

 434-003/A	ENQUIRY VALVES	Bharat Heavy Electricals Limited (A Government of India undertaking) HIGH PRESSURE BOILER PLANT PURCHASE DEPARTMENT/VALVES TIRUCHIRAPPALLI-620 014.	Phone: +91 (431) 257 7096/4047 Email: sivabala@bhel.in kathir@bhel.in	
		ENQUIRY NO.	DATE	DUE DATE FOR QUOTATION
		ENSFV00187	02.02.2018	28.02.2018
		Please quote Enquiry No., and due date in correspondences <i>This is only a request for quotation and not an order.</i>		
<u>Date, Time & Venue of tender opening:</u> 28.02.2018 at 14.30 Hrs. at The Tender Opening Cell/Valves Room No. -26, Building -24 Bharat Heavy Electricals Limited Tiruchirappalli - 620014, Tamilnadu, India Email: tender_cell@bheltry.co.in		<u>Scope of supply</u> Supply of Spring Loaded Safety Valves as per the purchase specification enclosed. -List of Annexures 00. Annexure 0A - Scope of Supply 01. Annexure 1A - DATA SHEET VDS:SV:1818 Rev: 01 02. Annexure 1B - SV Spec SV-013 Rev:02 Annexure 1C - <Not Applicable> 03. Annexure 1D - QP FORMAT 04. Annexure 1E - QA REQUIREMENT 05. Annexure 2A - GENERAL TERMS AND CONDITIONS 06. Annexure 2B - SPECIAL TENDER TERMS 07. Annexure 2C - IBR APPROVED INSPECTION AGENCIES 08. Annexure 2D - CONFIRMATION TO THE TERMS AND CONDITIONS 09. Annexure 3A - PBG FORMAT 10. Annexure 3B - LIST OF CONSORTIUM BANKS 11. Annexure 4A - INTEGRITY PACT FORMAT 11. Annexure 4B - SCHEDULE OF DEVIATIONS 12. Annexure 4C - UNPRICED FORMAT IMPORT 13. Annexure 4D - PRICED BID FORMAT IMPORT		
The rate of Excise Duty and Sales Tax, Prevalent on the date of quotation, should be clearly indicated in the quotation itself. 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) Quotations will be opened at 14.30 Hrs. (IST) on the due date in the presence of tenderers who may like to be present. Late tenders will not be considered.		Yours faithfully, For Bharat Heavy Electricals Ltd Sivabala Shanmugam Sr. Engineer/Purchase/Valves		

ENSFV00187 - SCOPE OF SUPPLY

Material	Matl_Desc	Qty	Sale Order	Item	ProjName
974611310000	SPRING LOADED SHSV-1-TANGEDCO-1818-1821	2	3503183	005001	NORTH CHENNAI 1x800 TPS ST-III
974611330000	SPRING LOADED HRHSV-1-TANGEDCO-1818-1821	2	3503183	005003	NORTH CHENNAI 1x800 TPS ST-III
974611340000	SPRING LOADED HRHSV-2-TANGEDCO-1818-1821	2	3503183	005004	NORTH CHENNAI 1x800 TPS ST-III
974611350000	SPRING LOADED HRHSV-3-TANGEDCO-1818-1821	2	3503183	005005	NORTH CHENNAI 1x800 TPS ST-III
974611310000	SPRING LOADED SHSV-1-TANGEDCO-1818-1821	2	3503186	005001	UPPUR 2X800MW UNIT 1
974611330000	SPRING LOADED HRHSV-1-TANGEDCO-1818-1821	2	3503186	005003	UPPUR 2X800MW UNIT 1
974611340000	SPRING LOADED HRHSV-2-TANGEDCO-1818-1821	2	3503186	005004	UPPUR 2X800MW UNIT 1
974611350000	SPRING LOADED HRHSV-3-TANGEDCO-1818-1821	2	3503186	005005	UPPUR 2X800MW UNIT 1
974611310000	SPRING LOADED SHSV-1-TANGEDCO-1818-1821	2	3503187	005001	UPPUR 2X800MW UNIT 2
974611330000	SPRING LOADED HRHSV-1-TANGEDCO-1818-1821	2	3503187	005003	UPPUR 2X800MW UNIT 2
974611340000	SPRING LOADED HRHSV-2-TANGEDCO-1818-1821	2	3503187	005004	UPPUR 2X800MW UNIT 2
974611350000	SPRING LOADED HRHSV-3-TANGEDCO-1818-1821	2	3503187	005005	UPPUR 2X800MW UNIT 2
		24			

 Bharat Heavy Electricals Ltd., Trichy-14, Valves Engineering 365-003/A			DATA SHEET SPRING LOADED SAFETY VALVE VDS:SV:1818 Rev: 01		Sheet: 1 of 5 Date: 18.07.2017 Cust no: 1818,1821&1822 Pre: Rabin R Appd: E.Athiannavi
Customer:			M/s TANGEDCO		
			A/c North Chennai 1x800MW, Uppur 2x800MW		
1	Serial no.		1		
2	Tag no.		10LBA11-AA702, 10LBA12-AA702		
3	Location		SUPERHEATER OUTLET		
4	Required quantity	nos.	2 no. / Unit		
5	Fluid to be handled		STEAM		
6	Required Capacity	kg/h	497000 (for 2 valves)		
7	Set Pressure	kg/cm ² (g)	295.7		
8	Relieving Temperature	°C	603±5°C		
9	Valve Type		Spring Loaded, Full Lift, Angle		
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	608		
15	System Operating Pressure	kg/cm ² (g)	276.9		
16	System Design Pressure	kg/cm ² (g)	299.0		
17	Imposed Back Pr.		Atmosphere		
18	Allowable Over Pr.		As per ASME Sec-I		
19	Blowdown	%	As per ASME Sec-I		
20	Applicable Code		ASME Sec-I / IBR		
21	Valve Model		*		
22	Inlet Size & Rating		*		
23	Inlet Type/Standard		Butt Weld/ASME B16.25		
24	Outlet Size & Rating		*		
25	Outlet Type/Standard		Flanged/ASME B16.5		
26	Body Material		SA182 F92 (or) Equivalent		
27	Disc Material		*		
28	Nozzle/Seat Material		*		
29	Inlet Neck Material		SA182 F92		
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), ITEM 11 of IBR FORM-III , Functional test, Leak test		
39	Required Accessories		Blowdown adjustment rings, Manual Lifting Lever, Test Gag, Hydro Test Plug etc		
Notes:					
* means Vendor to specify					
1. Offers received from vendor shall include the commissioning spares and also the operational spares indicated in Annexure-I. Offers without spares will be subsequently rejected 2. BHEL reserves the right to change the spares requirement as per customer need in the PO 3. For site information see Annexure - II 4. Edge preparation as per Annexure - III					

 Bharat Heavy Electricals Ltd., Trichy-14, Valves Engineering 365-003/A			DATA SHEET		Sheet: 2 of 5
			SPRING LOADED SAFETY VALVE		Date: 30.03.2017
			VDS:SV:1818 Rev: 00		Cust no: 1818,1821&1822
Customer:			M/s TANGEDCO		Pre: Rabin R
			A/c North Chennai 1x800MW, Uppur 2x800MW		Appd: E.Athiannavi
1	Serial no.		3	4	5
2	Tag no.		10LBB11-AA703, 10LBB12-AA703	10LBB11-AA704, 10LBB12-AA704	10LBB11-AA705, 10LBB12-AA705
3	Location		REHEATER OUTLET	REHEATER OUTLET	REHEATER OUTLET
4	Required quantity	nos.	2 no. / Unit	2 no. / Unit	2 no. / Unit
5	Fluid to be handled		STEAM	STEAM	STEAM
6	Required Capacity	kg/h	1270958 (for 6 valves)		
7	Set Pressure	kg/cm²(g)	67.2	67.9	68.6
8	Relieving Temperature	°C	603±5°C	603±5°C	603±5°C
9	Valve Type		Spring Loaded, Full Lift, Angle	Spring Loaded, Full Lift, Angle	Spring Loaded, Full Lift, Angle
10	Orifice Designation		*	*	*
11	Calculated Orifice Area	mm²	*	*	*
12	Selected Orifice Area	mm²	*	*	*
13	Rated Capacity per Valve	kg/h	*	*	*
14	System Design Temperature	°C	608	608	608
15	System Operating Pressure	kg/cm²(g)	59.98	59.98	59.98
16	System Design Pressure	kg/cm²(g)	68.04	68.04	68.04
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		SA182 F92 (or) Equivalent	SA182 F92 (or) Equivalent	SA182 F92 (or) Equivalent
27	Disc Material		*	*	*
28	Nozzle/Seat Material		*	*	*
29	Inlet Neck Material		SA182 F92	SA182 F92	SA182 F92
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), ITEM 11 of IBR FORM-III , Functional test, Leak test	Hyd.Test (Form-IIIC as per IBR regulation 269), ITEM 11 of IBR FORM-III , Functional test, Leak test	Hyd.Test (Form-IIIC as per IBR regulation 269), ITEM 11 of IBR FORM-III , Functional test, Leak test
39	Required Accessories		Blowdown adjustment rings, Manual Lifting Lever, Test Gag, Hydro Test Plug etc	Blowdown adjustment rings, Manual Lifting Lever, Test Gag, Hydro Test Plug etc	Blowdown adjustment rings, Manual Lifting Lever, Test Gag, Hydro Test Plug etc
Notes:					
* means Vendor to specify					
1. Offers received from vendor shall include the commissioning spares and also the operational spares indicated in Annexure-I. Offers without spares will be subsequently rejected					
2. BHEL reserves the right to change the spares requirement as per customer need in the PO					
3. For site information see Annexure - II					
4. Edge preparation as per Annexure - III					

GENERAL NOTES for Spring loaded 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 & ITEM 11 of IBR FORM-III.
5. Site Information given in Annexure –II should also be considered in the SV design offered

ANNEXURE - I

The details of spares components and required quantity for a given material code are given below.

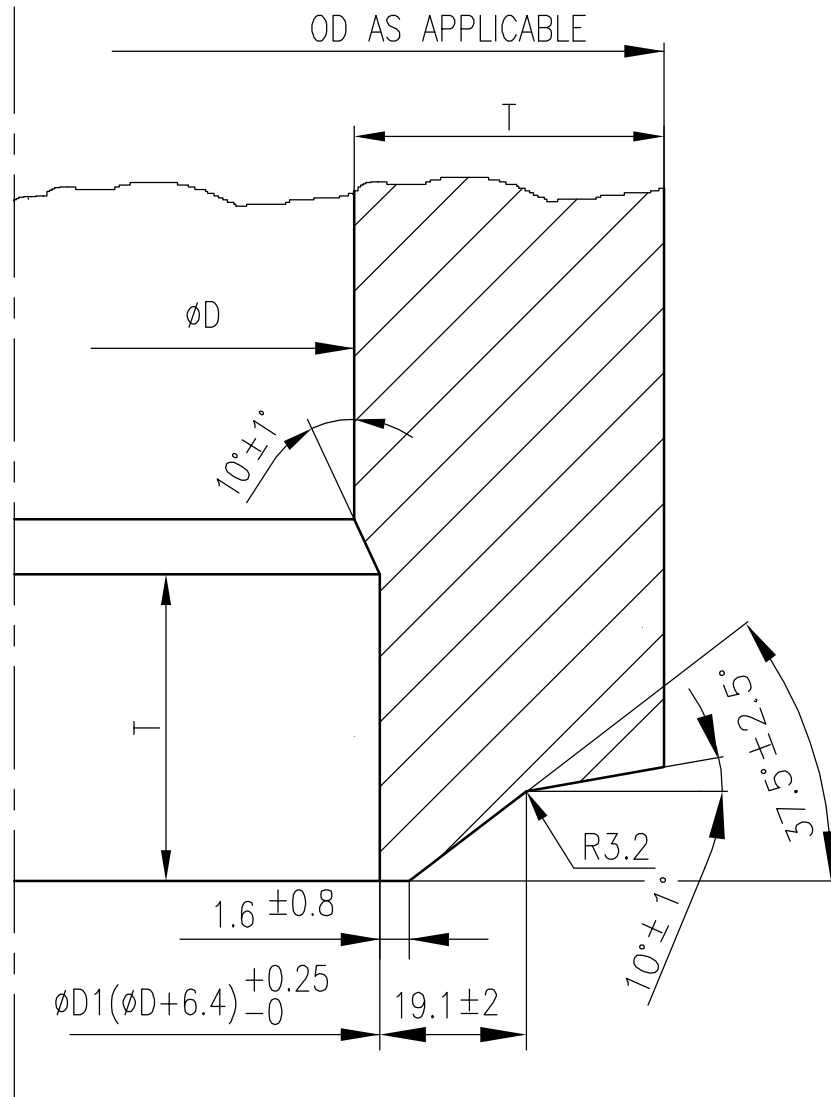
A) Material Code for operational Spares of SH SV for TANGEDCO North Chennai & Uppur Projects			
Sl no	Material Code	Description	Quantity
1	974611310010	Upper Adjusting Ring Pin (SH SV)	1 no.
2	974611310020	Lower Adjusting Ring Pin (SH SV)	1 no.
3	974611310030	Upper Adjusting Ring (SH SV)	1 no.
4	974611310040	Lower Adjusting Ring (SH SV)	1 no.
5	974611310050	Disc (SH SV)	1 no.
6	974611310060	Spindle (SH SV)	1 no.
7	974611310070	Guide (SH SV)	1 no.
8	974611310080	Disc Holder (SH SV)	1 no.
9	974611310090	Spring (SH SV)	1 no.
B) Material Code for operational spare of HRH SV for TANGEDCO North Chennai & Uppur Projects			
Sl no	Material Code	Description	Quantity
1	974611320010	Upper Adjusting Ring Pin (HRH SV)	1 no.
2	974611320020	Lower Adjusting Ring Pin (HRH SV)	1 no.
3	974611320030	Upper Adjusting Ring (HRH SV)	1 no.
4	974611320040	Lower Adjusting Ring (HRH SV)	1 no.
5	974611320050	Disc (HRH SV)	1 no.
6	974611320060	Spindle (HRH SV)	1 no.
7	974611320070	Guide (HRH SV)	1 no.
8	974611320080	Disc Holder (HRH SV)	1 no.
9	974611320090	Spring (HRH SV)	1 no.

ANNEXURE - II

SITE INFORMATION

1. Ambient Temperature (Min) : 15°C
Ambient Temperature (Max) : 50°C
2. Relative Humidity : 75%
3. Height above MSL : 10 m
4. Seismic Zone : Zone III as defined in IS1893-2002
 - a. Zone Factor : 0.16
 - b. Importance Factor : 1.75
5. Wind Data - Calculations for wind effect shall be in accordance with IS 875 (Part 3):1987
 - a. Basic Wind Speed : 50m/sec

ANNEXURE – III



GIVEN DIMENSIONS ARE IN MILLIMETERS

VALVE INLET EDGE PREPARATION STYLE



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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
<i>REV. NO</i>	<i>DESCRIPTION</i>	<i>PREPARED BY</i>	<i>CHECKED BY</i>	<i>APPROVED BY</i>	<i>DATE</i>



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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 safety valves. The offer shall be submitted along with all the documents required in this specification.

- 1.1 Data sheet indicates the type, size, required relieving capacity etc. of the selected 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, Seat bushing, Disc, Spring, Inlet neck etc. Alternate superior material of construction shall also be acceptable, with prior written approval by us.
- 1.3 The manufacture, inspection and testing of valves shall conform in all respects to the applicable requirements of ASME Section-I/IBR.
- 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 confirming 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 Safety valves shall be furnished in accordance with ASME Section-I.
- 1.9 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.
- 1.10 Only materials listed and rated in B16.34 are acceptable and materials offered shall be appropriate to the design conditions listed.
- 1.11 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, if requested, prior to ordering.
- 1.12 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 The function of the Safety Valve is to provide over pressure protection for ASME Code Section-I fired vessels.
- 2.2 The Safety Valve assembly should include respective Test Gag, Hydrostatic Plug for butt welded valves, Lifting Lever, Cap, Weather protection hood or Spring Cover etc.
- 2.3 All the Safety Valves shall be suitable for outdoor installation.
- 2.4 Safety valves shall be of the direct spring loaded type and shall have a tight, positive & precision closing and shall be of pop type.
- 2.5 Sizing shall be carried out as per ASME Sec-I or IBR (Indian Boiler Regulations). 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 their calculations for Purchaser approval and record.
- 2.6 Construction and Materials shall conform to ASME Section-I Code.



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- 2.7 The design of valve seat and guiding arrangement shall ensure consistent operation reseating and tightness over several successive operations.
- 2.8 Safety valves shall have the feature of adjustable blow down for the range given in ASME Section-I.
- 2.9 Valves shall have open yoke and suitable weatherproof cover for spring.
- 2.10 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).
- 2.11 Wherever stelliting of Disc and Seat bushing has been specified, it stands for stelliting of the seat area or the entire disc contour, unless otherwise specified.
- 2.12 The allowable tolerance in set pressure is as per ASME Section-I.
- 2.13 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.
i) Tag number as per purchaser's data sheet.
ii) Manufacturer's Model number
iii) Manufacturer's Serial number
iv) Size & Rating for Inlet and Outlet
v) Seat diameter
vi) Manufacturer's name/trade mark.
vii) Blow down as percentage of set pressure.
viii) Accumulation as percentage of set pressure.
ix) Lift
x) Certified capacity of steam in Kg/h (with type test report to be submitted)
xi) Valve set pressure.
xii) Relieving Temperature.
xiii) Cold bench set pressure.
xiv) Date of manufacture.

3.0 INSPECTION AND TESTING

- 3.1 All safety valves shall be inspected, tested and stamped per applicable ASME Section-I code. All valves shall be factory calibrated and set as per the process data submitted by the Purchaser and as per applicable ASME code.
- 3.2 Material, Mechanical and Chemical tests shall be performed in a manner as specified in the relevant codes.
- 3.3 Quality Assurance plan to be submitted for our/clients review & approval. Sample quality plan attached.



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- 3.4 The material test certificates (correlated to melt number) shall be furnished by the vendor for identification and correlation.
- 3.5 For components like Body, Inlet Neck, Seat Bushing, Disc, Spindle, Spring, Disc Holder & Guide, Blowdown ring and Yoke and Yoke Rod etc. material test certificates (typical) shall be furnished for identification & correlation.
- 3.6.0 Minimum NDT requirements extent of check for Pressure retaining parts/components shall be as follows.
- 3.6.1 Steel Castings: 100% RT on butt weld joints/ends and MPI on change in dimensions /shape shall be carried out.
- 3.6.2 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.
- 3.6.3 Dye penetrate test as per ASTM E165 shall be performed on all machined surfaces of critical components.
- 3.6.4 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.
- 3.6.5 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.
- 3.6.6 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.
- 3.6.7 100% MPI shall be done on base/body casting with pressure rating 1500 class and above in line with ASME B16.34.
- 3.6.8 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.
- 3.7 Each Safety valve, pressure retaining parts shall undergo hydrostatic test as per IBR/ASME code. There shall not be any visible leakage during this test. Test certificate to be furnished in the form of IBR Form IIIC. The contractor shall guarantee his valve 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.



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3.8 Safety valve shall be tested for opening at specified set pressure. Testing of safety valve shall be with steam only. Attachment 11 to IBR Form III to be furnished

3.9 Seat Leakage test as applicable.

3.10 Type test report for capacity, shall be furnished for the selected valve series along with offer.

4.0 ADDITIONAL REQUIREMENTS

4.1 Machined surfaces shall be suitably protected.

4.2 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.

4.3 All the valves shall be packed suitably in wooden cases in order to avoid damage during transit and also during storage at site.

4.4 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.

4.5 All painted surfaces shall be given a minimum coating 2.0 mils dry film thickness.

4.6 All unpainted surfaces shall be protected with a rust preventive, which can be removed by solvent washing.

4.7 Paint specifications are to be submitted for purchaser's review with bid.

4.8 All exposed machined surfaces shall be coated with suitable rust preventative coating prior to shipment.

4.9 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.

4.10 All threaded connections shall be plugged or capped with standard pipe plugs or caps.



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- 4.11 List of Commissioning spares shall be quoted if applicable.
- 4.12 List of recommended spares for 5 years trouble free operation of valves shall be quoted.
- i) Upper Adjusting Ring 2 nos. of each type
 - ii) Lower Adjusting Ring 2 nos. of each type
 - iii) Upper Adjusting Ring Lock Pin 2 nos. of each type
 - iv) Lower Adjusting Ring Lock Pin 2 nos. of each type
 - v) Disc 2 nos. of each type
 - vi) Guide 1 no. of each type
 - vii) Disc Holder 1 no. of each type
 - viii) Spindle 1 no. of each type
- 4.13 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.
- 4.14 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.

5.0 DOCUMENT REQUIREMENTS

- 5.1 Materials of all parts & trim details to be furnished by vendor along with quote.
- 5.2 General arrangement drawing with mounting details, BOM, Face to Face & overall dimensions, Marking for identification of recommended spare components.
- 5.3 Valve sizing calculations as per IBR or ASME Sec I with valve model, inlet outlet size, orifice details, Rated/ Certified Capacity.
- 5.4 Recommended Inlet Stub End connection Edge preparation details for our approval.
- 5.5 Copy of type test report for capacity, for the selected valve series.
- 5.6 Sound Pressure Level calculations.
- 5.7 Valve Outlet Pressure While relieving.
- 5.8 Shipment weight & volume details.
- 5.9 Equipment preservation procedure during shipment, pre-erection storage period & Extended storage period.
- 5.10 Operation & maintenance manual 6 sets and one soft copy.
- 5.11 All GA drawings, Test Certificates (in the form of IBR form IIIC and Attachment 11 to Form III as per IBR), Seat leakage test report, filled datasheets and Material test Certificates.



**STANDARD SPECIFICATION FOR
SPRING LOADED SAFETY VALVES
FOR SUPERCRITICAL BOILERS**

Spec No: SPEC:SV:013

Rev No: 02

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- 5.12 The following details should be submitted
- i)Special tool list
 - ii)Rust preservation schedule
 - iii)Painting schedule
 - iv)Lubrication list
- 5.13 Reaction force Calculations as per ANSI/ ASME B31.1
- 5.14 Recommended discharge piping size, allowable forces on connections, weight of valve, product catalogue, customer filled in data sheets (if any)
- 5.15 The welding procedure and materials proposed of pressure boundary joints must be submitted to the purchaser with the quotation for review and approval.
- 5.16 Valve opening / rising time & typical exhaust piping details.
- 5.17 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.
- 5.18 Even if there is no deviation from the tender document, the tenderer shall submit the deviation form and indicate as "no deviations".



**STANDARD SPECIFICATION FOR
SPRING LOADED SAFETY VALVES
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ITEM 11 of IBR FORM-III

11. Boilers:

Details of safety valves and test results:

Manufacturer.....

Identification marks of valves.....

Maker's No.....

Type.....

Lift (mm)..... Drawing Nos.....

Valves details:-

Material.....

Valve Seat.....

Flat/Bevel.....

Diameter of valve seating.....

Valve Body:-

Material.....

Opening at neck.....

Opening at outlet.....

Springs:-

Material.....

Process of manufacture.....

Chemical composition.....

Dimensions:

Outside diameter of coil.....

Section of wire.....

Number of coils.....

Free length of coils.....

Test results:-

Place of test..... date.....

Closing down pressure.....

Remarks:-

Does the valve chatter?.....

Does the valve seat leak?.....

Blow off pressure.....

Type of valve and extract of test results.....

Type of valve.....

Place of test..... date

Constant 'C' by test results.....

Capacity of the valve for the intended blow off
pressure.....

Signature of Maker's representative

Inspecting Authority
witnessing tests.



**STANDARD SPECIFICATION FOR
SPRING LOADED SAFETY VALVES
FOR SUPERCRITICAL BOILERS**

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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.

MFGR.'s LOGO		MANUFACTURER'S NAME AND ADDRESS		MANUFACTURING QUALITY PLAN				PROJECT : PACKAGE : CONTRACT NO. : MAIN-SUPPLIER:						
				ITEM :		QP NO.:							REV.NO.:	
				SUB-SYSTEM:		DATE:		PAGE: OF....						
SL. NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY			REMARKS
					M	C / N					M	C	N	
1.	2.	3.	4.	5.	6.		7.	8.	9.	D*	** 10.			11.

		LEGEND: * RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION. ** M: MANUFACTURER/SUB-SUPPLIER C: MAIN SUPPLIER, N: NTPC P: PERFORM W: WITNESS AND V: VERIFICATION. AS APPROPRIATE, CHP: NTPC SHALL IDENTIFIED IN COLUM "N" AS ' W"	 FOR NTPC USE	DOC. NO.:		REV..... CAT.....	
MANUFACTURER/ SUB-SUPPLIER	MAIN-SUPPLIER						
SIGNATURE				REVIEWED BY	APPROVED BY	APPROVAL SEAL	

Additional Quality Requirements

1. Raw Materials shall be as per BHEL Engineering Specification, IBR and international material specifications.
2. Welders shall be qualified as per IBR. Welding procedures shall be qualified as per ASME BPVC Sec IX.
3. Heat Treatment shall be as per qualified WPS and IBR. Wherever Gr 91 is involved in the welds, such welds shall be post weld heat treated at 760 ± 10 Deg C with soaking time of one hour/inch of job thickness.
4. NDE on raw materials, machined edges and welds shall be carried out & accepted as below, as applicable:

SI No	NDE Method	Test Method	Acceptance Criteria
1	UT – on forgings	ASTM A388	ASME BPVC Sec VIII Div 2 Cl 3.3.4
2	UT on Pipes	ASTM E213	ASTM E213 with 5% notch (0.3 mm min & 1.5 mm max)
3	RT	ASME BPVC Sec V	ASME BPVC Sec VIII Div 1 UW-51 & Mandatory Appx 4
4	MT	ASTM E709	ASME BPVC Sec VIII Div 1 Mandatory Appx 6
5	PT	ASTM E165	ASME BPVC Sec VIII Div 1 Mandatory Appx 8

5. Hydrostatic test, seat leak test and functional test shall be carried out as per BHEL Engineering Specification & BHEL/Customer approved datasheets. IBR Form III-C shall be submitted
6. All forgings/bars of diameter/wall thickness above 40 mm shall be UT tested.
7. Forgings shall be certified in IBR Form III-G and Castings, if used, shall be certified in IBR Form III-F.
8. Hardness testing shall be done on raw materials of Gr 91/92 as per the material specifications and results reported in MTCs.
9. Hardness testing shall be done after PWHT on welds wherever Gr 91/92 materials are involved and shall be within 195-300 HBW and results reported in inspection records.
10. All fillet welds shall be MPI/LPI tested after PWHT.

Note: - Vendor must submit their acceptance on above referred points and in case of any deviation please mention them on Schedule of deviation sheet.



BHARAT HEAVY ELECTRICALS LTD

VALVES PURCHASE

Trichy - 620 014, India

GENERAL TERMS AND CONDITIONS (ENSV00187)

1. QUOTATIONS:

a. **BID system:** The offers are invited in Two part bid system (Part I will be Techno-commercial bid and part II will be Price Bid). Techno-commercially suitable vendors alone will be intimated for price bid opening.

b. **Submission of tender:**

i. Tender called through E-Procurement mode: The bidder shall submit the bid online in BHEL e-Procurement portal at <https://bheleps.buyjunction.in>

The bidder would be required to register on the above e-procurement portal for submitting their bids. Offers through mail and Hardcopies are not acceptable.

ii. Tender called through Non- Procurement mode: Each offer should be sent in double cover separately and the same should be sealed and super scribed with correct Tender No., item of supply and due date of opening. Two or more quotations should not be sent in one cover. Price Bid should contain only Price in INR per unit for each type. Tender should send to the below mentioned address:

The Tender Opening Cell / Valves
Room No. -26, Building -24
Bharat Heavy Electricals Limited
Tiruchirappalli - 620014, Tamil Nadu, India
Or
Email ID: tender_cell@bheltry.co.in

- c. **Late tenders:** Tender received after 2.00 pm on due date will be considered as Late tender. 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. **GST Number:** GST registration number, HSN number (Item wise) with applicable taxes should be mentioned in quotation. If the vendor is not GST registered the offer is liable for rejection.
- i. **Deviation.** Any deviations from the specification are to be furnished separately as "Schedule of Deviation". If there is no deviation vendor should indicate "No Deviation".
- j. **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:**

For Indigenous Suppliers: 100% after 45 days on satisfactory receipts and acceptance of material at BHEL stores/ Site acknowledgement.

Any deviation in the above payment terms except payment through LC/Advance will attract loading as "Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidder. Offers of indigenous Suppliers with payment terms as CAD at site, Confirmed LCs, Advance payment or any other payment terms are liable for rejection.

For Import Supplies: Payment term is 100% payment on CAD basis after 45 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account.

Any deviation in the above payment term will attract loading as "Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.



BHARAT HEAVY ELECTRICALS LTD

VALVES PURCHASE

Trichy - 620 014, India

GENERAL TERMS AND CONDITIONS (ENSV00187)

In case of Usance LCs the loading will be considered @ 1.5% on the offered Value. For unconfirmed LC at sight the loading will be considered @ 3.5% on the offered Value. CAD at site, Confirmed LCs, Advance payment or any other payment terms are liable for rejection.

- b. Liquidated Damage:** Liquidated damages shall be 0.5% of the total order value or part thereof subject to a maximum of 10% of the total order value. For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the total order value.

Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value)

Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contractors. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Debit note will be issued by BHEL indicating the respective supply invoice number.

c. Delivery Terms:

For Indigenous Suppliers: **FOR BHEL Trichy inclusive of freight and insurance**

For import Supplies: CFR/CIF Chennai seaport as per incoterm 2010

- d. Validity of Offer:** Prices should be fixed and valid for 120 days from the date of tender opening
- e. Delivery period:** Delivery schedule will be **12 Weeks** from the date of PO. If supplier offers more than the required delivery period BHEL will operate 0.5% loading factor for evaluation of their offer for every week delay to a maximum of 5%. Any other delivery period after loading to maximum will be rejected.
- f. Risk Purchase:** 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 at the rate mentioned in clause 2 b above. Non acceptance to risk purchase clause the offer is liable for rejection.
- g. Guarantee Clause:** The vendor shall give a guarantee for the performance of his supplies for a period of eighteen months from the date of dispatch or twelve months from the date of commissioning whichever is earlier.
- h. Miscellaneous:** Any conditions which might have been quoted by the seller and are in contravention to the terms of PO and which have not been specifically accepted by Purchaser will not be applicable to the contract/PO.
- i. Performance Bank Guarantee:** If tender Calls for Performance Bank Guarantee, Vendor should provide a performance bank guarantee (PBG) in BHEL format 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.

3. Compliance / Acceptance required for following points to ensure Input Tax Credit

- a.** Supplier shall mention their GSTN registration number in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc.
- b.** All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).
- c.** A declaration to the effect that all invoice particulars are/were uploaded in the GSTN network/ portal & all tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL.
- d.** All documents like Mill Test Certificate, LR copy, Guarantee/Warranty certificate, work completion certificate, any other document mentioned in PO, shall be sent along with the vehicle/consignment. For all consignments received within the calendar month, input credit will be availed within that month in line with monthly returns filing cycle. In case of any discrepancy in the document or non-submission of documents mentioned in the PO, then BHEL will not be able to accept or account the material, in such case availing of tax credit will be deferred to next month or so.
- e.** In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the suppliers, within the calendar month notified by BHEL.



BHARAT HEAVY ELECTRICALS LTD

VALVES PURCHASE

Trichy - 620 014, India

GENERAL TERMS AND CONDITIONS (ENSV00187)

- f. For any such delay in availing of tax credit for reasons attributable to supplier (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty (if any) will be deducted/recovered for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills.

4. Special Provisions for Micro and Small Enterprises (MSE):

- a. 20% of the tendered quantity is earmarked for MSE suppliers in this tender.
- b. Out of the 20% tendered quantity reserved for MSE suppliers, 4% shall be earmarked for procurement from MSE owned by SC/ST entrepreneurs.
- c. In case MSE vendor participating in the tender quotes within the price band of LI +15%, they will be allowed to supply the portion of the requirement subject to acceptance of LI price by MSE vendor. In case of more than one such MSE, the supply shall be shared proportionately.
- d. MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM II certificate having deemed validity (Two years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with CA certificate applicable for the year, certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or small) where the deemed validity of EM II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Non submission of such documents will lead to consideration of their bids at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier till the supplier submits these documents.

3. GENERAL CONDITIONS

- a. BHEL reserves the right to finalize the tender as per item serial number 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 to 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. BHEL reserves the right to finalize the tender either through price bid opening or through Reverse Auction route.
- g. 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.
- h. The Drawings and Technical documents given in this enquiry are the sole property of BHEL. This should not be misused in any form.
- i. Purchase Order, PO Item serial number, Material code, Quantity should be clearly marked on the packing
- j. Confirmation for compliance is to be given in the offer for all the conditions specified above and to the respective Purchase Specification.
- k. If any supplier is not honouring their own quotation or any of its conditions within the validity period, the action will be taken against those suppliers in line with "Guidelines for suspension of business dealings with suppliers/contractors" (refer www.bhel.com)

4. DOCUMENTATION:

- a. **With Consignment:** Duplicate for transporter copy, Original Invoice, Packing List, Delivery Challan, O&M manual (if applicable) Material Test Certificate, Test Certificates, Compliance Certificate, Guarantee/Warranty Certificate and other documents mentioned in PO/TDC/Drawing.
- b. **Online Submission:** Supplier should upload the soft copy of all Test Certificates in BHEL website <http://vis.bheltry.co.in/vis/index.jsp> at Vendor information system tab.
- c. **To Purchase:**
 - i. **FOR BHEL TRICHY case-** Original Invoice, duplicate for transporter copy, Packing list, LWB and Delivery challan.
 - ii. **FOR Site case-** Original Invoice, Original LWB, Original Packing List, Original IBR documents, Original despatch clearance Certificate and Inspection report, Test certificates as per PO, Original Site Acknowledgment etc.
- d. **Identification:** Material code, Purchase Order, PO item serial number, Unique serial number if any should be provided in all despatch documents, materials and packing clearly.



BHARAT HEAVY ELECTRICALS LTD

VALVES PURCHASE

Trichy - 620 014, India

GENERAL TERMS AND CONDITIONS (ENSFV00187)

5. TENDER EVALUATION:

a. PART I Techno-commercial Bid.

- i. All vendors should submit General arrangement drawing, datasheet and C&I diagram (If any) of the offered product
- ii. 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.
- iii. Offers from supplier not having technical capability or not agreed for commercial terms, will be rejected.

b. PART II Price Bid.

- i. Bidders qualified for both part I will be intimated for participating in priced bid opening/Reverse Auction.
- ii. L1 bidder will be decided based on landed cost for the equipment to BHEL.
- iii. 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

VALVES PURCHASE

Trichy - 620 014, India

SPECIAL TERMS AND CONDITIONS (ENSV00187)

1. All material should be inspected by IBR approved inspection agency, Customer and BHEL.
2. **Performance Bank Guarantee is Applicable:** Vendor should provide a performance bank guarantee (PBG) for 10% of the total Purchase order value valid for a guarantee period with an additional claim period of 2 months. Bank guarantee should be as per BHEL format from list of consortium Banks (Annexure 3B).
3. Evaluation will be as **total package** with cost to BHEL which will include Commissioning spares and commissioning assistance.
4. Delivery should be **24 weeks** from date of purchase order and if supplier offers more than this delivery period BHEL will operate 0.5% loading factor for evaluation of their offer for every week delay.
5. **Guarantee Period:** The complete system shall be guaranteed for 24 months of trouble free performance from the date of shipment or 18 months from commissioning date whichever is earlier. In case of any failure or trouble reported from site, the supplier shall depute their representative immediately to attend the problem and replace the defective components/parts, free of cost.
6. **Commissioning Assistance:** Commissioning assistance should be quoted in price bid, Quotation should contain exact value including all expenses like commissioning charges, travel, accommodation etc. Since commissioning requirement and time depends on the equipment supplied by the supplier, number of days required for commissioning should be decided by the vendor for arriving commissioning charges. Vendor have to quote firm price in currency without any variable elements. **Vendor should NOT specify that commissioning charges will be quoted separately.**

Loading Criteria

1. Any deviation in the payment term will attract loading as mentioned. "Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.
2. In the case of Usance LCs the loading will be considered @ 1.5% on the offered Value.
3. For LC at sight the loading will be considered @ 3.5% on the offered Value.
4. Normally CAD at sight, Confirmed LCs and Advance payment are liable for rejection.
5. Any deviation from the LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).

Integrity Pact (IP)

1. IP is a tool to ensure that activities and transactions between Company and its Bidders/Contractors are handled in affair, transparent and corruption free manner. A panel of Independent External Monitors(IEMs) have been appointed to oversee implementation of IP in BHEL.

The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory who signs in the offer) along with the techno-commercial bid. Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this pact would be a preliminary qualification.



BHARAT HEAVY ELECTRICALS LTD

VALVES PURCHASE

Trichy - 620 014, India

SPECIAL TERMS AND CONDITIONS (ENSFV00187)

Details of IEM for this tender is furnished below:

Name: Shri D.R.S Chaudhary, IAS (Retd.)

Address: E-1/164 Arera Colony Bhopal -462016

Email: dilip.chaudhary@icloud.com

2. Please refer Section-B of the IP for Roles and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to the IEM mentioned in the tender.

No routine correspondence shall be addressed to the IEM (phone/post/email) regarding the clarifications, time extensions or any other administrative queries etc. on the tender issued. All such clarifications / issues shall be addressed directly to the tender issuing (procurement) department.

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. VRK
2
25/4

V. K. JAIN

(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.,
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Germany | Europe |
| 39. | M/s OOO "TekhnoLogicheskieEnergositime"
1. Kalinia St. Belgorod, 308001
Russia | Russia, China, Ukraine, USA
& Germany |
| 40. | M/s Engineering Bureau Franke
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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,
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Secunderabad- 500 003, (India) | All countries except India |

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|-----|--|----------------------------|
| 43. | M/s TUV SUD Industrie Service GmbH,
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80686 Munich,
Germany | All countries except India |
| 44. | M/s Germanischer Lloyd Industrial Services GmbH,
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20459 Hamburg,
Germany | All countries except India |
| 45 | M/s. TUV Thuringen e.V.,
Business Division Steam and Pressure Technology,
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| 46. | M/s. SGS-CSTC Standards Technical Services Co. Ltd.
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China | China |
| 47 | M/s Moody International Limited,
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2. Chief Inspector of Boilers,
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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
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28. Chief Inspector of Boilers,
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33. M/s. Hartford Steam Boiler Inspection and Insurance Company of Connecticut,
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U.S.A.

34. M/s. Japan Inspection Company Limited,
No.10-7, 1-Chome, hatchobori, Chou-ku,
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35. M/s. S.G.S. Korea Company Limited, Korea and Japan
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48. M/s. SGS-CSTC Standards Technical Services Co. Ltd. China
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