated against each item in our tender.
- j. **Performance Bank Guarantee:** If tender Calls for Performance Bank Guarantee, Vendor should provide a performance bank guarantee(PBG) for 10% of the total Purchase order value valid for warranty/guarantee period with an additional claim period of 2 months. PBG should be issued from list of consortium banks.
- k. **Bank Charges:** All Bank charges outside India are to vendor's account only.



VALVES PURCHASE

Trichy - 620 014. India

GENERAL TERMS AND CONDITIONS-IMPORT

3. GENERAL CONDITIONS

- a. BHEL reserves the right to finalize the tender as per item sl no wise or as a total package or project wise. Separate orders will be released for each project and documents should be supplied for each order separately.
- b. BHEL reserves the right to increase or reduce or split the Tender Quantity and NOT to order for some or all material based on the changes in project.
- c. BHEL shall have the right to visit vendor works during the execution of contract along with end customer for verifying status, inspection and testing of the material.
- d. BHEL reserves the right to negotiate or re-float the tender in case the quoted prices are not acceptable.
- e. Supplier shall arrange packing to avoid lose or damages during Road Transport, Site handling & Storage.
- f. Purchase Order, PO Item SI No, Material code, Quantity should marked the Packing clearly.
- g. BHEL reserves the right to finalize the tender either through price bid opening or through Reverse Auction route.
- h. BHEL reserves the right to reject the offer of a particular bidder due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / units.
- i. The Drawings and Technical documents given in this enquiry are the sole property of BHEL. This should not be misused in any form.

4. DOCUMENTATION:

- a. **With Consignment:**
 - One set of Non Negotiable Documents, O&M Manual, packing list, Fumigation Certificate.
- b. **Through Bank:** All originals in Triplicate, material description in all documents shall be exactly as indicated in PO.
 - Bill of lading /Airway Bill and Certificate of Origin.
 - The invoice indicating the Unit price & total price.
 - Packing List contains quantity, net & gross weight of each item, packing dimensions, PO, Item SI No.
 - Inspection test certificates as per PO, Guarantee/warranty certificates.
 - Original Performance Bank Guarantee in the BHEL format from list of consortium bank, If applicable
- c. **To Purchase :** In soft copy
 - Copy of All Test Certificates as per purchase order.
 - Certificate that materials shipped and shown in the packing list are not less than that invoiced.
 - Copy of Non-negotiable documents
- d. **Identification:** Material code, Purchase Order, PO item SI No, Unique SI No if any should be provided in all despatch documents, materials and packing clearly.

5. TENDER EVALUATION:

Part I-Pre Qualification Bid-

- All Vendors should submit supply record, end user certificate and PO reference, catalogue etc...
- Vendor who are not registered in BHEL Trichy Product Material Directory (PMD), Vendor should submit duly filled supplier registration forms (SRF) which can be downloaded from our website www.bhel.com and supporting documents to the data filled in SRF.
- Vendors who are registered in other BHEL units can submit vendor code, Name of BHEL unit, Nature of item supplied, Vendor performance rating along with supplier registration form (SRF).
- BHEL reserves right to visit vendor works before registration for verification of facilities.
- Vendor who doesn't have manufacturing capacity/capabilities/credentials will be rejected.

PART II Techno-commercial Bid.

- All vendors should submit General arrangement drawing, datasheet and C&I diagrams of the offered product
- Point by point technical confirmation of all pages of our technical specifications and commercial conditions are required with your sign and seal along with techno commercial Offer.
- Filled Annexure 4A and Annexure 4B should be submitted.
- IBR certification of the factory should be confirmed with the offer.
- Offers from supplier not having technical capability or not agreed for commercial terms, will be rejected

PART III Price Bid.

- Bidders qualified for both part I and part II will be intimated for participating in priced bid opening/Reverse Auction.
- L1 bidder will be decided based on landed cost for the equipment to BHEL..
- Price Bid should be in BHEL format Annexure 4C
- For evaluation, the exchange rate shall be taken as TT selling rate of SBI on date of Part-1 bid opening.



BHARAT HEAVY ELECTRICALS LTD

Annexure 2B

VALVES PURCHASE

Trichy - 620 014. India

TENDER TERMS AND CONDITIONS

Special Terms applicable for this tender

1. Vendor should submit supply reference list for super critical projects for final approval of BHEL and Customer. Only Customer approved vendors and technically accepted vendors will be intimated for price bid opening.
2. All material should be inspected by IBR approved inspection agency, Customer and BHEL.
3. Performance Bank Guarantee is Applicable: Vendor should provide a performance bank guarantee(PBG) for 10% of the total Purchase order value valid for a period of 12 month from the date of commissioning (or) 18 months from the date of dispatch whichever is earlier with an additional claim period of 2 months. Bank guarantee should be as per BHEL format from list of consortium Banks (Annexure 3B).
4. Evaluation will be item wise with cost to BHEL which will include Commissioning spares and commissioning support.
5. Delivery should be less than 30 weeks from date of purchase order.
6. List and quote for operational spares required for the valves should be provided with the offer as a separate list.
7. Excise duty and Customs duty is exempted for this project.
8. Delivery Address-OPGCL Banahrapalli 2x660MW

The above offer should reach the following office address on or before the due date 19.09.2013 by 14:30 hours (IST). Late offers will not be considered in any circumstances.

TENDER BOX/PURCHASE/VALVES
III FLOOR, BUILDING 24
BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPALLI – 620014
TAMILNADU, INDIA

RFQ Owner Details

Name : Fayas Malik K
Designation : Engineer
Department : Purchase valves
Phone : +91 (0) 431 2577913
Mobile : +91 7598541541
Email : fayasmalik@bheltry.co.in

All communication should be addressed to the Secretary to the Government of India, Ministry of Industry, by title, NOT by name

Fax : 011-2306 2626

संख्या /No. 20/29/2009 -Boilers
भारत सरकार
वाणिज्य और उद्योग मंत्रालय
(औद्योगिक नीति एवं संवर्धन विभाग)
उद्योग भवन, नई दिल्ली - 110107
GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY
(DEPTT. OF INDUSTRIAL POLICY & PROMOTION)
UDYOG BHAWAN, NEW DELHI-110107,
दिनांक/ Dated, the 2nd April, 2012

To

1. All the members of the Central Boilers Board
2. All the Inspecting Authorities

Subject: List of recognised Inspecting/Competent Authorities, Well Known Steel Makers, Foundries/Forgings units, Tube/Pipe Makers, Material Testing Laboratories and Remnant Life Assessment Organizations under Indian Boiler Regulations as on 31st March, 2012.

Sir,

I am to forward herewith a copy each of the list of recognised Inspecting/Competent Authorities, Well Known Steel Makers, Foundries/Forgings units, Tube/Pipe Makers, Material Testing Laboratories and Remnant Life Assessment Organizations under Indian Boiler Regulations, 1950, as on 31st March, 2012 for your reference and record.

Thanking you,

Yours faithfully,


(S. K. Jain)

Development Officer &
Assistant Secretary, Central Boilers Board
Tel.No.011-23063321/3318

Encl: "As above"

Mr. SRH
↓
Mr. V RK
↓
2
2/4/12

V. K. Jaiswal

(As on 31/03/2012)

INSPECTING AUTHORITIES

<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 Chhattisgarh	Chhattisgarh
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. Lloyd's Register Asia
63-64, Kalpataru Square, 6 th Floor,
Kondivita Lane, Off. Andheri-Kurla Road,
Mumbai-400 059 | Tamilnadu, Maharashtra
Gujarat, Haryana & Punjab |
| 30. M/s. TUV Nord Systems GmbH Co.KG.
Langemarckstr 20
451141 Essen
GERMANY. | Europe, Brazil, China, Korea
and Thailand |
| 31. M/s RSA
(Formerly Royal & Sun Alliance plc)
17 York Street,
Manchester, M2 3RS,
United Kingdom | Europe |

- | | | |
|-----|--|--|
| 32. | M/s. Japan Inspection Company Limited,
No.10-7, 1-Chome, hatchobori, Chou-ku,
Tokyo, 104-0032, Japan | All countries except India |
| 33. | M/s. S.G.S. Korea Company Limited,
Industrial Division,
647-2, Sinpyeong-dong,
Saha-gu, Busan,
KOREA (604-030). | Korea & Japan |
| 34. | M/s Bureau Veritas,
67-71, Boulevard du Chateau,
92200 Neuilly-sur-Seine,
FRANCE | All countries except India. |
| 35. | M/s. Lloyds Register Verification Ltd.,
71, Fenchurch Street,
London EC 3M, U.K. | All countries except India. |
| 36. | M/s. Velosi Certification Bureau Ltd.,
Unit 1 Woodside Business Park,
Whitley Wood Lane,
Reading, Berkshire, RG2 8LW
United Kingdom | Europe, Middle East
Countries, China, Malaysia
Singapore & USA |
| 37. | M/s TUV Rheinland Brandenburg P falz e.V.,
Am Grauen stein, D-51105 Klon,
Germany | Europe , Japan, China &
Korea |
| 38. | Technischer Uberwachungs-Verein Saarland e.V.,
Am Tuev 1,
66280 Sulzbach,
Germany | Europe |
| 39. | M/s OOO "TekhnoLogicheskieEnergositime"
1. Kalinia St. Belgorod, 308001
Russia | Russia, China, Ukraine, USA
& Germany |
| 40. | M/s Engineering Bureau Franke
International,
55, Amurskaya St.,
Dnepropetrovsk
49108, Ukraine | Ukraine, Russia, Belarus, China ,
Uzbekistan, Poland, Belgium, Romania,
& Czech Republic |
| 41. | M/s. ARISE Boiler Inspection &
Insurance Company Risk Retention Group,
Grand Bay 1, 7000 South Edgerton Road,
Suite 100, Brecksville,
OH 44141 USA | USA & Canada |
| 42. | Tata Projects Limited,
"Mithona Towers-I", 1-7-80 to 87,
Opp. Wesley Co-Ed. Jr. College,
Prenderghast Road,
Secunderabad- 500 003, (India) | All countries except India |

- | | | |
|-----|--|----------------------------|
| 43. | M/s TUV SUD Industrie Service GmbH,
Wstendstr. 199,
80686 Munich,
Germany | All countries except India |
| 44. | M/s Germanischer Lloyd Industrial Services GmbH,
Steinhoeft 9,
20459 Hamburg,
Germany | All countries except India |
| 45. | M/s. TUV Thuringen e.V.,
Business Division Steam and Pressure Technology,
Melchendorfer Str. 64,
99096 Erfurt,
Germany | Europe |
| 46. | M/s. SGS-CSTC Standards Technical Services Co. Ltd.
9 th Building, No. 69,
KangQiao Industrial Park, Block 1159,
KangQiao East Road, Pudong District,
Shanghai-201 319
China | China |
| 47. | M/s Moody International Limited,
Hayworthe House, Market Place,
Haywards Heath, West Sussex,
United Kingdom | All countries except India |

COMPETENT AUTHORITIES

NAME OF THE AUTHORITY

1. Director of Boilers,
Andhra Pradesh
2. Chief Inspector of Boilers,
Arunachal Pradesh
3. Chief Inspector of Boilers
Assam
4. Chief Inspector of Boilers
Bihar.
5. Chief Inspector of Boilers
Chhattisgarh
6. Chief Inspector of Boilers,
Delhi.
7. Chief Inspector of Boilers,
Goa.
8. Director of Boilers,
Gujarat.
9. Chief Inspector of Boilers,
Haryana.
10. Chief Inspector of Boilers,
Himachal Pradesh.
11. Chief Inspector of Boilers,,
Jharkhand.
12. Director of Boilers,
Karnataka.
13. Director of Boilers,
Kerala.
14. Director of Boilers,
Madhya Pradesh.
15. Director of Boilers,
Maharashtra.
16. Chief Inspector of Boilers,
Meghalaya
17. Chief Inspector of Boilers,
Manipur

18. Chief Inspector of Boilers,
Mizoram
19. Chief Inspector of Boilers,
Nagaland
20. Director of Boilers,
Orissa
21. Director of Boilers,
Punjab
22. Chief Inspector of Boilers,
Labour Department,
Government of Puducherry,
Puducherry
23. Chief Inspector of Boilers,
Rajasthan.
24. Director of Boilers
Tamil Nadu
25. Chief Inspector of Boilers,
Tripura
26. Director of Boilers,
Uttar Pradesh
27. Deputy Director of Factories & Boilers
Uttarakhand
28. Chief Inspector of Boilers,
West Bengal
29. M/s. National Test House,
Plot No.F-10, M.I.D.C.,
Marol, Andheri (E),
MUMBAI - 400 093.
30. Welding Research Institute,
Bharat Heavy Electricals limited,
Tiruchirapalli – 620014.
31. M/s RSA
(Formerly Royal & Sun Alliance plc)
17 York Street,
Manchester, M2 3RS,
United Kingdom
32. M/s. TUV Nord Systems GmbH Co.KG.
Langemarckstr 20
451141 Essen
GERMANY.

Europe

Europe, Brazil, China, Korea
and Thailand

33. M/s. Hartford Steam Boiler Inspection and Insurance Company of Connecticut,
Code Services, One State Street,
P.P.Box 299, Hartford, CT 06141-0299
U.S.A.
34. M/s. Japan Inspection Company Limited,
No.10-7, 1-Chome, hatchobori, Chou-ku,
Tokyo, 104-0032, Japan
35. M/s. S.G.S. Korea Company Limited, Korea and Japan
Industrial Division,
647-2, Sinpyeong-dong,
Saha-gu, Busan,
KOREA (604-030).
36. M/s Bureau Veritas,
67-71, Boulevard du Chateau,
92200 Neuilly-sur-Seine,
FRANCE
37. M/s. Lloyds Register Verification Limited, All countries except India
71, Fenchurch Street,
London EC3M 4BS,
UNITED KINGDOM
38. M/s. Velosi Certification Bureau Ltd., Europe, Middle East
Countries, China, Malaysia
& USA
Unit 1 Woodside Business Park,
Whitley Wood Lane,
Reading, Berkshire, RG2 8LW
United Kingdom
39. Technischer Uberwachungs-Verein Saarland e.V., Europe
Am Tuev 1,
66280 Sulzbach,
Germany
40. M/s. OOO "TekhnoLogicheskieEnergosistime", Russia, China, Ukraine, USA
& Germany
1, Kalinia St. Belgorod, 308001,
Russia.
41. M/s. National Test House,
11/1, Judges Court Road
Alipore, Calcutta - 700027
42. M/s. ARISE Boiler Inspection & Insurance Company USA & Canada
Risk Retention Group,
Grand Bay 1, 7000 South Edgerton Road,
Suite 100, Brecksville,
OH 44141 USA
43. M/s TUV Rheinland Brandenburg Pfalz e.V.,
Am Grauen Stein, D-51105 Klön,
Germany

44. M/s National Test House,
Kamla Nehru Nagar,
Ghaziabad- 201 002
Uttar Pradesh
45. M/s TUV SUD Industrie Service GmbH, All countries except India
Wstendstr. 199,
80686 Munich,
Germany
46. M/s Germanischer Lloyd Industrial Services GmbH, All countries except India
Steinhoeft 9,
20459 Hamburg,
Germany
47. M/s. TUV Thuringen e.V., Europe
Business Division Steam and Pressure Technology,
Melchendorfer Str. 64,
99096 Erfurt,
Germany
48. M/s. SGS-CSTC Standards Technical Services Co. Ltd. China
9th Building, No. 69,
KangQiao Industrial Park, Block 1159,
KangQiao East Road, Pudong District,
Shanghai-201 319
China
49. M/s Moody International Limited, All countries except India
Hayworthe House, Market Place,
Haywards Heath, West Sussex,
United Kingdom

(As on 31/03/2012)

WELL-KNOWN STEEL MAKERS

1. M/s. Vallourec & Mannesmann Tubes,
V & M France, Aciere de Saint
Saulve, BP 10,
Rue du Galibot, 59880 Saint – Saulve,
FRANCE.
2. M/s. FACOR Steels Limited,
46 A & B, MIDC Industrial Estate,
Hingna Road,
NAGPUR-440 028
3. M/s. Kalyani Carpenter Special Steel Limited,
Mundwa,
PUNE – 411 036.
4. M/s. ISMT Ltd.,
(Steel Plant)
Jejuri – Morgaon Road, Taluk Purandara
P.O. Jejuri-412303,
Distt. Pune.
5. M/s. Tata Steel Limited,
Steel Division,
JAMSHEDPUR- 831 001
6. M/s. Jindal Steel & Power Ltd.,
Kharsia Road, P.B. No. 16,
Raigarh 496001.
CHHATISGARH
7. M/s Bharat Heavy Electricals Limited,
Central Foundry Forge Plant,
HARDWAR-249 403
8. M/s Steel Authority of India Ltd.,
Visvesvaraya Iron & Steel Ltd.,
BHADRAVATI-577 301
KARNATAKA
9. M/s Mukand Limited,
Belapur Road,
Dighe, P.O. Kalwe
Thane-400 605,
Maharashtra
10. M/s Kalyani Steel Limited,
Hospet Division, Hospet Road,
Taluka & Distt. Koppal,
GINIGERA-583228
Karnataka

11. M/s Mukand Limited,
Hospet Division, Hospet Road,
Taluka & Distt. Koppal,
GINIGERA-583228
Karnataka.
12. M/s Steel Authority of India Ltd.,
Bhilai Steel Plant ,
Bhilai-490 001
Chhattisgarh.
13. M/s Mahindra UGINE Steel Company Ltd,
Jagdishnagar,
Khopoli – 410216
Distt. Raigad
Maharashtra.
14. M/s Steel Authority of India Ltd.,
Bokaro Steel Plant,
Ispat Bhavan,
Bokaro Steel City – 827001,
Distt. Bokaro,
Jharkhand.
15. M/s. Ilsenburger Grobblech GmbH,
Veckenstedter Weg 10,
D-38871 Ilseburg,
Germany.
16. M/s HKM Huttenwerke Krupp Mannesmann GmbH,
Postfach 251124,
D47251 Duisburg,
Germany.
17. M/s. Tubos Reunidos Industrial S.L.U.,
Barrio Sagarribai 2,
01470 Ammurrio (Alava),
SPAIN.
18. M/s Jayaswals Neco Ltd,
Siltara Growth Centre, Siltara,
Raipur – 493 111,
Chhattisgarh.
19. M/s Remi Metals Gujarat Ltd.,
Plot No.1, GIDC,
Industrial Estate,
Valia Road,
Jhagadia – 393 110,
Dist.Bhaurch, Gujarat.
20. M/s Steel Authority of India Ltd.,
Rourkela Steel Plant,
Rourkela-769 011.

21. M/s Wuyang Iron and Steel co.Ltd.,
Wuyang City, Henan Pro,
P.R.China-462 500
22. M/s Adhunik Metaliks Limited,
Chadrihariharpur, Kuarmuda,
Distt. Sundergarh,
Orissa-770 039
23. M/s. Essar Steel Limited,
27 km, Surat Hazira Road,
Hazira- 394 270,
Surat, Gujarat
24. M/s Steel Authority of India Limited,
Alloy Steels Plant,
Durgapur- 713 208
West Bengal
25. M/s JSW Steel Limited,
Salem Works,
P.O. Pottaneri-Kallipatti Village,
Mecheri- 636 453
Distt. Salem
Tamil Nadu
26. M/s AG der Dillinger Huttenwerke,
Werkstr.1, D-66736 Dillingen,
Germany
27. Ms Shyam Forgings Pvt. Limited,
6th Milestone, G.T. Road,
Chhaprola,
Gautam Budh Nagar-201 009
Uttar Pradesh
28. M/s Sunflag Iron & Steel Co. Limited,
P.O. Bhandara Road,
Distt. Bhandara-441 905
Maharashtra
32. M/s Evraz Vitkovice Steel, a.s.,
Stramberska 2871/47,
709 00 Ostrava-Hulvaky,
Czech Republic

(As on 31/03/2012)

WELL-KNOWN FOUNDRIES

1. M/s. Samco Metals and Alloys Pvt. Ltd.,
Kaniyambadi-632102,
Vellore Taluk, N.A. Distt.,
TAMIL NADU.
2. M/s. Gujarat Techno-Castings Pvt. Ltd.
Near C.D. High School,
Saijpur-Bogha,
AHMEDABAD.
3. M/s. Ratan Engineering Company Pvt. Ltd.,
F-454 RIICO Industrial Area,
Bhiwadi, Distt ALWAR
RAJASTHAN
4. M/s. Uni Deritend Limited,
Maneck Nagar, Tumsar-4410912
Distt. Bhandara,
MAHARASHTRA.
5. M/s. Malnad Alloy Castings Pvt. Ltd.,
36-A, Shimoga-Bhadravathi Industrial Area,
Machenahalli-577222
SHIMOGA
6. M/s. Auto Shell Casts Pvt. Ltd.,
10, SIDCO Industrial Estate,
COIMBATORE - 641 021
7. M/s. Jsons Foundry Pvt. Ltd.,
Plot No.G/13, MIDC,
Kupwad Block,
Sangli-416 436
MAHARASHTRA.
8. M/s. Veeyes Alloys Pvt. Ltd.,
Door No.3C1-3C4, Athipalayam Pirivu,
Ganapathy,
COIMBATORE-641 006.
9. M/s. Upper India Special Castings Limited,
Dhandari Industrial Area, Focal Point,
LUDHIANA-141 010
10. M/s. Anugraha Valve Castings Limited,
391/2, Sendoda Goudan Pudur,
Arasur Village, Palladam (TK),
COIMBATORE-641 407.
11. M/s. Aruna Alloy Steels Pvt.Ltd.,
Unit – II,
3/1, Olaganeri Village, Uthangudi Post,
MADURAI-625 107.

12. M/s. Oswal Industries Limited,
Bileswarpura,
P.O. Chhatral, Tal Kalol,
Distt. Gandhinagar,
Gujarat – 382 729.
13. M/s. A.V. Valves Limited,
160, Industrial Estate,
Nunhai,
AGRA-282 006.
14. M/s. Veeyes Foundry Pvt. Ltd.,
SF No.302/1 & 4, Kodathur Road,
Kunnathur Pudur (P.O.),
COIMBATORE-641 107.
15. M/s. Madura Steel Industries Pvt. Ltd.,
Chettinaickenpatty,
DINDIGUL-624 004.
16. M/s Creative Castings Limited,
102, G.I.D.C. Phase II,
Dolatpara,
JUNAGARH - 362 003
17. M/s Peekay Steel Castings (P)Ltd.,
(Foundry Division), Nallalam,
KOZHIKODE-673027,
Kerala.
18. M/s PTC Industries Ltd.,
B-480, RIICO Industrial Area,
BHIWADI -301019.
19. M/s The KCP Limited,
Engineering Unit,
Post Box No. 2278,
Tiruvottiyur,
CHENNAI - 600019.
20. M/s. Jayaswal Neco Ltd.,
T-41/42, MIDC Industrial Area,
Hingna Road, NAGPUR-440 016
21. M/s. Saurabh Metals Pvt. Ltd.,
1,22, New Industrial Area,
Mandideep – 462 046,
Bhopal.
22. M/s. Sanmar Foundries Ltd.,
Foundry Division,
87/1, Vadugapatti Village,
Viralimalai-621316.
TAMILNADU

23. M/s. Sri Ranganaathar Industries Pvt. Ltd.,
12/45, Thadagam Road,
Edayapalayam P.O.,
COIMBATORE - 641025.
24. M/s. Aruna Alloy Steel Pvt.Ltd.,
Unit-I
Super B-6, Industrial Estate,
K. Pudur,
MADURAI - 625007.
25. M/s Hindustan Udyog Limited,
Biren Roy Road,
Ranipur, Maheshtala,
24, Paragana (South), West Bengal.
26. M/s Harihar Alloy Private Ltd.,
Unit-I, SF No. 421 & 671, Trichi-Thuraiyur Road,
PULIVALAM – 621006.
27. M/s Coimbatore Super Alloy (P) ltd.,
Thelungupalayam Pirivu,
Ellapalayam P.O., Annur (Via),
Pogalur - 641697.
Coimbatore Distt.
28. M/s Ultimate Alloys (P) ltd.,
Kannampalayam Village,
Trichi Road, Sular,
COIMBATORE - 641402.
29. M/s Kartik Steel Ltd.,
52-53, Sipcot Industrial Complex,
Ranipet - 632403.
N.A. District
30. M/s S.V.E Castings Pvt.Ltd.,
Plot No. 1 & 2, KIADB Indl. Area,
Anantapur Road,
Bellary - 583101.
31. M/s Sueeraa Alloys Global (P) Ltd.,
315/2 Kandampalayam,
Sembianallur Village,
Avanashi – 641654.
Coimbatore.
32. M/s. Sree Shiva Sai Cast Pvt. Ltd.
(Formerly: M/s Aaditya Cast)
Survey No. 57,
Gejjenahalli,
Shimoga – 577204.

33. M/s R.K. Machine Tools Ltd.,
854, R.K. Road,
Industrial Area -A,
Ludhiana - 141003.
34. M/s Mani's Foundries (Pvt.) Ltd.,
SF No. 211 & 274, Uralipatty,
Velvarkottai (PO)
Dindigul - 624803.
35. M/s Castech Foundries Pvt. Ltd.,
1708/1709, G.I.D.C., Phase - II,
Dolatpara, Junagarh - 362003 (Gujarat)
36. M/s S.S. Alloy Products Pvt. Ltd.,
83/5, Phase-I, "F" Road,
GIDC Vatva,
Ahmedabad - 382445.
37. M/s. Sri Padmabalaji Steels P. Ltd.,
459/460, Masandipalayam,
Karakoundampalayam Post,
Annur, Coimbatore - 641 697.
38. M/s NMVST Alloys Cast,
4/363-A, Kallipalayam Village,
Chikkarampalayam PO.,
Karamadai (PO) - 641 104,
Coimbatore Dist.,
Tamilnadu.
39. M/s. Veeyes Alloys Private Limited,
Unit-II, S.F. No.518/1A&1B,
Saravanampatti- Tudiyalur Road,
Vellakinar Post,
Coimbatore - 641 029.
40. M/s. Amex Alloys Private Limited,
SF No. 289/2, Sathy Road,
Kunnathur Pudur PO,
Coimbatore 641 107.
41. M/s. Balaji Super Alloys,
Bettathapuram Pirivu,
Karamadai (PO) - 641 104
Coimbatore Dist.
42. M/s. Anugraha Valve Castings Limited,
(Formerly : M/s Graha Industries Private Limited)
S.F. No.307, Sendoda Goudan Pudur,
Arasur Village, Palladam (TK),
COIMBATORE-641 407.

43. M/s Aruna Alloy Steels Pvt. Ltd.,
Narasingampatti, (Unit-III)
Therkutheru,
Madurai - 625112.
44. M/s Ratnamani Techno Casts Ltd.,
3310, Phase IV, GIDC Estate, Chhatral 382 729,
Ahmedabad Mehsana Highway, Dist. Gandhinagar,
Gujarat.
45. M/s Nectar Steel Cast Pvt. Ltd.,
E-62, MIDC Waluj,
Aurangabad - 431 136.
46. M/s Western Precicast Pvt. Ltd.,
Gate No. 170, Village Savali,
Taluka Miraj, Dist. Sangli. (Maharashtra)
47. M/s. Shyam Forgings Pvt. Ltd.,
6th Mile Stone, G.T. Road, Chhaprola,
Gautambudh Nagar - 201 009 (U.P.).
48. M/s Electralloy Special Steel Castings Pvt. Ltd.,
Plot No. 25, SIPCOT Industrial Complex,
6th Cross Road,
Hosur-635 126 (Tamil Nadu)
49. M/s Koso Fluid Control (P) Limited,
Foundry Division,
1/80, Talungupalayam Road,
Pillayappampalayam Post,
Annur, Coimbatore-641 653
50. M/s Bharat Heavy Electricals Limited,
Central Foundry Forge Plant,
Ranipur, Haridwar-249 403 (Uttarakhand)
51. M/s Amsteel Castings Pvt. Limited,
35-A, Sipcot Industrial Industrial Complex,
Hosur-635 126 (Tamil Nadu)
52. M/s Neesa Infrastructure Limited,
278, Pancharatna Industrial Estate,
Vill: Changodar, Tal.: Sanand,
Distt. Ahmedabad- 382 213
Gujarat
53. M/s RLS Alloys Private Limited,
S.F. No. 118/1,2,3 Sethurapatti,
Fathimanagar,
Trichy- 620 012
Tamil Nadu

54. M/s Harihar Alloys Private Limited,
Unit II, S.F. No. 229/2 & 4B,
Laxmanampatti Village,
Kulathur(Tk),
Pudukottai-622 054
Tamil Nadu
55. M/s Leader Valves Limited,
S-3,S-4, Industrial Town,
Jalandhar-144 004
Punjab
56. M/s A. K. Multimetals Private Limited,
A-1, Focal Point,
Mandi Gobindgarh-147 301
Punjab
57. M/s Uttar Pradesh Steels,
Village- Nara,
P.O. Mansurpur-251 203
Distt. Muzaffarnagar,
Uttar Pradesh
58. M/s Shree Kumaran Alloys,
S.F.No. 461, Telungupalayam Road,
Ellapalayam Post
Annur,
Coimbatore-641 697
59. M/s Yama Control Company,
Old No. 26, New No. 43A, P.N.Palayam Road,
Perumal Koil Thottam,
Ganapathy
Coimbatore-641 006
60. M/s Tulip Castings Pvt. Limited,
Plot No. 29, Opp. SBI,
MIDC Shirolu,
Kolhapur-416 122
61. M/s Flow Link Systems(P) Limited,
189/1A-1C, Uthupalayam,
Avinashi Road, Arasur
Coimbatore-641 407
62. M/s Vinayaka Electro Alloys(I) Pvt. Limited,
2/27A, Chennimalai Road,
Near Power House, Ingur
Perundurai-638 058
Distt. Erode, Tamil Nadu
63. M/s Shree Harie Steel & Alloys,
S.F. No. 461/A, Masandipalayam,
Karekavundampalayam Post
Annur-641 697
Tamil Nadu

64. M/s CRI Pumps Private Limited,
Unit: Valves-Steel Castings,
S.F. No. 51/1, Masagounden,
Chettipalayam, Kunnathur,
Pudur Post, Oraikkalpalayam,
Coimbatore-641 107

65. M/s Angalamman Alloys (P) Limited,
S.F. No. 245,1-A, 1-B,
Bettathapuram Pirivu,
Karmadai-641 104
Coimbatore Distt.

(As on 31/032012)

WELL-KNOWN FORGES

1. M/s. M.M. Forgings Limited, Plant I,
Singampunari-630502.
Singampunari District,
TAMILNADU.
2. M/s. Sadhu Forgings (P) Ltd.,
Plot No.140, Sector 24,
FARIDABAD-121 005
3. M/s. Unity Forge Limited,
D-10, Maraimalai Nagar-603 209.
Kancheepuram Distt
TAMIL NADU.
4. M/s. Vishnu Forge Industries Limited,
C-01/C-02 and A-24,
HMT Industrial Estate,
BANGALORE - 560031.
5. M/s. LGB Forge Limited,
(Formerly: M/s L.G. Balakrishnan & Bros.),
Plot No. 80 & 81, 5th Mile K.R.S. Road,
Metagalli Post,
MYSORE-570 016.
6. M/s Chaudhary & Sons(Forgings) Pvt. Limited,
Plot No. 4, Lal Kuan,
G. T. Road ,
Ghaziabad- 201 009
Uttar Pradesh
7. M/s. C.D. Engineering Company,
C-199, Bulandshahr Road,
Industrial Estate,
GHAZIABAD- 201 009
8. M/s. Steel & Industrial Forgings Limited,
Athani P.O. Mulankunnathukavu,
Thrissur Distt. Pin-680 771.
Kerala
9. M/s. MM Forgings Limited Plant 2,
Erasanayakanpatti,
Fathimanagar Post,
Viralimalai,
Pudukottai Distt.-621 316.
TAMILNADU
10. M/s Echjay Industries Private Limited,
Echjay Steel Division,
Lalpari Lake Road,
RAJKOT - 360 003.

11. M/s Ghaziabad Ispat Udyog Pvt. Ltd.,
C-89, Industrial Area,
Bulandshar Road, GHAZIABAD - 201 001.
12. M/s. CHW Forge Pvt. Limited,
Village Achheja, P.O. Dujana, G.T. Road,
Greater NOIDA-203207,
Distt. Gautam Budh Nagar,
UTTAR PRADESH
13. M/s Bharat Heavy Electricals Limited,
Heavy Electrical Equipment Plant,
Ranipur
HARDWAR-249 403
14. M/s ACME Forgings Pvt. Ltd.,
Rajkot-Gondal Highway,
P.O. T.B. Hospital,
RAJKOT-360002.
15. M/s Vikrant Forge Ltd.,
Maity Para,
Delhi Road, P.O. Dunkuni- 711 224,
Distt. Hoogly,
West Bengal.
16. M/s Vinir Engineering Pvt. Ltd.,
102-104, Bammassandra Industrial Area,
Bangalore – 560 099.
17. M/s. CD Industries,
Plot No.3, South of G.T. Road,
Industrial Area, Bulandshahr Road,
GHAZIABAD - 201 001.
18. M/s Hi-Tech Forgings (Bangalore) Pvt. Ltd.,
V-1(A), 3rd Cross,
Behind B-167/B-168, Peenya 1st Stage,
Peenya Industrial area,
Bangalore-560058.
19. M/s. The Punjab Steel Works,
B-38, Mayapuri Industrial Area-Phase 1,
New Delhi-110064.
20. M/s. Kissan Steels (P) Ltd.,
B-12, Industrial Area No. 1,
Bulandshahar Road, Ghaziabad
U.P. – 201001.
21. M/s. Thillai Engineering Works,
161, SIDCO Industrial Estate,
Ambattur,
Chennai – 600 098.

22. M/s Anandmayee Forgings Pvt. Ltd.,
5A, Industrial Area,
Site-4, Sahibabad,
Distt. Ghaziabad – 201 010 (U.P.).
23. M/s. Ommi Forge Private Limited,
No.2, Visveswaraiah Industrial Area,
BANGALORE – 560 048.
24. M/s AMW-AGM Forgings Pvt. Ltd.,
(Formerly: M/s MGM Forgings Pvt. Ltd)
Plant II, 82-84, 5th Mile, Metagalli Post,
Mysore - 570016.
25. M/s. Fivebros Forgings Pvt. Ltd.,
145-A, G.I.D.C. Industrial Estate,
Ankleshwar – 393 002
Gujarat.
26. M/s Bharat Heavy Electricals Limited,
Central Foundry Forge Plant,
Ranipur, Haridwar-249 403
Uttarakhand
- 27 M/s Alka Forgings,
C-20, Bulandshar Road Industrial Area,
Ghaziabad
Uttar Pradesh
- 28 M/s Hindon Forge (P) Lilited,
C-173, Bulandshahar Road Industrial Area,
Ghaziabad-201 001
Uttar Pradesh
29. M/s Metal Forgings Private Limited,
B 1, Mayapuri Industrial Area Phase I
New Delhi- 110064
- 30 M/s R.D.Forge,
(A Unit of R. D. Chemicals Pvt. Ltd.)
C-114, Bulandshar Road Industrial Area,
Ghaziabad- 201 009
Uttar Pradesh
31. M/s Lal Metal Forge Limited,
A-7/1/13, Electro Steel Casting Compound,
South Side of G. T. Road Industrial Area ,
Ghaziabad- 201 009
Uttar Pradesh
32. M/s Good Luck Engineering Co.,
Khasra No. 2839,
Gram Dhoom Manikpur,
G.T.Road, Dadri
Distt. Dautam Budh Nagar (U.P.)

33. M/s Bharat Heavy Electricals Limited,
Ramachandrapuram,
Hyderabad-502 031
Andhra Pradesh

34. M/s Utsah Engineering Private Limited,
Khasra No. 605 to 612,615 & 618
Village-Khera, Dholana Road
Pilkhuwa, Distt. Ghaziabad
Uttar Pradesh

(As on 31/03/2012)

WELL-KNOWN TUBE AND PIPE MAKER

1. M/s. Bharat Heavy Electricals Limited,
Unit Seamless Steel Tube Plant,
Tiruchirapalli-620014.
TAMILNADU
2. M/s Vallourec & Mannesmann Tubes,
V&M Deutschland GmbH, Wiesen Strasse 36,
45476 Muelheim an der Ruhr, Germany.
3. M/s Vallourec & Mannesmann Tubes,
V&M Deutschland GmbH, Ratherkreuzweg, 106,
D-40472 Duesseldorf, Germany.
4. M/s Vallourec & Mannesmann Tubes,
V&M Deutschland GmbH, Henkelstrasse, 209,
D-40599 Duesseldorf, Germany.
5. M/s Vallourec & Mannesmann Tubes,
Saint Saulve Tube Plant, Z I rue du Galibot, B P 2,
59880 Saint Saulve, France.
6. M/s Vallourec & Mannesmann Tubes,
Aulnoye Tube Plant, 64, rue de Leval B P 159,
59620 Aulnoye Aymeries, France.
7. M/s. Tata Steel Limited,
Tube Division,
P.O. Burma Mines
JAMSHEDPUR.-831 007
8. M/s. Maharashtra Seamless Ltd.,
Village Sukeli, NH 17,
B.K.G. Road, Taluka Roha,
Distt. Raigarh-402 126.
MAHARASHTRA.
9. M/s. ISMT Ltd.,
Plant B,
B-13, M.I.D.C., Baramati,
Distt. Pune – 413 133.
10. M/s Tube Products of India,
Welded Pipes & Tube Division,
Avadi,
CHENNAI – 600 054.
11. M/s. Tubos Reunidos Industrial S.L.U.,
Barrio Sagarribai 2,
01470 Ammurrio (Alava),
SPAIN.

12. M/s Jindal Pipes Ltd.,
22nd Mile, Delhi-Hapur Road,,
P.O. Jindal Nagar,
GHAZIABAD
13. M/s ISMT Ltd.,
C-1, MIDC Industrial Area,
Nagapur,
AHMEDNAGAR-414111.
14. M/s Ratnamani Metals & Tubes Ltd.,
SSTP Division, Survey No. 769,
Ahmedabad - Mehsana Highway,
Village Indrad – 382 729
GUJARAT.
15. M/s Ratnamani Metals & Tubes Ltd.,
Kutch Division, Survey No. 474,
Bhimsar Road,
Village Bhimsar – 370 201
Taluka Anjar ,GUJARAT
16. M/s. Mahalaxmi Seamless Ltd.,
Pipe Nagar (Sukeli), Via Nagothane,
Tal. Roha, Distt. Raigarh,
Maharashtra-402126.
17. M/s. Tube Investment of India Ltd.,
Unit: Tube Products of India,
Shirwal P.O., Khandala Taluka,
Satara District,
Maharashtra – 412 801.
18. M/s Jindal Saw Ltd., (Seamless Tube Div),
Plot No. A-59/60, Malegaon MIDC,
Sinnar-422 113,
Dist. Nashik – Maharashtra.
19. M/s Dalmine S.p.A.-Dalmine Plant,
Piazza caduti 6 luglio 1944,
24044 Dalmine (Bnergamo)
Italy.
20. M/s Dalmine S.p.A.-Costa Volpino Plant,
Via Pio, 1,
24062 Costa Volpino (Bergamo)
Italy.
21. M/s SC Mittal Steel,
Cordun Village, Roman-lasi Highway,
Km. 333, Neamt County, Romania.

22. M/s. Lalit Pipes & Pipes Ltd.,
Survey No.77,
Village Varaskol,
Khardi Railway Station (C.R.),
Tal. Shahpur, Dist Thane,
Maharashtra.
- 23 M/s Tube Products of India,
A-16-17, Industrial Area,
Phase – 6,
S.A.S. Nagar, Mohali,
Punjab - 160055.
24. M/s Remi Metals Gujarat Ltd.,
Plot No.1, GIDC,
Industrial Estate,
Jhagadia – 393 110,
Dist. Bharuch, Gujarat.
25. M/s Caparo Tubes India,
Steel Tube Road,
Dewas – 455 001,
Madhya Pradesh.
26. M/s Heavy Metal & Tubes limited,
101, Bileshwarpura,
Ta.: Kalol, Distt. Gandhinagar,
Gujarat
27. M/s Heavy Metal & Tubes limited,
138, Bileshwarpura,
Ta.: Kalol, Distt. Gandhinagar,
Gujarat
28. M/s Bhushan Steel Limited,
Vill. Nifan & Savroli,
Savroli-Kharpada Road,
Tal.: Khalapur, Distt. Raigad-410 202
Maharashtra
29. M/s Tenaris Silcotub, S.C. Silcotub S.A.,
Mihai Viteazul No. 93,
450131 Zalau,
Romania

(As on 31/3/2012)

WELL KNOWN PIPE MAKERS

1. M/s Productos Tubulares S.A.U,
Carretera Galindo a Ugarte s/n,
8510 - Valle de Trapaga,
(Vizcaya)
SPAIN.
2. M/s Surindra Engineering Co. Ltd.,
Surindra House, Safaid Pool,
M.V. Road, Andheri (East),
MUMBAI - 400072.
3. M/s Mukat Tanks & Vessels Pvt. Ltd.,
J-11/G-69, MIDC Industrial Area,
Tarapur, Distt.-Thane,
Maharashtra
4. M/s Ratnamani Metals & Tubes Ltd.,
SAW Pipe Division, Plot Nos. 3306 to 3309,
GIDC Estate, Phase IV
Ahmedabad - Mehsana Highway,
Village Chhatral, -382 729
Taluka Kalol, District Gandhinagar
GUJARAT.
5. M/s Zelezarny Veseli a.s.
Division Valcovny trub Chomutov,
Libusina 4778, 430 01 Chomutov
Czech Republic
6. M/s IBF SPA,
Pipes Division,
Via Ghandi 17/19-20010,
Vittuone(Milan),
Italy

(As on 31/3/2012)

WELL KNOWN TUBE MAKERS

- 1 M/s CST Valinox Limited,
9-14, Isnapur,
Patancheru
Medak District-502 307
Andhra Pradesh

(As on 31/3/2012)

WELL-KNOWN MATERIAL TESTING LABORATORIES

1. M/s. R.K. Inspection & Testing Services,
C-196/2, Mayapuri, Phase-II,
NEW DELHI-110064.
2. M/s National Test House,
11/1, Judges Court Road,
Alipore,
Kolkata-700 027
3. M/s National Test House,
Plot No. F-10, MIDC,
Marol, Andheri (E),
Mumbai-400 093
4. M/s IRC Engineering Services India Pvt. Ltd.,
A-53, Sector 63,
Noida-201 301
5. M/s Spectro Analytical Labs Limited,
E-41, Okhla Industrial Area,
Phase-II,
New Delhi-110 020
6. M/s National Test House,
Kamla Nehru Nagar,
Ghaziabad-201 002
Uttar Pradesh

(As on 31/3/2012)

WELL KNOWN REMNANT LIFE ASSESSMENT ORGANISATIONS

1. M/s Bharat Heavy Electricals Limited,
High Pressure Boilers Plant,
TIRUCHIRAPALLI - 620014.
2. M/s Tata Power Comp[any Limited,
Trombay Thermal Power Station,
Mahul Road, Chembur,
MUMBAI - 400074.
3. M/s. Thermax Babcock & Wilcox ,
(A Division of Thermax Limited),
D-II Block, Plot No. 38 & 39,
MIDC, Chinchwad ,
Pune- 411 019
4. M/s. Central Power Research Institute,
Thermal Research Centre,
Chinchwara Road,
KORADI.-441 111
5. M/s. Central Mechanical Engineering Research Institute,
Mahatma Gandhi Avenue,
DURGAPUR-713 209
6. M/s. Utility Powertech Ltd.,
'UPL House',
W-24, Sector-11,
Noida-201 301
Uttar Pradesh
7. M/s. NTPC Alstom Power Services Pvt. Ltd.,
B-1, J-1, Mohan Cooperative Industrial Area,
Mathura Road,
New Delhi-110044.
8. M/s Energo Engineering Projects Pvt.Ltd.,
A 57/4, Okhla Industrial Area,
Phase-II,
New Delhi – 110 020.
9. M/s NDE Inspection,
50 – Fourth Cross, Raja Colony,
Collector Office Road,
Tiruchirapalli – 620 001.
10. M/s IRC Engineering Services India Pvt. Ltd.,
612, Chiranjiv Tower,
43, Nehru Place,
New Delhi – 110019.

11. M/s National Thermal Power Corporation Ltd.,
Research & Development Centre,
A-8A, Sector-24,
Noida, U.P.
12. M/s Electrical Research and Development Association,
ERDA Road, GIDC, Makarpura Industrial Estate,
Vadodara-390 010
Gujarat
13. M/s Steag Energy Services (India) Private Limited,
(Formerly Evonik Energy Services (India) Private Limited),
A-29, Sector- 16,
Noida-201 301
Uttar Pradesh
14. M/s Perfect Inspection Services,
265, Light Industrial Area,
Bhillai
Chhattisgarh
15. M/s ND Tech Consultants Pvt. Limited,
90A-Pocket 1,
Mayur Vihar Phase-I
New Delhi- 110 091
16. M/s ASP Industrial Test House Pvt. Limited,
87 (First Floor),
Navyug Market
Ghaziabad- 201 001
Uttar Pradesh
17. M/s National Metallurgical Laboratory,
(Council of Scientific & Industrial Research)
Burmamines,
Jamshedpur-831 007
Jharkhand

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT AND THE EXPIRY DATE OF BG MUST BE AFTER 60 DAYS FROM THE DATE OF COMPLETION OF WARRANTY PERIOD)

PERFORMANCE BANK GUARANTEE

In accordance of M/s. Bharat Heavy Electricals Limited (A Government of India undertaking, a company incorporated under the Companies Act 1956 having its Registered Office at “BHEL House”, SIRI Fort, New Delhi 110 049) through its High Pressure Boiler Plant Division located at Tiruverumbur, Tiruchirapalli- 620 014 (hereinafter called ‘the Company’) having entered into a contract withhereinafter called ‘ the said contractor ‘ which term includes ‘suppliers’ for the purpose of this Bond and under the terms and conditions of the contract No..... Dt Between BHEL, Trichy and as per the contract, the contractor / supplier is to furnish a performance Bank guarantee for Rs. for the due performance of the equipment to be supplied under the above referred contract and for the fulfillment of all the terms and conditions of the contract, We(indicate the name of the bank) (herein after referred to as the bank) at the request of (Contractor(s)) do here by undertake to pay the company an amount not exceeding Rs.....against any loss or damage caused to or suffered or would be caused to or suffered by the company by reason of any breach by the said contractor (s) of any of the terms and conditions contained in the said agreement.

2. We(indicate the name of the bank with full address), do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by the reason of the contractor(s) ‘failure to perform’ the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs._____.

3. We undertake to pay unconditionally to the Company any money so demanded notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal. The payment under this guarantee would not wait till the disputes have been decided by any Court or Tribunal or in the arbitration proceedings or by any other authority. The payment so made by us under this Bond shall be a valid discharge of liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.

4. We.....(indicate the name of Bank), further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till _____ Office / Department/ Division of the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. (I) Unless a demand or claim under this guarantee is made on us in writing on or before the _____ we shall be discharged from all the liability under this guarantee thereafter. But where such claim or demand has been preferred by the Company with the Bank before the expiry of the said date, the claim shall be enforceable notwithstanding the fact that the said enforcement is effected after the said date.

(ii) For the purpose of this clause, any letter making demand on the Bank by M/s. BHEL dispatched by Registered Post with Ack.Due or by Telegram or by any Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim / demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the bank personally.

6. We(indicate the name of Bank), further agree with the company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the company or any indulgence by the company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating would, but for this provision, have effect of not so relieving us.

7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

8. It shall not be necessary for the company to proceed against the contractor before proceeding against the guarantor-bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealised.

9. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirapalli.

10. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authorities granted to him/them by the guarantor.

11. We(indicate the name of Bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing.

In witness whereof we....., (indicate the name of Bank) have hereunto setout Bank Seal the _____ day _____ month 200

BANK E-MAIL ID:
BANK PHONE NO.
BANK FAX NO:

List of Consortium Bank			
	Nationalised Bank		Nationalised Bank
1	Allahabad bank	19	Vijaya Bank
2	Andhra bank		Public Sector Banks
3	Bank of Baroda	20	IDBI
4	Canara Bank		Foreign bank
5	Corporation bank	21	CITI Bank N.A
6	Central bank	22	Deutsche Bank AG
7	Indian Bank	23	The Hongkong and Shanghai Banking Corporation Limited
8	Indian Oversea Bank	24	Standard Chartered Bank
9	Oriental bank of Commerce	25	The Royal Bank of Scotland N.V.
10	Punjab National Bank	26	J P Morgan
11	Punjab & Sindh Bank		Private bank
12	State Bank of India	27	Axis Bank
13	State Bank of Hyderabad	28	The Federal Bank Limited
14	Syndicate Bank	29	HDFC
15	State Bank of Travancore	30	Kotak Mahindra Bank
16	UCO Bank	31	ICICI
17	Union Bank of India	32	Indusind Bank
18	United Bank of India	33	Yes Bank

SCHEDULE OF DEVIATIONS

Enq Ref:

Offer Ref:

Date:

Commercial Deviation:

Annexure / Clause No.	Description	Supplier Deviation

Technical Deviation:

Annexure / Clause No.	Description	Supplier Deviation

We confirm acceptance of all the Technical and Commercial requirements as per BHEL Tender, except the above deviations.

Signature with Seal

			Annexure 4B1		
BHEL Enquiry No. & Date			Vendor's Offer Ref No. & Date		
Enq SI No.	Material Code	Description	Unit	Qty	Quoted/ Not Quoted
10					
20					
30					
40					
50					
.					
.					
.					
Total Ex-works Value in Rs					
Add Packing & Forwarding Charges if extra					
Excise Duty					
CST/VAT					
Add Freight Charges if extra					
Add Transit Insurance Charges if extra					
FOR Site Value in Rs					
Discount If Applicable					
Validity of offer					
Consignment Package Details					
Approximate Net / Gross Weight in Kgs					
Dimension of Consignment					
NOTE:					
The Price Bid should be submitted strictly in line with the above FORMAT					
Prices should be only on FOR Site(as mentioned in enquiry) basis					

Signature & Seal of Ve

					Annexure 4C
	BHEL Enquiry No. & Date			Vendor's Offer Ref No. & Date	
	MODEL PRICE BID FORMAT FOR IMPORT VENDORS				
	Currency				
Enq Sl No.	Description	Unit	Qty	Unit Price in Currency	Value in Currency
1					
2					
3					
4					
5					
.					
.					
	Total Ex-works Value in currency				
	Add Packing & Forwarding Charges if extra				
	Add FOB Charges if extra				
	FOB Value in Currency				
	Validity of Price				
	Consignment Package Details				
	Approximate Net / Cross Weight in Kgs				
	Dimension of Consignment				
	Delivery date from the date of Purchase Order				
				Signature & Seal of Vendor	
	NOTE:				
	The Price Bid should be submitted strictly in line with the above FORMAT				
	Prices should be only on FOB basis				