

ENQUIRY VALVES

Bharat Heavy Electricals Limited

(A Government of India undertaking) HIGH PRESSURE BOILER PLANT PURCHASE DEPARTMENT/VALVES TIRUCHIRAPPALLI-620 014. Phone: 0431-2577544 & 2577305

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ENQUIRY NO.	DATE	DUE DATE FOR
		QUOTATION
EN-VAL-OT-1002	22.03.2012	12.04.2012

Please quote Enquiry No., and due date in correspondences
This is only a request for quotation and not an order.

			This is only a request for quotation and not an order.						
SL.NO.	MATERAIAL CODE DESCRIPTION	UNIT	QUANTITY	DELIVE	RY SCHEDULE				
	DRAWING NO TDC NO.				QUANTITY	DATE			
	Supply of Fully Machined QCNRV, Heavy Medium and High Pressure Valve Body Castings In WCB/WCC & C12A Material as per TDC:0:433/REV00.		Scope of supply						
	Date , Time & Venue of tender opening: 12.04.2012 at 14.30 Hrs. at Valves Purchase Conferenc Building No 24, BHEL, Tiruchirappalli-620 014, Tamil Nadu State, India.	·	Supply of Radiographic Quality Fully Machined QCNRV, Heavy Medium and High Pressure Valve Body Castings In WCB/WCC & C12A Material as per TDC:0:433/REV00. For Bill Of Quantities Refer Annexure –A. For Drawings and other details refer "ENQUIRY INSTRUCTIONS – FOR MACHINED CASTINGS"						

The rate of Excise Duty and Sales Tax, Prevalent on the date of quotation, should be clearly indicated in the quotation itself. If these particulars are not provided, the quotation is liable for rejection.

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 14.30 Hrs. (IST)

Quotation will be opened at 15.30 Hrs. (IST) on the due date in the presence of tenderers who may like to be present. Late tenders are liable to be rejected. Yours faithfully,

For Bharat Heavy Electricals Ltd Sr.Manager (Valves Purchase)

Enquiry for Valve - Castings: Annexure - A

EN-VAL-OT-1002 Bill Of Quantities

En. SL NO	CF_CODE_DESC	Casting Drawing NO	Machining Code	Machining Drawings	Tender Qty	Casting Wt KG
1	BODY 20", 150CL A216-WCB -L628	2VL62817334R/01	954600070000	2VL51317594	100	1275
2	BODY 20", 300CL A216-WCB -L630	2VL63017335R/02	954600030000	2VL51517592	50	1295
3	BODY 24", 150 cl A216-WCB-L632	2VL63217336R/00	954600010000	2VL51917593	50	1590
4	BODY 32", 600 cl A216-WCC-NA06	1VNA0605194R/01	931107020000	1VNA0605195/2	10	4850
5	BODY_C12A_GV20_2850SPL-W780	2VW78016676R/1	931233078500	2VW78018084	10	4846
6	BODY_ C12A_GV_22_3000SPL-WA81	2VWA8116652R/2	931232688500	2VWA8118080	15	6440
7	BODYC12A_GV_12_2500SPL-V493	2VV49316514R/0	931217468500	2VV49318083	50	1753
8	BODY_750_900_C12A HRHIV_3316	2V331614082R/1	932017540000	2V331614088/03	10	3275
9	BODY-HRHIV-800-C1500-C12A-3319	2V331914683R	932023160000	2V331914682	8	6990

BHEL, Tiruchirapalli-620014. Quality Assurance TECHNICAL DELIVERY CONDITION

Product: STEEL CASTINGS (VALVES)- IMPORTED

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1.0 MATERIAL:

Specification : ASME / ASTM {Latest on date of Purchase Order (PO)}:

CARBON STEEL (CS) : SA / ASTM A216 WCB, WCC & 352 LCB , LCC

ALLOY STEEL (AS) : SA / ASTM A217 WC6, WC9, C12A.

STAINLESS STEEL (SS): SA / ASTM A351 CF3M,CF8,CF8C & CF8M. Additional Requirement : As listed below(Supplementary to Specification) Size, Qty, Grade/Class : As per Purchase order & Drawing / Pattern.

2.0 CHEMICAL COMPOSITION AND PROCESS:

Melting: As per the Specification, Fully Killed.

Carbon= 0.25% maximum: for SA / ASTM A216 WCB only. Carbon= 0.15% maximum: for SA / ASTM A217 WC6 & WC9

Product Analysis on test bar for each melt including residual elements shall be carried out and reported in Test

Certificates.

In case of API-6D materials the following additional requirements shall be met:

CS: Carbon=0.23% max.(in ladle) and 0.25% max.(in Product analysis)

Carbon Equivalent=0.43 max.(in ladle) and 0.45 max.(in Product analysis)

Carbon Equivalent=%C+(%Mn/6)+(%Cr+%Mo+%V)/5+(%Ni+%Cu)/15

SS: Carbon=0.03% max. except as below.

Carbon=0.08% max.for stabilized steels with Nb >10xC.and

for stabilized steels with Nb and Ta mass of (Nb+Ta)>8xC.

3.0 DIMENSIONS AND TOLERANCES:

Tolerances as per the Drawing.

Non tolerance Dimensions for valve components as per the Drawing:VL:STDC:023 (Latest)

4.0 HEAT TREATMENT :(HT)

CS. Castings of High Pressure Valve.(Cl.1500 & above),QCNRV & CRHNRV: Shall be in Annealed Condition. AS. Castings: Normalized and Tempered.

SA/ASTM A217 WC6: Normalizing Temperature 920-950 °C and Tempering Tempareture 680 °C (Minimum) SA/ASTM A217 WC9: Normalizing Temperature 920-950 °C and Tempering Tempareture 720 °C (Minimum) SA/ASTM A217 C12A: Normalizing Temperature 1050-1080 °C and Tempering temperature 750-780 °C Others: Heat Treat as per the Specification.

5.0 MECHANICAL TESTS:

Test bars to be cast integral with the casting or separately. If cast separately, they shall be cast at the same time as the castings and from the same ladle. A metal strip with heat number stamped shall be fused with the test bar during casting, to maintain traceability. If one(1) casting is made from more than one heat, separate test bars for each heat/cast to be poured & all test bars shall satisfy the requirements. Following tests to be conducted per heat / Heat treatment batch, as per ASTM A370.

S. NO	TEST			Material sp	ecification		
3. NO	5. NO 1E31		A/ASTM A216, 2	217	SA/ASTM A352	SA/ASTM A 351	
1	Tension Test			As per the Sp	ecification		
2	Hardness Test	As per the S	pecification		225 BHN. max.	Not applicable	
			Angle of Bend	Dia of Pin			
		WCB	90°	2t			
3	Bend Test Specimen 1"x 3/4"	WCC	90°	2t	Not applicable	S3 of SA703	
		WC6	120°	3t			
			90°	3t			
		C12A	90°	2t			
4	Charpy- U Impact for all	As per IBR. a	t Room tempera	ature.			
	Quick Closing Non-Return Valve,	Acceptance:	Avg /Single=36J	/32J min.	Not applicable	Not applicable	
	Cold Re-Heat Non-Return Valve Bodies				Not applicable	Not applicable	
	FOR IBR.						
5	Charpy- V Impact for Low-Pressure Bye-	At 20 Deg.C	temperature.		Not applicable	Not applicable	
	pass Valve BODIES.	Acceptance:	Avg /Single=27J	/21J min.	Not applicable	Not applicable	

In addition to above IMPACT Test for API -6D and PED Valves shall be done as below

	S. NO TEST	Material specification						
5. NO		SA/ASTM A216, 217	SA/ASTM A352	SA/ASTM A 351				
1	Charpy- V Impact for CE Marking-Pressure Equipment Directive (PED) items as Specified in the Purchase Order.	At 20 Deg.C temperature. Acceptance: Avg /Single=40J/27J min.	As per Specification	Not applicable				
2	Charpy- V Impact for API -6D items if design temperature below minus 29°C (-29 °C)	Test Temperature=As per specification Acceptance: Avg/Single=34J/25J	As per Specification	Not applicable				

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6.0 **FETTLING, DRESSING & CLEANING:**

- Dressing of castings- Free from risers, in gates, notches, undercuts and deep marks etc.
- Fused wires, parting line fins, chills etc. shall be removed by grinding.
- Gas cutting if employed shall be done before Heat treatment.

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- Preheat the material to 200 Deg. C. before gas cutting the Alloy steels.
- Castings shall be blast cleaned both inside and outside for the removal of fused sand, scales etc.
- Visual inspection of castings for surface quality as per MSS-SP-55 shall be carried out.

NON DESTRUCTIVE TESTING (NDT) AFTER HEAT TREATMENT: 7.0

The NDE requirements for the castings shall meet the following as shown in Table-1 below. Castings shall be free from surface and internal defects like porosity, shrinkage, sand inclusion, crack, cold shut and other harmful defects. All castings shall be of Radiographic Quality.

As per ASME B16.34. Radiographic Testing Procedure: Magnetic Particle Inspection (MPI): As per ASTM E709 Liquid Penetrant Inspection (LPI): As per ASTM E165

Table: 1

Document No: TDC:0:433

Product	Components	Charecteristics		Тур	e of NDE Check		
			RT	RT Area	RT Acc. Std	MT\$	MT Area
Conventional	Body,Bonnet	< 600Class	10%	ASME B16.34	As per Table: 2		
Valves	Body,Bonnet	600Class &	100%	(latest) as per SPL			
(Gate, Globe		above		class Valve RT			
& Check)	Body,Bonnet	1500Class &	100%	requirement		100%	All
and API 6D	& Wedge	above	4000/			4000/	accessible
Gate Valves		All Special Class Valves	100%			100%	surfaces
		Class valves					including belly
							Deliy
	Body	150 & 300	10%		As per Table: 2	100%	All
		Class					accessible
							surfaces
Quick Closing				Dutt Wold Endo			including belly
Non-Return Valve &		600Class &		Butt Weld Ends, Change of sections	As per Table: 2		Deliy
Cold Re-Heat		above		including seat and	As per Table. 2		
Non-Return	Body	150 & 300	4000/	neck portion			All
<u>Valve</u>	(Special)	Class	100%			100%	accessible
							surfaces.
		600Class &					
		above					
	Body	< 600Class	100%	ASME B16.34	As per Table: 2		All
CRH	Dody	600Class &	10070	(latest) as per SPL	7.0 por rabio. 2		accessible
Isolating		above		class Valve RT			surfaces
Device		1500Class &		requirement.		100%	including
		above					belly
\$ LPI Can be s	substituted for MI	I in all inaccessib	le area a	nd for stainless steel ca	stings.		

Table: 2

Tubic. 2						
TYPE OF DISCONTINUITY	ACCEPTANCE LEVEL	< 600	CLASS	≥ 600 CLASS		
DISCONTINUITI	CATEGORY	Thickness ≤2"	Thickness >2"	Thickness ≤2"	Thickness >2"	
Gas Porosity	Α	A2	A3	A1	A2	
Sand/Slag inclusion	В	В3	В3	B2	B2	
Shrink Type-1	С	CA2	CA3	CA1	CA2	
Shrink Type-2	С	CB3	CB3	CB2	CB2	
Shrink Type-3	С	CC3	CC3	CC2	CC2	
Crack	D	NONE	NONE	NONE	NONE	
Hot Tear	E	NONE	NONE	NONE	NONE	
Unfused Inserts (Chills/Chaplets)	F	NONE	NONE	NONE	NONE	

- Butt welding ends shall be free of shrinkage, crack & hot tear.
- For butt weld ends Gas hole/Porosity and sand inclusions to be within level A1 &B1 respectively

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7.1 Acceptance for MPI & LPI: ASME B16.34.

(1)Cracks are not permitted.

- (2)For linear indications (with length > 3 times width) other than cracks, indications must be separated by a distance greater than the length of an acceptable indication. Maximum allowable length of the indication shall be:
 - (a) For thickness (t) up to 13mm= 8mm,
 - (b) For thickness from 13 to 25mm = 13mm
 - (c) For thickness above 25mm =18mm.
- (3)For rounded indications (circular or elliptical with length < 3 times width), 4 or more indications in a line separated by 1.5 mm or less edge to edge are unacceptable. Maximum allowable diameter of the indication shall be:

 (a)For thickness up to 13mm =8mm, and
 (b)For thickness above 13mm =13mm

8.0 Development Stage of Casting:

- a. During developmental stage, RT on sample castings (3 Castings with nominal bore (NB) ≤100mm. & 1 casting with NB > 100mm) for each type of casting shall be carried out on entire area of the casting to the acceptance requirement of Table-1 & 2. In addition 100% MPI on all critical areas like change of sections, riser & in gate portions shall be carried out. If machining operation is involved the same shall be done and defect free condition shall be ensured. If any defect noticed in RT and machining, the type of defect shall be analysed and accordingly size of gate, runner, riser and pouring methodology to be modified to get defect free casting. Sampling shall be continued till achieving sound casting. After satisfactory development of sampling bulk production shall be started. However weld repaired areas identified in visual examination for doubtful indications to be probed by MPI.
- b. During developmental stage RT on sample castings of yoke, yoke clamp & wedge/disc shall meet Level-3 of ASTM E446/E186/E280

9.0 REPAIR:

Castings with unacceptable cracks, hot tears, shrinkage, etc. to be rectified by grinding & if required by welding. Welding to be done by qualified welder and the procedure used for welding shall be qualified in accordance with ASTM A 488/ASME Section IX.

.For IBR items welder shall be qualified as per IBR and approved by IBR approved Inspecting Authority.

The welding consumables and parameters shall be as per the qualified procedures. The recommended welding consumables are given in Table below.

Casting Material	Electrode Specification	Minimum Preheat in ° C	Minimum Post heat Temperature in ° C	PWHT Temperature in ° C
A 216 WCB, A 216 WCC	E 7018 - A1	150	150 for 2 hours	595 to 625
A 217 WC6	E 8018 B2	220	220 for 2 hours	650 to 680
A 217 WC9, A 217 C5, CSN 422744	E 9018 B3	220	220 for 2 hours	675 to 705
A 217 C12A	E 9015 B9 E 9018 B9 Ref Note - 1	220-280	220-280 for 2 hrs	750 to 770
A 217 CA15	E 410	220	220 for 2 hours	760 to 790
A 351 CF3M, A 351 CF8M	E 316	Nil	Nil	Nil
A 351 CF8, A 351 CF8C	E 347	Nil	Nil	Nil

Note - 1

A. The following welding filler materials only shall be used.

Cromocord 9 M (Oerlikon) Fox C 9 MV (Bohler) Cromo 9V (Thyssen)

B. C12A castings to be Post weld heat treated irrespective of depth or size of repair

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9.1 All repaired areas after PWHT shall be subjected to NDE and Hardness test. Hardness shall meet material Specification. (If Specified)

10.0 SURFACE TREATMENT:

SS castings to be pickled & passivated (after repair & HT if any) as per ASTM A380. Satisfactory passivity of the surface to be checked using SS passivity test kit (Free iron test). After passivation, rinsing & test, the rinsed demineralised water to be checked for chloride with 1% Silver nitride, which shall not exceed 0.5 PPM

11.0 DIMENSIONAL CHECK:

- Dimensional reports for Sample castings and for All fully Machined castings are to be furnished along with other Certificates.
- b. For all QCNRV & CRHNRV Body Castings, thickness of the body shall be checked on throughout the surface on a grid of 100mm x 100mm and recorded & reports to be submitted to BHEL.

12.0 MARKING AND PACKING:

Following details to be marked on each casting on a raised pad using low stress stamps and Castings shall be suitably packed to avoid damage during transit.

1. Foundry code, 2. Specification, grade & Melt number, 3. Other details as per drawing.

13.0 INSPECTION AND CERTIFICATION:

13.1: For IBR items

- a) If the Foundry is recognized as "Well known Foundry" under IBR, Items shall be inspected by foundry and works certificate along with IBR Form III F shall be issued.
- b) If the Foundry is not recognized as "Well known Foundry" under IBR, Items shall be inspected by an Inspecting Authority approved by IBR and work certificate along with IBR Form III G shall be issued.
- 13.2: For CE-marking items the materails shall be inspected by M/s. LLoyd's/ TUV/ BVQI or anyother agengy approved for PED of CEmarking, if the foundry is not certified to ISO 9000 by any of the . above organisation.
- For API items, the castings shall be inspected by the foundry and works certificate with details like PSL No., Temperature class rating, size shall be issued.
- 13.4 Test certificates shall contain the following details.
 - 1.Purchase Order No.(BHEL),TDC No. & Test certificate number
 - 2. Specification and Grade with applicable year of code, Heat Number, Quantity & Size
 - 3. Steel making process, Chemistry including incidental elements Heat wise.
 - 4. Heat treatment details of the material and test bars.
 - 5. Mechanical test results, NDE test results with reference & acceptance standard.
 - 6. Repair details including HT, if any, Cleaning & Surface treatment details.
 - 7. Any other information like clearance of sample casting.
 - 8. Dimensional Inspection Report where applicable.

14.0 AUDIT CHECKS AT BHEL:

BHEL reserves the right to carry out audit checks for chemistry, HT condition, mechanical test and NDT on representative test bars or job. Items found defective during check or subsequent processing at BHEL are liable for rejection.

15.0 END USE:

For use in valves and other components like flanges, fittings etc. for high temperature & high pressure applications meeting IBR, ASME Section I, ASME B 16.34, PED and API.

toman	M.L.	Salv	V.R.L.
D.SUDHAKARAN	M.RAJAKUMAR	S.SELVARAJAN	V.RAVIKUMAR
QA	ENGG/VALVES	QUALITY ASSUARANCE	QUALITY ASSURANCE
PREPARED BY	REVI	APPROVED BY	

Special Terms and Conditions

- 1. Material shall be supplied as per the Technical delivery conditions TDC:0:433/Rev 00, drawing and other special requirements as given in Purchase order.
- 2. On placement of purchase order, the vendor shall make ready one sample casting in each of the ordered items at one point of time to enable BHEL to depute their Quality personnel/ IBR authorized inspection agency for inspection of the casting and Quality documents. The vendor shall make available RT films, dimensional reports, and other quality documents to BHEL/ IBR authorized Inspection Agency during inspection.
 - On successful acceptance of the sample by BHEL personnel /IBR authorized inspection agency at Vendors works, the sample can be dispatched to BHEL and the vendor can start the Bulk production of the Castings.
- 3. In the event of non-clearance of sample/inability of the vendor to develop the castings as per BHEL requirement, BHEL will have the right to cancel the PO without any financial implication to BHEL
- 4. Any defects found during Machining/Assembly/ Hydro test of the valves, the minor repairs shall be undertaken by BHEL and the entire cost of such repairs shall be borne by the vendor. If the defects are found to be major, such castings will be rejected and in such a case the vendor shall replace all the defective castings on FOR/BHEL Tiruchy-14. To ensure the guarantee of supplies, a Performance Bank Guarantee (PBG) for 10% of order value for a period of 18 months from the date of dispatch with an additional claim period of 2 months as per the format given in Annexure E. The PBG shall be submitted along with payment documents
- 5. All castings shall be supplied free of defects like shrinkage, hot tears and process variable defects like sand inclusion, slag inclusion, gas entrapment etc. If any casting is found defective, the same shall be upgraded at foundry itself before dispatch to BHEL with necessary documentation.
- 6. Separate charges shall not be paid for Test bar and Test certificate supplied by vendors. Test bar / Plates for welding procedure qualification as well as for audit check shall be supplied by vendors free of cost whenever required by BHEL.
- 7. No price variation clause is acceptable, i.e. the price of the component quoted by the vendor shall be firm throughout the period of the contract.
- 8. Delivery: BHEL Expected Delivery:
 - To develop the samples in each size within 3 months from the date of placement of order.

- On successful acceptance of the samples, the vendor to deliver at least 50% of the castings ordered in each size within 3 months from the date of acceptance of sample castings.
- Balance 50% supplies shall be delivered during the subsequent 3 months.
- Those vendors already having pattern/s and are willing to participate in the tender, the sample development time is restricted to one month.
- Vendors having BHEL orders for castings would be considered against this tender only if their capacity and delivery are meeting BHEL requirements for the existing orders and the current requirement.
- Vendor to confirm/quote their delivery schedule/ in "Unpriced bid", which can be mutually discussed and settled;

8. Radiography:

Radiographic inspection shall be carried out as per TDC:0:433/Rev 00 for the applicable ordered valve Castings.

All the applicable radiography films shall be dispatched to BHEL either before the dispatch of castings or along with the castings.

BHEL may conduct radiography and MPI examination as audit check on any casting at frequent intervals and the castings should satisfy the quality requirements as spelt out in TDC:0:433/Rev 00.

- 9. For QCNRV & CRHNRV body castings, the wall thickness shall be checked throughout the surface on grid of 100mm X 100mm and the report shall be submitted to BHEL along with Test certificate.
- Qualified NDE personnel at vendor's works shall carry out RT and MPI examination on all the ordered castings as per BHEL- Technical delivery conditions – TDC:0:433/Rev 00.
- 11. All the castings shall be subjected to chemical, mechanical tests etc., as per TDC:0:433/Rev 00 and the relevant test certificate shall accompany the consignment. All castings shall also be subjected to impact tests as called for in the TDC and the testing charges shall be borne by the vendor.
- 12. BHEL reserves the right to reject the castings that are found to be defective during machining / assembly / hydraulic testing notwithstanding the earlier acceptance. Such defective castings have to be replaced Free of Cost by the vendor.
- 13. Liquidated damage clause will be applicable for delayed supplies @ 0.5% per week or part thereof subject to a maximum of 10%.

- 14. Risk purchase clause: BHEL shall be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the supplier, either the whole of the goods or any part thereof which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid. The supplier shall be liable for the losses, which BHEL may sustain by way of such risk purchase in addition to aforesaid penalty for delayed delivery
- 15. Guarantee clause: The vendor shall give a guarantee of eighteen months from the date of acceptance of the castings at BHEL.

16. ADOPTION OF INTEGRITY PACT:

BHEL is committed to fostering the most ethical and corruption free environment and values its relationship with all bidders, contractors and vendors. Conducting business in a transparent, fair and corruption free manner will go in a long way in making the vendors and contractors our partners in progress and to reinforce this belief. BHEL has already signed a memorandum of understanding with transparency India international on adoption of integrity pact for all Major tenders/contracts. Integrity pact first promoted by transparency international, an NGO, is a tool to ensure that activities and transactions between a company or government department and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. The integrity pact which is an integral part of this commercial terms and conditions of tender may please be signed and sent to us along with the techno-commercial offer in token of acceptance of the conditions of the pact.

17. FORCE MAJEURE:

If at any time during the continuance of the contract, the performance in which or in any part by either party of any obligations under the contract are prevented or delayed by reason of any war, hostilities, acts of public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine restrictions, or acts of God (hereinafter referred to "an events" then provided the notice of happening of any such event is given by either party to the other within 21 days of the occurrence thereof, neither party shall by reason of such event be entitled to terminate the contract nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance and delivery under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. If the performance in whole or part of any obligation under the contract is prevented or delayed by reason of any such event, claims of extension of time shall be granted for periods considered reasonable by BHEL subject to prior notification by the vendor to BHEL of the particulars of the event and supply to BHEL, if required, of any supporting evidence. Any waiver of time in respect of partial instalment shall not be deemed a waiver of time in respect of remaining deliveries.

18. DISPUTES:

In the event of any dispute and/or difference arising between the Vendor and BHEL as to interpretation and/or execution of the contract and/or the respective rights and liabilities of the parties, such disputes and/or differences shall be referred to the sole arbitrator nominated by BHEL .The provisions of the Indian Arbitration Act and the rules there under shall apply to such arbitration. The award passed by the arbitrator shall be final and conclusively binding on all the parties.

19. JURISDICTION:

The court of the place from where the purchase order is issued during the contractual period shall alone have jurisdiction to decide any dispute arising out of or in connection with the purchase order.

In addition to all the above conditions, BHEL Standard Terms & Conditions and the requirements spelt out in the Enquiry covering letter shall also be applicable for the orders to the extent they are not superseded by the above conditions.

Bharat Heavy Electricals Ltd.



(A Govt. of India Undertaking)



VALVES PURCHASE, TIRUCHIRAPPALLI- 620 014. INDIA

STANDARD TERMS AND CONDITIONS IMPORTS ENQUIRY

I OFFER

Offer in ENGLISH LANGUAGE in a SEALED COVER SUPERSCRIBING the Enquiry Number and the due date shall be submitted addressed to

THE AGM.
PURCHASE VALVES
GOVERNMENT OF INDIA
ACCOUNT: BHARAT HEAVY ELECTRICALS LIMITED
UNIT: TIRUVERUMBUR
BOILER PLANT PROJECT
P.O. TIRUCHIRAPPALLI - 620 014
TAMIL NADU, INDIA

Offers should be firm on the basis of FOB Nearest Sea Port. Shipping specifications and the earliest delivery should be indicated in the offer.

In case overseas suppliers route their offer through their accredited selling agents, a letter of authority should be furnished mentioning the name and address of their selling agents who are authorised to bid, negotiate and conclude a Contract on their behalf.

II AGENCY COMMISSION:

- (i) In respect of offers from overseas suppliers, agency commission, if any, payable to their agents in India, shall invariably be shown separately in the proforma invoice and this will be paid by us in India, in Indian Rupees, on satisfactory completion of the Contract.
- (ii) If Overseas Principal has any tie up with any third party in respect of Agency Commission it should be declared while submitting the offers.
- (iii) Copies of current Agency, / Agreemental Authorization Letter in respect of Agency Commission shall be furnished along with order, if not made available earlier.
- (iv) For calculation of Rupee equivalent of Agency Commission, exchange rate as prevailing on the date of order will be taken.

III VALIDITY:

The offers shall be kept open for acceptance for **90 days** (ninety days) from the date of opening of the tender.

IV TEST CERTIFICATES:

The tenderer shall clearly mention in their offer, that the Test Certificate, as called for in the technical specification, in the required number of copies will be provided at no extra cost.

∀ TERMS OF PAYMENT:

100% payment shall be made within 45 to 90 days on receipt and acceptance of castings at BHEL.

Documents Required from vendor for Payment:

- a. Bill of Lading.
- b. Packing list & Invoice
- c. Country of origin Certificate
- d. Test Certificates / Compliance Certificate
- e. A Certificate that:

One copy of Tests / Compliances Certificate with non-negotiable documents, comprising of House Airway Bill, Invoice, Packing list, Country of origin Certificate, applicable drawings and catalogues, duly signed and stamped, have been sent separately to the port Consignee, purchaser

Attn: AGM / Purchase Department/ Valves, BHEL, Tiruchirappalli 620 014, India and to Senior Manager / Finance, Import Section, BHEL Tiruchirappalli 620 014, India

VI **GENERAL**:

(I) Bank Guarantee:

The supplier in the event of an order, should furnish a Bank Guarantee from a consortium Bank at no extra cost in a proforma which will be Supplied to the Supplier, along with the order, for an amount equivalent to 10% of the value of the contract. The Bank Guarantee should remain in full force and effect during the period that would be taken for successful completion of the contract and shall continue to be enforceable till 12 months from the date of receipt of consignment at purchaser's site or 18months from the date of last shipment at the Port of Delivery whichever is earlier.

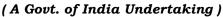
VII LD / PENALTY AND INTEREST ON ADVANCES FOR DELAY IN DELIVERY:

If the supplier fails to deliver the Raw Materials / equipment / components within the period specified in the contract the Purchaser shall deduct Liquidated Damages a sum equivalent to 0.5% of the price for each week of delay upto a maximum of 10% of the price of the delayed / undelivered goods

VIII Note to the Beneficiary

- a. All documents are to be in "ENGLISH LANGUAGE" only.
- b. Description of the material is to prefixed by the word "BOILER COMPONENTS / MACHINERY SPARES" (if not otherwise required by the contract)
- c. Contract No., L.C. No. and Import License No. are to be inducted in all documents
- d. Invoice should show the description of the goods and the unit rate of each item as in the purchase contract.
- e. Packing list must indicate case identification, case dimension, and case contents, gross and net weight.
- f. Against each item in the invoice and packing list, the serial number of the corresponding item in the purchase contract or as per order acknowledgement should be indicated.
- g. Demurrage charges due to delayed presentation of the original shipping documents for the reason not attributable to the buyer should be borne by the seller
- h. All documents should be submitted in triplicate
- i. Please avoid ODC (Over Dimensional Consignment) to the Air consolidation agent and inform us before packing the material of ODC condition

Bharat Heavy Electricals Ltd.







VALVES PURCHASE, TIRUCHIRAPPALLI- 620 014. INDIA

STANDARD TERMS AND CONDITIONS

INDIGENOUS ENQUIRY

1. QUOTATIONS:

- a. Each tender should be sent in double cover, should be sealed and super scribed with correct Tender No., item of supply and 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 but the quotation against each tender should be sent separately to avoid confusion. Tender should not be addressed to any individual's name but only by designation.
- b 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.
- c Price should be F.O.R. dispatching station inclusive of risk in transit and remain valid for 60 days from. the due date.
- d If any Sales Tax is payable as extra to the quoted price, it should be specifically stated in quotation along with CST & T.N.G.S.T No. failing which the purchaser will not be liable for payment of Sales Tax. Our T.N.G.S.T No. 3550005 Dated 01-04-1995 C.S.T. No. 259383 Dt. 11.06.1991.
- e. No revision of prices will be entertained after tenders are opened.
- f. Manufacturer's name, Trade Mark or Patent No. if any should be specified. Illustrative leaflets giving technical particulars are required along with quotation wherever necessary.
- g. Products with I.S.I. certification marks will be preferred.
- h The purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full without assigning any reason whatsoever.

2 SAMPLES:

Wherever possible samples should be submitted separately whether specifically requested or not so as to reach the purchaser on or before its due date of the enquiry. They should be clearly marked with the enquiry No. and the date on the outside cover to facilitate identification.

3 PACKING AND MARKING:

The supplier shall arrange for securely protecting and packing the stores to avoid lose or damages during transit.

Continued .. 2

Page: 02 of 02

4 TERMS OF PAYMENT:

Payment will be made within 45 to 90 days after accepting of materials at our stores. Where required by the purchaser, the successful tendered must send the operation and maintenance manuals, test certificates, drawings, etc., for the materials should be sent immediately after dispatch of the materials and a statement to that effect should be made in the Invoice. Failure to comply with this provision will result in delay in payment of the bills. Goods dispatched either by V.P.P. or by thro' document presented through bank will not be accepted unless agreed to by the Purchaser.

The Original Excise Duty Gate Pass or certified extract form Excise Duty Ledger should accompany the material. A Photostat copy of the above gate pass for each delivery challan should be submitted along with the original bills routed through bank or submitted directly to BHEL Department.

5 **SECURITY DEPOSIT**:

For purchase over Rs.5000/- the successful tender/s may be requested to furnish a Bank Guarantee/Security Deposit for an appropriate value as may be determined by BHEL.

6 LIQUIDATED DAMAGES:

It is clearly understood among the parties to the contract that 'Time is the essence of the Contract. Therefore, the delivery of the goods specified in the purchase order should be made with in the time prescribed. Where the seller supplies or despathces the goods beyond the delivery period specified the purchaser will have no obligation to accept the goods. If accepted liquidated damages at the rate of $\frac{1}{2}$ % of the value of goods delayed for each week of delay or part thereof will be levied without prejudice to any other relief of compensation due to the purchaser under any other condition of this contract.

7 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 the seller either the whole of the 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. The 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 6 above.

8 PREFERENTIAL DELIVERY:

It should be noted if a contract is placed on a higher tender as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of the earlier delivery, the seller will be liable to pay to the purchaser the difference between the contract rate and that of the lowest acceptable tender on the basis of final price F.O.R. destination, including all elements of freights, sales tax, duties and other incidents, incidental in case of failure to complete supplies In terms of such contract within the date of delivery specified In the tender and incorporated in the contract.

9 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.

10 **GENERAL**:

The Purchaser reserves the right to split up the tender and place order for individual items with different tenders and also increase or decrease the quantity.

Any other conditions which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted in by Purchaser will not be applicable to the contract.

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 with
which term includes 'suppliers' for the purpose of this Bond and under the terms and conditions of the contract No
2. We
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

5. (I)	Unl	less a	demand	or cla	im und	ler thi	s guara	antee	is made	on u	s in v	writing	on or b	efore
the _					_we_sh	all be	e discl	arge	ed from	all	the l	liability	under	this
guara	ntee	there	after.	But	where	such	claim	or o	demand	has	been	n prefe	rred by	the
Comp	any	with t	he Bank	befor	re the	expiry	of the	said	l date, tl	ne cla	aim s	hall be	enforce	eable
notwit	thsta	nding	the fact	that t	he said	enfor	cemen	t is ef	ffected a	fter t	he sa	id 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.
- 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 guaranter-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 guaranter hereunder be outstanding or unrealized.
- 9. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirapalli, Tamilnadu, India.
- 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 nai	me of	Ban	k) lastly 1	undertak	e n	ot to	revoke	this
	guarantee	during	its	currency	except	with	the	previous	consent	of	the	compan	y in
	writing.												

In witness whereof we	(indicate the nam	ne of Bank) have hereunto
setout Bank Seal the	day	month 200
BANK E-MAIL ID:		
BANK PHONE NO.		
BANK FAX NO:		

Annexure-F

GENERAL TERMS AND CONDITIONS OF RA

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

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

Enquiry for Valve - Castings: Annexure - G

EN-VAL-OT-1002 Techno Commercial Bid format

En. SL NO	CF_CODE_DESC	Casting Drawing NO	Machining Code	Machining Drawings	Tender Qty	Casting Wt KG	**Quoted / Not Quoted
1	BODY 20", 150CL A216-WCB -L628	2VL62817334R/01	954600070000	2VL51317594	100	1275	
2	BODY 20", 300CL A216-WCB -L630	2VL63017335R/02	954600030000	2VL51517592	50	1295	
3	BODY 24", 150 cl A216-WCB-L632	2VL63217336R/00	954600010000	2VL51917593	50	1590	
4	BODY 32", 600 cl A216-WCC-NA06	1VNA0605194R/01	931107020000	1VNA0605195/2	10	4850	
5	BODY_C12A_GV20_2850SPL-W780	2VW78016676R/1	931233078500	2VW78018084	10	4846	
6	BODY_ C12A_GV_22_3000SPL-WA81	2VWA8116652/1	931232688500	2VWA8118080	15	6440	
7	BODYC12A_GV_12_2500SPL-V493	2VV49316514R/0	931217468500	2VV49318083	50	1753	
8	BODY_750_900_C12A HRHIV_3316	2V331614082R/1	932017540000	2V331614088/03	10	3275	
9	BODY-HRHIV-800-C1500-C12A-3319	2V331914683R	932023160000	2V331914682	8	6990	

^{**} Indicate Quoted or Not quoted against each item.

Enquiry for Valve - Castings:

Annexure - H

EN-VAL-OT-1002

Priced Bid format

En. SL NO	CF_CODE_DESC	Casting Drawing NO	Machining Code	Machining Drawings	Tender Qty	Casting Wt KG	Total/ Rate Piece Rs	Total Rate Rs
1	BODY 20", 150CL A216-WCB -L628	2VL62817334R/01	954600070000	2VL51317594	100	1275		
2	BODY 20", 300CL A216-WCB -L630	2VL63017335R/02	954600030000	2VL51517592	50	1295		
3	BODY 24", 150 cl A216-WCB-L632	2VL63217336R/00	954600010000	2VL51917593	50	1590		
4	BODY 32", 600 cl A216-WCC-NA06	1VNA0605194R/01	931107020000	1VNA0605195/2	10	4850		
5	BODY_C12A_GV20_2850SPL-W780	2VW78016676R/1	931233078500	2VW78018084	10	4846		
6	BODY_ C12A_GV_22_3000SPL-WA81	2VWA8116652R/2	931232688500	2VWA8118080	15	6440		
7	BODYC12A_GV_12_2500SPL-V493	2VV49316514R/0	931217468500	2VV49318083	50	1753		
8	BODY_750_900_C12A HRHIV_3316	2V331614082R/1	932017540000	2V331614088/03	10	3275		
9	BODY-HRHIV-800-C1500-C12A-3319	2V331914683R	932023160000	2V331914682	8	6990		

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 8th April, 2011

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, 2011.

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, 2011 for your reference and record.

hell krom file

Thanking you,

Yours faithfully,

Development Officer &

Assistant Secretary, Central Boilers Board Tel.No.23063321/3318

Encl: "As above"

le Carle Copies agencies.

The appropriate agencies.

INSPECTING AUTHORITIES (As on 31/3/2011)

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

17.

Chief Inspector of Boilers,

Manipur

Manipur

18. Chief Inspector of Boilers, Mizoram Mizoram Nagaland 19. Chief Inspector of Boilers, Nagaland 20. Director of Boilers, Orissa Orissa 21. Director of Boilers, Punjab Punjab 22. Chief Inspector of Boilers, Puducherry Labour Department, Government of Puducherry, Puducherry 23. Chie f Inspector of Boilers, Rajasthan Rajasthan. 24. Director of Boilers Tamil Nadu Tamil Nadu Tripura 25. Chief Inspector of Boilers, Tripura 26. Director of Boilers, Uttar Pradesh Uttar Pradesh 27. Deputy Director of Factories & Boilers Uttarakhand Uttarakhand 28. Chief I nspector of Boilers, West Bengal West Bengal M/s. TUV Nord Systems GmbH Co.KG. All countries except India Langemarckstr 20 451141 Essen GERMANY. 30. All countries except India M/s. Royal & Sunalliance Engineering, 17, York Street, Manchester, M2 3RS, ENGLAND All countries except India 31. M/s. Japan Inspection Company Limited, No.10-7, 1-Chome, hatchobori, Chou-ku, Tokyo, 104-0032, Japan

Korea & Japan

32.

M/s. S.G.S. Korea Company Limited,

Industrial Division,

16th FL, KT Pusan IT Center, 830-29,Beomil 2-Dong ,Jung-Gu, Pusan, KOREA (601-706). M/s Bureau Veritas,
 67-71, Boulevard du Chateau,
 92200 Neuilly-sur-Seine,
 FRANCE

All countries except India.

M/s. Llo yds Register of Verification Ltd.,
 Fenchurch Street,
 London EC 3M, U.K.

All countries except India.

M/s. Velosi Certificat ion Bureau Ltd.,
 318a Kings Road, Clifton House,
 Reading Berkshire, RG1 4JG,
 United Kingdom

All countries except India

M/s TUV Rheinland Brandenburg P falz e.V.,
 Am Grauen stein, D-51105 Klon,
 Germany

Europe, Japan, China & Korea

 M/s Moody International Ltd., Cuckfield House, High Street, Cuckfield, West Sussex, RH 17 5EL, U.K. All countries except India

Technischer Uberwachungs-Verein Saarland e.V.,
 Am Tuev 1,
 66280 Sulzbach,
 Germany

Europe

39. M/s OOO "TekhnoLogicheskieEnergosistime"1. Kalinia St. Belgorod,308001Russia

Russia, China, Ukraine & USA

M/s. Det Norske Veritas,
 Veritasveien 1, P.O. Box 300,
 N-1322, Hovik,
 NORWAY

Argentina, Australia, Austria, Belgium, Brazil, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, South Korea, Spain, Sweden, Switzerland, U.K. and U.S.A.

 M/s. Engi neering Bureau Franke International,
 55, Amurskaya St., Ukraine 49108 Ukraine, Russia, Belarus, China, Uzbekistan, Poland, Belgium, Romania, & Czech Republic

 M/ s. ARISE Boiler Inspection & Insurance Company Risk Retention Group, Grand Bay 1, 7000 South Edgerton Road, Suite 100, Breeksville, OH 44141 USA Argentina, Austria, Canada, Brazil, France, Germany, Italy, Malaysia, Netherlands, Singapore, U.K. and USA

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

44. M/s TUV SUD Industrie Se rvice GmbH, Wstendstr. 199, 80686 Munich, Germany

All countries except India

45. M/s Germanischer Lloyd Industrial Services GmbH, All countries except India Steinhoeft 9, 20459 Hamburg, Germany

46 M/s. TUV Thuringen e.V., Business Division Steam and Pressure Technology, Melchendorfer Str. 64, 99096 Erfurt, Germany

Europe

COMPETENT AUTHORITIES (As on 31/3/2011)

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 Chattisgarh
- 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 In spector of Boilers, Himachal Pradesh.
- 11. Chief In spector of Boilers,,
 Jharkhand.
- Directo r of Boilers, Karnataka.
- 13. Directo r of Boilers, Kerala.
- Directo r of Boilers, Madhya Pradesh.
- Directo r of Boilers, Maharashtra.
- Chief In spector of Boilers, Meghalaya
- 17. Chief In spector of Boilers, Manipur

- Chief In spector of Boilers, Mizoram
- Chie f Inspector of Boilers, Nagaland
- 20. Director of Boilers, Orissa
- Director of Boilers, Punjab
- Chie f Inspector of Boilers, Labour Department, Government of Puducherry, Puducherry
- 23. Chie f Inspector of Boilers, Rajasthan.
- Director of Boilers
 Tamil Nadu
- Chief Inspector of Boilers, Tripura
- Director of Boilers, Uttar Pradesh
- Deputy Director of Factories & Boilers Uttarakhand
- 28. Chief I nspector of Boilers, West Bengal
- 29. M/s. National Test House, Plot No.F-10, M.I.D.C., Marol, Andheri (E), MUMBAI - 400 093.
- Welding Research Institute,
 Bharat Heavy Electricals limited,
 Tiruchirapalli 620014.
- M/s. Royal & Sunalliance Engineering,
 17, York Street,
 Manchester,
 M2 3RS, ENGLAND.
- 32. M/s. TUV Nord Systems GnbH Co. KG, Langemarcestrasse 20, 45841 Essen, GERMANY

All countries except India

- 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.
- M/s. Japan Inspection Company Limited, No.10-7, 1-Chome, hatchobori, Chou-ku, Tokyo, 104-0032, Japan
- M/s. S.G.S. Korea Company Limited, Industrial Division,
 16th FL, KT Pusan IT Center,
 830-29,Beomil 2-Dong, Jung-Gu,
 Pusan, KOREA (601-706).
- M/s Bureau Veritas,
 67-71, Boulevard du Chateau,
 92200 Neuilly-sur-Seine,
 FRANCE
- M/s. Lloyds Register of Verification Limited,
 71, Fenchurch Street,
 London EC3M 4BS,
 UNITED KINGDOM

All countries except India

- M/s. Velosi Certification Bureau Ltd.,
 318a Kings Road, Clifton House
 Reading, Berkshire, RG1 4JG,
 United Kingdom
- M/s Moody International Ltd., Cuckfield House, High Street, Cuckfield, West Sussex RH 17 5 EL, U.K.
- 40. Technischer Uberwachungs-Verein Saarland e.V.,Am Tuev 1,66280 Sulzbach,Germany

Europe

M/s. OOO "TekhnoLogicheskieEnergosistime",
 1, Kalinia St. Belgorod, 308001,
 Russia.

Russia, China, Ukraine & USA

- M/s. Det Norske Veritas,
 Veritasveien 1, P.O. Box 300,
 N-1322, Hovik,
 NORWAY.
- 43. M/s. National Test House, 11/1, Judges Court Road Alipore, Calcutta - 700027

- 44. M/s. ARISE Boiler Inspection & Insurance Company Risk Retention Group, Grand Bay 1, 7000 South Edgerton Road, Suite 100, Breeksville, OH 44141 USA
- M/s TUV Rheinland Brandenburg Pfalz e.V., Am Grauen Stein, D-51105 Klon, Germany
- 46. M/s National Test House, Kamla Nehru Nagar, Ghaziabad- 201 002 Uttar Pradesh
- M/s Germanischer Lloyd Industrial Services GmbH, Steinhoeft 9, 20459 Hamburg, Germany

Europe

All countries except India

48 M/s. TUV Thuringen e.V.,
Business Division Steam and Pressure Technology,
Melchendorfer Str. 64,
99096 Erfurt,
Germany

WELL-KNOWN STEEL MAKERS

- M/s. Vallourec & Mannesmann Tubes, V & M France, Aciere de Saint Saulve, BP 10, Rue du Galibot, 59880 Saint – Saulve, FRANCE.
- M/s. FACOR Steels Limited, 46 A & B, MIDC Industrial Estate, Hingna Road, NAGPUR-440 028
- M/s. Kalyani Carpenter Special Steel Limited, Mundwa, PUNE - 411 036.
- M/s. ISMT Ltd., Jejuri – Morgaon Road, Village Kolvihire, P.O. Jejuri-412303, Tal Purandar, Distt. Pune.
- M/s. Tata Steel Limited, Steel Division, JAMSHEDPUR- 831 001
- M/s. Star Wire India Ltd., 21/4, Mathura Road, BALLABGARH-121004
- 7. M/s. Jindal Steel & Power Ltd., Kharsia Road, P.B. No. 16, Raigarh 496001. CHHATISGARH
- M/s Bharat Heavy Electricals Limited, Central Foundry Forge Plant, HARDWAR-249 403
- M/s Steel Authority of India Ltd., Visvesvaraya Iron & Steel Ltd., BHADRAVATI-577 301 KARNATAKA
- 10. M/s Mu kand Limited, Belapur Road, Dighe, P.O. Kalwe Thane-400 605, Maharashtra
- 11. M/s Kal yani Steel Limited, Hospet Division, Hospet Road, Taluka & Distt. Koppal, GINIGERA-583228 Karnataka

- 12. M/s Mu-kand Limited, Hospet Division, Hospet Road, Taluka & Distt. Koppal, GINIGERA-583228 Karnataka.
- 13. M/s Steel Authority of India Ltd.,Bhilai Steel Plant ,Bhilai-490 001Chhattisgarh.
- 14. M/s Mahi ndra Ugine Steel Company Ltd, Jagdishnagar, Khopoli – 410216 Distt. Raigad Maharashtra.
- 15. M/s Steel Authority of India Ltd.,
 Bokaro Steel Plant,
 Ispat Bhavan,
 Bokaro Steel City 827001,
 Distt. Bokaro,
 Jharkhand.
- 16. M/s. Ilsenb urger Grobblech GmbH,Veckenstedter Weg 10,D-38871 Ilsenburg,Germany.
- 17. M/s HKM H uttenwerke Krupp Mannesmann GmbH, Postfach 251124, D47251 Duisburg, Germany.
- M/s. Tubos Reunidos Industrial S.L.U., Barrio Sagarribai 2, 01470 Ammurrio (Alava), SPAIN.
- 19. M/s Benteler Stahl/Rohr GmbH,Stahlwerk Lingen,Niederdarmer Strasse 5,49811 Lingen,Germany.
- M/s Ambica Steels Limited,
 51/2, Site IV,
 Sahibabad Industrial Area,
 Ghaziabad U.P. 200 1 010.

- 21. M/s Ambica Steels Limited, Plot No. 32, Site II, Loni Road, Mohan Nagar, Ghaziabad- 201 010. U.P
- 22. M/s Ja yaswals Neco Ltd, Siltara Growth Centre, Siltara, Raipur – 493 111, Chattisgarh.
- 23. M/s Re mi Metals Gujarat Ltd., Plot No.1, GIDC, Industrial Estate, Valia Road, Jhagadia – 393 110, Dist.Bhaurch, Gujarat.
- M/s Steel Authority of India Ltd., Rourkela Steel Plant, Rourkela-769 011.

CARLESTER ... V.

- 25. M/s Wu yang Iron and Steel co.Ltd., Wuyang City, Henan Pro, P.R.China-462 500
- 26. M /s Adhunik Metaliks Limited, Chadrihariharpur, Kuarmuda, Distt. Sundergarh, Orissa-770 039
- M/s. Essar Steel Limited,
 km, Surat Hazira Road,
 Hazira- 394 270,
 Surat, Gujarat
- 28. M/s Steel Authority of India Limited,Alloy Steels Plant,Durgapur- 713 208West Bengal
- 29. M/s JSW Steel Li mited,
 Salem Works,
 P.O. Pottaneri-Kallipatti Village,
 Mecheri- 636 453
 Distt. Salem
 Tamil Nadu
- 30. M/s AG der Dillinger Huttenwerke, Werkstr.1, D-66736 Dillingen, Germany

- 31. Ms Sh yam Forgings Pvt. Limited, 6th Milestone, G.T. Road, Chhaprola, Gautam Budh Nagar-201 009
 Uttar Pradesh
- 32. M/s S unflag Iron & Steel Co. Limited, P.O. Bhandara Road, Distt. Bhandara-441 905 Maharashtra

WELL-KNOWN FOUNDRIES

- M/s. Samco Metals and Alloys Pvt. Ltd., Kaniyambadi-632102, Vellore Taluk, N.A. Distt., TAMIL NADU.
- M/s. Gujarat Techno-Castings Pvt. Ltd. Near C.D. High School, Saijpur-Bogha, AHMEDABAD.
- M/s. Ratan Engineering Company Pvt. Ltd.,
 F-454 RIICO Industrial Area,
 Bhiwadi, Distt ALWAR
 RAJASTHAN
- M/s. Uni Deritend Limited, Maneck Nagar, Tumsar-4410912 Distt. Bhandara, MAHARASHTRA.
- M/s. Malnad Alloy Castings Pvt. Ltd.,
 36-A, Shimoga-Bhadravathi Industrial Area,
 Machenahalli,
 SHIMOGA 577 222
- M/s. Auto Shell Casts Pvt. Ltd.,
 10, SIDCO Industrial Estate,
 COIMBATORE 641 021
- 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.
- M/s. Upper India Special Castings Limited, Dhandari Industrial Area, Focal Point, LUDHIANA-141 010
- M/s. A nugraha Valve Castings Limited, 391/2, Sendoda Goudan Pudur, Arasur Village, Palladam (TK), COIMBATORE-641 407.
- M/s. Aruna Alloy Steels Pvt.Ltd.,
 Unit II,
 3/1, Olaganeri Village, Uthangudi Post,
 MADURAI-625 107.

- M/s. Oswal Industries Limited, Bileswarpura, P.O. Chhatral, Tal Kalol, Distt. Gandhinagar, Gujarat – 382 729.
- M/s. Uni Deritend Limited, S.V. Road, Manpade, THANE-400-607
- 14. M/s. A.V. Valves Limited,160, Industrial Estate,Nunhai,AGRA-282 006.
- 15. M/s. Veeyes Foundry Pvt. Ltd., SF No.302/1 & 4, Kodathur Road, Kunnathur Pudur (P.O.), COIMBATORE-641 107.
- M/s. Madura Steel Industries Pvt. Ltd., Chettinaickenpatty, DINDIGUL-624 004.
- 17. M/s Creative Castings Limited,102, G.I.D.C. Phase II,Dolatpara,JUNAGARH 362 003
- 18. M/s Peekay Steel Castings (P)Ltd., (Foundry Division), Nallalam, KOZHIKODE-673027, Kerala.
- M/s PTC Industries Ltd.,
 B-480, RllCO Industrial Area,
 BHIWADI -301019.
- 20. M/s The KCP Limited, Engineering Unit, Post Box No. 2278, Tiruvottiyur, CHENNAI - 600019.
- M/s. Jayaswal Neco Ltd.,
 T-41/42, MIDC Industrial Area,
 Hingna Road, NAGPUR-440 016
- M/s. Saurabh Metals Pvt. Ltd.,
 1,22, New Industrial Area,
 Mandideep 462 046,
 Bhopal.

- M/s. Star Wire India Ltd.,
 21/4, Mathura Road,
 BALLABGARH-121004.
- M/s. Sanmar Foundries Ltd., Foundry Division, 87/1, Vadugapatti Village, Viralimalai-621316. TAMILNADU
- 25. M/s. Sri Ranganaathar Industries Pvt. Ltd.,
 12/45, Thadagam Road,
 Edayapalayam P.O.,
 COIMBATORE 641025.
- M/s. Aruna Alioy Steel Pvt.Ltd., Unit-I Super B-6, Industrial Estate, K. Pudur, MADURAI - 625007.
- 27. M/s Hindustan Udyog Limited,
 Biren Roy Road,
 Ranipur, Maheshtala,
 24, Paragana (South), West Bengal.
- 28. M/s Harihar Alloy Castings Ltd., SF No. 421 & 671, Trichi-Thuraiyur Road, PULIVALAM – 621006.
- 29. M/s Coimbatore Super Alloy (P) ltd.,
 Thelungupalayam Pirivu,
 Ellapalayam P.O., Annur (Via),
 Pogalur 641697.
 Coimbatore Distt.
- M/s Ultimate Alloys (P) ltd.,
 Kannampalayam Village,
 Trichi Road, Sulur,
 COIMBATORE 641402.
- M/s Kartik Steel Ltd.,
 52-53, Sipcot Industrial Complex,
 Ranipet 632403.
 N.A. District
- 32. M/s S.V.E Castings Pvt.Ltd.,
 Plot No. 1 & 2, KIADB Indl. Area,
 Anantapur Road,
 Bellary 583101.
- M/s Sueeraa Alloys Global (P) Ltd.,
 315/2 Kandampalayam,
 Sembiyanallur Village,
 Avanashi 641654.
 Coimbatore.

- 34. M/s. Shiva Sai Cast Pvt. Ltd. (Formerly: M/s Aaditya Cast) Survey No. 57, Gejjenahalli, Shimoga – 577204.
- 35 M/s R.K. Machine Tools Ltd., 854, R.K. Road, Industrial Area --A, Ludhiana - 141003.
- M/s Mani's Foundries (Pvt.) Ltd., SF No. 211 & 274, Uralipatty, Velvarkottai (PO) Dindigul – 624803.
- M/s Castech Foundries Pvt. Ltd.,
 1708/1709, G.I.D.C., Phase 11,
 Dolatpara, Junagarh 362003 (Gujarat)
- M/s S.S. Alloy Products Pvt. Ltd., 83/5, Phase-I, "F" Road, GIDC Vatva, Ahmedabad – 382445.
- M/s. Sri Padmabalaji Steels P. Ltd.,
 459/460, Masandipalayam,
 Karakoundampalayam Post,
 Annur, Coimbatore 641 697.
- M/s NMVST Alloys Cast,
 4/363, Kallipalayam Village,
 Chikkarampalayam PO.,
 Karamadai (PO) 641 104,
 Coimbatore Dist.,
 Tamilnadu.
- 41. M/s. Veeyes Alloys Private Limited, Unit-II, S.F. No.518/1A&1B, Saravanampatti- Tudiyalur Road, Vellakinar Post, Coimbatore 641 029.
- M/s. Amex Alloys Private Limited,
 SF No. 289/2, Sathy Road,
 Kunnathur Pudur PO,
 Coimbatore 641 107.
- M/s. Balaji Super Alloys,
 Bettathapuram Pirivu,
 Karamadai (PO) 641 104
 Coimbatore Dist.

- 44. 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.
- 45. M/s Aruna Alloy Steels Pvt. Ltd., Narasingampatti, (Unit-III) Therkutheru, Madurai - 625112.
- M/s Rine Engineering Pvt. Ltd.,
 Plot No. 73 AB&C, HPSIDC, Industrial Area Baddi,
 Distt. Solan 173 205, (H.P.)
- M/s Ratnamani Techno Casts Ltd.,
 3310, Phase IV, GIDC Estate, Chhatral 382 729,
 Ahmedabad Mehsana Highway, Dist. Gandhinagar,
 Gujarat.
- 48 M/s Nectar Steel Cast Pvt. Ltd.,E-62, MIDC Waluj,Aurangabad 431 136.
- M/s Western Precicast Pvt. Ltd.,
 Gate No. 170, Village Savali,
 Taluka Miraj, Dist. Sangli. (Maharashtra)
- 50 M/s. Shyam Forgings Pvt. Ltd., 6th Mile Stone, G.T. Road, Chhaprola, Gautambudh Nagar – 201 009 (U.P.).
- 51. M/s Simplex Castings Limited, (Special Castings Division), Urla Industrial Estate, Raipur 492 023 (Chhattisgarh State).
- M/s Electralloy Special Steel Castings Pvt. Ltd.,
 Plot No. 25, SIPCOT Industrial Complex,
 6th Cross Road,
 Hosur-635 126 (Tamil Nadu)
- 53. M/s Koso Fluid Control (P) Limited,
 Foundry Division,
 1/80, Talungupalayam Road,
 Pillayappampalayam Post,
 Annur, Coimbatore-641 653
- 54. M/s Bharat Heavy Electricals Limited,Central Foundry Forge Plant,Ranipur, Haridwar-249 403 (Uttrakhand)
- M/s Amsteel Castings Pvt. Limited,
 35-A, Sipcot Industrial Industrial Complex,
 Hosur-635 126 (Tamil Nadu)

- M/s Neesa In frastructure Limited,
 278, Pancharatna Industrial Estate,
 Vill: Changodar, Tal.: Sanand,
 Distt. Ahmedabad- 382 213
 Gujarat
- 57. M/s RLS Alloys Private Limited, S.F. No. 118/1,2,3 Sethurapatti, Fathimanagar, Trichy- 620 012 Tamil Nadu
- 58. M/s Harihar allo ys Castings (P) Limited, Unit II, S.F. No. 229/2 & 4B, Laxmanampatti Village, Kulathur(Tk), Pudukottai-622 054 Tamil Nadu
- 59. M/s Leader Valves Limited, S-3,S-4, Industrial Town, Jalandhar-144 004 Punjab
- M/s A. K. Multimetals Private Limited, A-1, Focal Point, Mandi Gobindgarh-147 301 Punjab
- M/s Uttar Pradesh Steels, Village- Nara,
 P.O. Mansurpur-251 203 Distt. Muzaffarnagar, Uttar Pradesh
- 62. M/s Shree Kumaran Alloys, S.F.No. 461, Telungupalayam Road, Eliapalayam Post Annur, Coimbatore-641 697
- 63. M/s Yama Control Company,
 Old No. 26, New No. 43A, P.N.Palayam Road,
 Perumal Koil Thottam,
 Ganapathy
 Coimbatore-641 006

WELL-KNOWN FORGES

- M/s. M.M. Forgings Limited, Plant I, Singampunari-630502.
 Singampunari District, TAMILNADU.
- M/s. Sadhu Forgings (P) Ltd., Plot No.140, Sector 24, FARIDABAD.
- M/s. Unity Forge Limited,
 D-10, Maraimalai Nagar,
 Kattangulathur-603 209.
 TAMILNADU.
- M/s. Vishnu Forge Industries Limited,
 C-01/C-02 and A-24,
 HMT Industrial Estate,
 BANGALORE 560031.
- 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.
- M/s Chaudhary & Sons(Forgings) Pvt. Limited, Plot No. 4, Lal Kuan, G. T. Road , Ghaziabad- 201 009 Uttar Pradesh
- 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
- M/s. MM Forgings Limited Plant 2, Erasanayakanpatti, Fathimanagar Post, Viralimalai, Pudukottai Distt.-621 316. TAMILNADU
- 10. M/s Pradeep Metals Limited, R-205, T.T.C. Industrial Area, M.1.D.C. Rabale, NAVI MUMBAI -400 701.

- M/s Echjay Industries Private Limited,
 Echjay Steel Division,
 Lalpari Lake Road,
 RAJKOT 360 003.
- M/s Ghaziabad Ispat Udyog Pvt. Ltd.,
 C-89, Industrial Area,
 Bulandshar Road, GHAZIABAD 201 001.
- 13. M/s. Chaudhry Hammer Works (P) Ltd., Village Acheja, G.T. Road, Greater NOIDA, Distt. Gautam Budh Nagar, UTTAR PRADESH
- 14. M/s Bharat Heavy Electricals Limited,
 Heavy Electrical Equipment Plant,
 Ranipur
 HARDWAR-249 403
- M/s ACME Forgings Pvt. Ltd., Rajkot-Gondal Highway, P.O. T.B. Hospital, RAJKOT-360002.
- M/s Vikrant Forge Ltd.,
 Maity Para,
 Delhi Road, P.O. Dunkuni- 711 224,
 Distt. Hoogly,
 West Bengal.
- 17. M/s Vinir Engineering Pvt. Ltd.,104, Bammasandra Industrial Area,Bangalore 560 099.
- M/s. CD Industries,
 Plot No.3, South of G.T. Road,
 Industrial Area, Bulandshahr Road,
 GHAZIABAD 201 001.
- 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.
- 20. M/s Sree Lakshmi Industrial Forge & Engineers Ltd., (Unit II),
 Plot No. 8, Attebelle Industrial Area,
 Icchangoor Village,
 Bangalore- 560 007
- M/s. The Punjab Steel Works,
 B-38, Mayapuri Industrial Area-Phase 1,
 New Delhi-110064.

- M/s. Kissan Steels (P) Ltd.,
 B-12, Industrial Area No. 1,
 Bulandshahar Road, Ghaziabad U.P. 201001.
- M/s. Thillai Engineering Works, 161, SIDCO Industrial Estate, Ambattur, Chennai – 600 098.
- M/s Anandmayee Forgings Pvt. Ltd.,
 5A, Industrial Area,
 Site-4, Sahibabad,
 Distt. Ghaziabad 201 010 (U.P.).
- M/s. Ommi Forge Private Limited,
 No.2, Visveswaraiah Industrial Area,
 BANGALORE 560 048.
- M/s Steel Smith,C-168, Bulandsher Road Industrial Area,Ghaziabad (UP)
- M/s Kunj Forgings Pvt. Ltd.,
 C-177, Buland Shahar Road, Industrial Area,
 Ghaziabad 201 001 (UP).
- 28. M/s AMW-AGM Forgings Pvt. Ltd., (Formerly: M/s MGM Forgings Pvt. Ltd.) Plant II, 82-84, 5th Mile, Metagalli Post, Mysore - 570016.
- M/s. Fivebros Forgings Pvt. Ltd., 145-A, G.I.D.C. Industrial Estate, Ankleshwar – 393 002 Gujarat.
- 30 M/s Bharat Heavy Electricals Limited, Central Foundry Forge Plant, Ranipur, Haridwar-249 403 Uttarakhand
- M/s Alka Forgings,
 C-20, Bulandshar Road Industrial Area,
 Ghaziabad
 Uttar Pradesh
- M/s Hindon Forge (P) Lilited,
 C-173, Bulandshahar Road Industrial Area,
 Ghaziabad-201 001
 Uttar Pradesh
- M/s Metal Forgings Private Limited,
 B 1, Mayapuri Industrial Area Phase I
 New Delhi- 110064

- 34 M/s R.D.Forge,
 (A Unit of R. D. Chemicals Pvt. Ltd.)
 C-114, Bulandshar Road Industrial Area,
 Ghaziabad- 201 009
 Uttar Pradesh
- 35. 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
- 36. M/s Good Luck Engineering Co.,
 Khasra No. 2839,
 Gram Dhoom Manikpur,
 G.T.Road, Dadri
 Distt. Dautam Budh Nagar (U.P.)

WELL-KNOWN TUBE AND PIPE MAKER

- M/s. Bharat Heavy Electricals Limited, Unit Seamless Steel Tube Plant, Tiruchirapalli-620014.
 TAMILNADU
- M/s Vallourec & Mannesmann Tubes,
 V&M Deutschland GmbH, Wiesen Strasse 36,
 45476 Muelheim an derRuhr, Germany.
- M/s Vallourec & Mannesmann Tubes,
 V&M Deutschland GmbH, Ratherkreuzweg, 106,
 D-40472 Duesseldorf, Germany.
- 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.
- M/s Vallourec & Mannesmann Tubes,
 Aulnoye Tube Plant, 64, rue de Leval B P 159,
 59620 Aulnoye Aymeries, France.
- M/s. Tata Steel Limited,
 Tube Division,
 P.O. Burma Mines
 JAMSHEDPUR.-831 007
- M/s. Maharashtra Seamless Ltd., Village Sukeli, NH 17, B.K.G. Road, Taluka Roha, Distt. Raigarh-402 126. MAHARASHTRA.
- M/s. ISMT Ltd.,
 Plant B,
 B-13, M.I.D.C., Baramati,
 Distt. Pune 413 133.
- M/s Tube Products of India,
 Post Bag No. 4,
 Avadi,
 CHENNAl 600 054.
- 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
- M/s. Mahalaxmi Seamless Ltd.,
 Pipe Nagar (Sukeli), Via Nagothane,
 Tal. Roha, Distt. Raigarh,
 Maharashtra-402126.
- M/s. Tube Investment of India Ltd.,
 Unit: Tube Products of India,
 Shirwal P.O., Khandala Taluka,
 Satara District,
 Maharashtra 412 801.
- M/s Jindal Saw Ltd., (Seamless Tube Div),
 Plot No. A-59/60, Malegaon MIDC,
 Sinnar-422 113,
 Dist. Nashik Maharashtra.
- M/s Dalmine S.p.A.-Dalmine Plant,
 Piazza caduti 6 luglio 1944,
 24044 Dalmine (Bnergamo)
 ltaly.
- 20. M/s Dalmine S.p.A.-Costa Volpino Plant,Via Pio, 1,24062 Costa Volpino (Bergamo)Italy.
- 21. M/s Benteler Stahl/Rohr GmbH,Residenzstrasse 1,33043 Paderborn,Germany.

- M/s SC Mittal Steel,
 Cordun Village, Roman-lasi Highway,
 Km. 333, Neamt County, Romania.
- M/s. CJSC Nikopolsky Seamless Tube Plant "NIKO TUBE",
 56, Trubnikov Avel, Nikopol,
 Dniepropetrovsk Region 53201,
 Ukraine.
- M/s CSJC Nikopol Tube Company (NTC),
 56, Trubnikov Avel, Nikopol,
 Dniepropetrovsk Region 53201,
 Ukraine
- M/s. Lalit Pipes & Pipes Ltd., Survey No.77, Village Varaskol, Khardi Railway Station (C.R.), Tal. Shahpur, Dist Thane, Maharashtra.
- M/s Tube Products of India,
 A-16-17, Industrial Area,
 Phase 6,
 S.A.S. Nagar, Mohali,
 Punjab 160055.
- 27. M/s Remi Metals Gujarat Ltd.,
 Plot No.1, GIDC,
 Industrial Estate,
 Jhagadia 393 110,
 Dist. Bharuch, Gujarat.
- 28. M/s Caparo Tubes India, Steel Tube Road, Dewas – 455 001, Madhya Pradesh.
- 29. M/s Heavy Metal & Tubes limited,101, Bileshwarpura,Ta.: Kalol, Distt. Gandhinagar,Gujarat
- M/s Heavy Metal & Tubes limited,
 138, Bileshwarpura,
 Ta.: Kalol, Distt. Gandhinagar,
 Gujarat
- M/s Bhushan Steel Limited,
 Vill. Nifan & Savroli,
 Savroli-Kharpada Road,
 Tal.: Khalapur, Distt. Raigad-410 202
 Maharashtra

WELL KNOWN PIPE MAKERS

- M/s Productos Tubulares S.A.U, Carretera Galindora Ugarte s/n, 8510 - Valle de Trapaga, (Vizoaya) SPAIN.
- M/s Surindra Engineering Co. Ltd., Surindra House, Safaid Pool, M.V. Road, Andheri (East), MUMBA1 - 400072.
- M/s Mukat Tanks & Vessels Pvt. Ltd., J-11/G-69, MIDC Industrial Area, Tarapur, Distt.-Thane, Maharashtra
- 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.

WELL-KNOWN MATERIAL TESTING LABORATORIES

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

WELL KNOWN REMINANT LIFE ASSESSMENT ORGANISATIONS

- 1. M/s Bharat Heavy Electricals Limited, High Pressure Boilers Plant, TIRUCHIRAPALLI - 620014.
- M/s Tata Power Comp[any Limited, Trombay Thermal Power Station, Mahul Road, Chembur, MUMBAI - 400074.
- M/s. Thermax Babcock & Wilcox Ltd.,
 D-1 Block, Plot No. 7/2,
 R D Aga Road,
 MIDC, Chinchwad,
 PUNE 411019.
- M/s. Central Power Research Institute, Thermal Research Centre, Chinchwara Road, KORADI.-441 111
- M/s. Central Mechanical Engineering Research Institute, Mahatma Gandhi Avenue, DURGAPUR-713 209
- M/s. Utility Powertech Ltd., Reliance Energy Tower, 5th Floor, A - 2, Sector 24, NOIDA - 201301.
- M/s. NTPC Alstom Power Services Pvt. Ltd., B-1, J-1, Mohan Cooperative Industrial Area, Mathura Road, New Delhi-110044.
- M/s Energo Engineering Projects Pvt.Ltd., A 57/4, Okhla Industrial Area, Phase-II, New Delhi ~ 110 020.
- M/s NDE Inspection,
 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.

- M/s ALSTOM Projects India Limited, Durgapur - 713206, Distt.- Burdwan, (West Bengal)
- M/s National Thermal Power Corporation Ltd., Research & Development Centre, A-8A, Sector-24, Noida, U.P.
- M/s MECON Limited, (In association with M/s National Metallurgical Laboratory, Jamshedpur)
 Doranda, Ranchi – 834002
- M/s Electrical Research and Development Association, ERDA Road, GIDC, Makarpura Industrial Estate, Vadodara-390 010 Gujarat
- 15. M/s Evonik Energy Services (India) Limited,A-29, Sector- 16,Noida-201 301Uttar Pradesh

LIST OF CONSORTIUM BANKS

Annexure: J

SI. No.	BANKS
1	STATE BANK OF INDIA
2	PUNJAB NATIONAL BANK
3	HDFC BANK
4	SYNDICATE BANK
5	CANARA BANK
6	INDIAN BANK
7	ST. BANK OF HYDERABAD
8	ICICI BANK
9	STANDARD CHARTERED BANK
10	UCO BANK
11	KOTAK MAHINDRA
12	ORIENTAL BANK OF COMMERCE
13	STATE BANK OF TRAVANCORE
14	CENTRAL BANK
15	IDBI BANK
16	FEDERAL BANK
17	HSBC LTD
18	DEUTSCHE BANK
19	CORPORATION BANK
20	CITI BANK
21	BANK OF BARODA
22	ABN AMRO BANK
23	UNITED BANK OF INDIA
24	VIJAYA BANK
25	UNION BANK OF INDIA
26	PUNJAB & SIND BANK
27	ANDHRA BANK
28	BANK OF INDIA
29	AXIS BANK



16 ,

Bharat Heavy Electricals Limited

High Pressure Boiler Plant, Tiruchirappalli-620 014. India.

Grams : BHARATELEC Phone:

Telex: 0455 - 211, 212, 295 & 296 FAX : 91 - (0431) - 52710

PRODUCT ENGINEERING/VALVES

VL:STDC:023 REV.00 PAGE 1 OF 6

TDC FOR UNTOLERANCED DIMENSIONS IN CASTING & FORGING DRAWINGS

Scope :

This technical delivery condition specifies the telerance for the unteleranced dimension for the castings and forgings wherever telerances are not specified in the applicable drawin applicable material TDC.

A.Castings :

Nominal dimension (in mm)				Telerance en diameter meight (in mm)	RÍ
UPTO	4			± 0.5	
OVER	4	UPTO	16	± 1.0	
CVER	16	UPTO	65	<u>+</u> 1.5	
OVER	65	UPTO	125	± 2.0	
OVER	125	UPTO	250	± 2.5	
OVER	250	UPTO	500	± 3.0	
OVER	500	UPTO	1000	± 4.0	
OVER	1000	UPTO	1600	± 5.0	

B. Fergings: As per Table (1), (2), & (3) & (4)

PREPARED

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BHARAT HEAVY ELECTRICALS LIMITED

Tiruchirappalli Materials Management – Valves

EN-VAL-OT-1002

ENQUIRY INSTRUCTIONS - FOR MACHINED CASTINGS

1. The rates shall be quoted only on the basis of unit price **for Radiographic quality Fully machined Steel Casting** as per Annexure – A, conforming to the Technical delivery condition/drawings and special terms and conditions.

The quoted rate shall be inclusive of pattern and development cost and all other tender requirements.

The unit price shall be inclusive of Radiographic/ Machining Charges and quoted on "FOB nearest sea port" or "FOR - Trichy" basis in case of import and indigenous vendors respectively.

List of customers to whom same or similar castings have been supplied along with performance certificates to be enclosed.

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

2. Offers are invited in two parts.

Part A:

- Techno commercial bid covering technical conditions, delivery conditions, and all commercial
 conditions except price and a filled up copy of Annexure—G without price, indicating
 "QUOTED/NOT-QUOTED" for the Bill of Quantities. Further vendor to furnish list of manufacturing
 and inspection facilities along with the company product catalogues.
- Please submit a separate envelope and indicate the enquiry number with "A" for techno commercial bid

Part B:

- Priced bid covering only price as per Annexure H
- Please submit a separate envelope and indicate the enquiry number with "B" for priced bid.

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

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

Envelope II: This sealed envelope should contain price details. This envelope should be clearly marked "Part B - Priced bid" indicating Enquiry No., Due Date, address and Reference of the Bidder.Both the envelopes (Part A & B) shall be put in one cover, duly sealed, super scribing as Part A and Part B of Enquiry No., due date of opening and the address and reference of the Bidder.

The above offer should reach the following office address on or before the due date 12.04.2012 by 14:30 hours.(IST). Late offers will not be considered.

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AGM/PURCHASE/VALVES Building – 24 , 3rd Floor. BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI-620 014 TAMILNADU, INDIA.

- 3. Opening of Tender:- The Part A -Technical & commercial bid alone would be opened on the Tender opening date 12.04.2012 by 15:30hrs.(IST).
- 4. Techno commercial bid will be opened first, after scrutinising the technical bid, Priced bids of technically and commercially suitable vendors will be opened with prior intimation.
- 5. BHEL reserves the right to finalise the tender either through price bid open or through Reverse Auction route. General terms and conditions of Reverse auction is enclosed vide Annexure-F for reference.
- 6. The rates shall be quoted separately for each item in the format as given in the Annexure-H.
- 7. Fixed price: Prices quoted by the bidder shall be fixed and not subject to any escalation whatsoever during the period of bid validity and execution of the Purchase Order. A bid submitted with an adjustable price will be treated as non-responsive and rejected. Prices shall be written in words and figures. In the event of difference, the price in words shall be valid and binding. Unit prices shall be considered correct in the event of any discrepancy with regard to total price.
- 8. Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL).
- 9. Indian Agent & Agency commission: An Indian Agent can represent only one Foreign Manufacturer against a particular Tender. The FOB price quoted by the Foreign bidder shall include the agency commission however, the agency commission component payable to their Indian Agents shall be shown separately in the Offer. This will be paid by BHEL in Indian Rupees, on satisfactory commissioning & acceptance of the equipment. The bidder shall furnish authenticated copy of the Agency Agreement detailing the precise relationship between them and their mutual interest in the business so as to consider the offer of the Indian Agent for the indigenous portion of the supply. For the main equipment, the offer should be from Principal / Original Equipment Manufacturer. The supplier to furnish original Authorization Letter for the Indian Agent along with the offer. Short shipment / Warranty replacement: In case of any short shipment in the main equipment / spares, customs duty levied on such supplies, shall be borne by the supplier. Any warranty replacement during the warrantee period shall be on FOR, BHEL, Tiruchirappalli, basis.
- 10. ADOPTION OF INTEGRITY PACT: Signed Intrgrity Pact (IP) should be furnished along with offer. IP should be signed by authorized official of the bidder / vendor / contractor. Offer without signed IP will not be considered.

This tender will be monitored by Independent External Monitor (IEM) by Name. Shri. Kanwarjit Singh, IRS (Retd.).

- 11. To those vendors who are not in BHEL Product Material Directory (PMD), the following additional conditions are applicable over and above the general condition.
- The vendors should submit the offers along with duly filled vendor registration forms which can be down loaded from our website www.bhel.com. The offer without the above forms & the relevant supporting documents will not be considered for technical evaluation.
- For indigenous sources, BHEL team will visit the vendor works to enlist them in our vendor directory and then their offer will be technically evaluated.

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- The import sources will be enlisted in our vendor directory based on D & B (M/s DUN & Bradstreet) statement and then their offer will be technically evaluated.
- 12. On completion of the final inspection of the castings by BHEL-QC/ IBR authorized inspection agency, necessary IBR certificate as per IBR Form-IIIG shall be supplied.
- 13. BHEL reserves the right
- To negotiate or re-float the tender in case the quoted prices are not acceptable. To counter-offer with vendors other than L1, in order to have broader vendor base for ensuring delivery, however subject to having a minimum of five sources for each category the H1 vendor would be eliminated.
- To increase or reduce the tender quantity.
- To not to order for some or all castings based on changes in project requirements.
- To visit vendor works during the execution of the contract, process of manufacture along with the end customer for inspection and testing of the castings at vendor/ sub-vendor's works.
- To reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / units.
- 14. Point by point technical confirmations of all pages of our technical specifications are required with your signatures along with the techno Commercial offer (Part-A).
- 15. In addition to all the above conditions, Special terms and conditions as per Annexure C and BHEL standard terms and conditions Annexure D (Imports & Indigenous) shall also be applicable for this enquiry.
- 16. The offers will be processed through Priced bid opening route/ Reverse Auction with prior intimation to technically suitable bidders only.
- 17. The Drawings and Technical documents given in this enquiry are the sole property of BHEL. This should not be misused in any form.

For Bharat Heavy Electricals Limited

P Raguraman AGM / Purchase / Valves

Enclosures: 1) Annexure-A: Bill of Quantities. 2) Annexure-B: Technical Delivery conditions (TDC:0:433/Rev 00). 3) Annexure-C: Special Terms & Conditions. 4) Standard Terms & Conditions. Annexure-D: -IMPORTS -INDEGENEOUS E: Performance Bank Guarantee Format. 5) Annexure-F: General terms and conditions of Reverse auction. 6) Annexure-G: 7) Techno Commercial Bid format. Annexure-8) Annexure-H: Priced Bid format. 9) List of IBR approved inspection agencies. Annexure-1: J: List of Consortium Banks. 10) Annexure-K: TDC-Tolerance for Untoleranced dimensions 11) Annexure-12) Drawings -**Casting Drawings** Machining Drawings 13) Integrity Pact

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