



BHARAT HEAVY ELECTRICALS LIMITED

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

PHONE :2577025
GRAMS : BHARATELEC
FAX NO: 2520719
E-mail: dcm@bheltry.co.in
Web:

429-002/A

	Enquiry No 2691600042	Enquiry Date 22.03.2016	Due Date for Quotation 16.05.2016
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order. Bid should be submitted in two parts. 1.Techno-commercial bid (Part-I) and 2.Price bid(Part-II) in a separate sealed cover and both covers must be placed in a third cover and sealed. Our Enquiry No., Enq. date & Enq. Due date must be written on all three covers.			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	Hydro Test Station Hydro Test Station is Indented to test Turbine Bypass system Valves (Steam and Spray Valves) as per specification SPEC:HP:0052 REV.02 and as per Part-A, Qualifying criteria.	NO	1.000	1.00	30.09.16

General Note:

- 1) Please submit your offer on F.O.R - BHEL, Trichy (Tamilnadu) basis and in two part (part-i: techno-commercial bid and part-ii: price bid) in a separate covers and both covers to be placed in an envelope which is super scribed with enquiry no, enquiry date and due date of tender opening.
- 2) If the offer is submitted in single part and the same will be liable for rejection.
- 3) Annexure- TERMS AND CONDITIONS enclosed herewith must be filled, signed With OFFICIAL SEAL Stamped and to be submitted along with your offer.
- 9.) Enclosure: TECHNICAL SPECIFICATION (Sheet No 1 to 21) & QUALIFYING CRITERIA FOR THE SUPPLY OF HYDRO TEST STATION (Page No 1 to 3)

All the tenders may be addressed to the following address:

**The Tender Opening Cell / MM
Room No: 26, Building 24, Ground Floor
Bharat Heavy Electricals Limited
TIRUCHIRAPALLI 620014**

In case personal delivery of the offer, it shall be dropped into the respective box kept in Room No: 26, after duly entering the data in the system.

Offers will be accepted only up to 14.00 Hrs on the due date. Therefore, vendors shall ensure to submit the offers well before this time. All due date extension requirements should be addressed to the respective Purchase mail IDs. All the due date extension requests from vendors will be considered only up to 48 hours before the due date and time.

Vendors are requested to avoid submission of offers through e mail / fax. In case of any unavoidable

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

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

ARUN PRASATH. N
Senior Engineer
Purchase (CP & SP) / MM / RM
BHEL, TIRUCHY 620 014

[Signature]
22/03/2016
MANAGER / PURCHASE
(FOSSIL BOILERS)
Yours faithfully,



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situation, offers shall be sent through e mail to the following mail ID only
tender_cell@bheltry.co.in.

As tenders are being opened by Common Tender Opening Cell, offer covers should be sealed with tenderer's distinctive seal and super scribed with correct Tender No. item of supply and due date of opening.

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

The bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

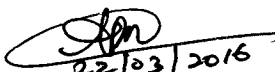
Enclosures:

"LD clause has to be confirmed without fail."

The offers should reach us 30 minutes before the time of opening of tenders.
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Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

ARUN PRASATH. N
Senior Engineer
Purchase (CP & SP) / MM / RW
BHEL, TIRUCHY - 620 014.


22/03/2016
MANAGER / PURCHASE
(FOSSIL BOILERS)
Yours faithfully,



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PE/ VALVES
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FOR
HP BYPASS VALVE HYDRO TEST STATION

sides. While testing the leakage on outlet side the inlet side alone will be pressurized and while testing the leakage on inlet side the outlet side alone will be pressurized.

3.5 Test Pressure

S No	DESCRIPTION	INLET SIDE	OUTLET SIDE
1	Maximum shell test pressure	1600 kg / cm ²	
2	Minimum shell test pressure	63 kg / cm ²	
3	Maximum shell test pressure		733 kg / cm ²
4	Minimum shell test pressure		63 kg / cm ²
5	Seat leak test: Maximum difference in pressure between inlet and outlet is 867 kg / cm ² (1600 – 733)		
6	Seat leak test: Minimum difference in pressure between inlet and outlet is 0 kg / cm ²		

3.6 Testing Method:

The inlet and outlet sides of the valve shall be closed manually with the help of suitable sealing plugs for pressurizing and the plugs shall have provisions for water filling, air evacuation and pressurizing. Provision shall be available to individually measure the pressure of water at the inlet side and outlet side of the valve. Connection sizes of the ports to be provided on the inlet and outlet test plugs used for filling water shall be specified in the vendor's offer.

3.7 Clamping:

Valves shall be horizontally placed, supported and clamped in a table for testing. Dimensions of table shall be suitably decided by vendor for all range of valves indicated in Annexure-1. V-blocks, fixing clamps with tenon to mount in T-slots shall also be provided.

3.8 Maximum hydraulic cylinder force required:

Hydraulic cylinder with a maximum bore diameter of 250mm with yoke and a stroke of 130mm and split coupling to suit the stem dimensions and yoke mounting dimensions indicated in Figure-4 shall be capable of exerting a maximum force of 1,75,000 kgf on the stem in both pull and push modes.

Provision shall be available on the machine in order to control the hydraulic cylinder force by controlling the oil pressure in the hydraulic cylinder to set different test loads for testing various valves. Vendor shall provide the details and calculations with regard to hydraulic cylinder force Vs oil pressure in the offer.

All the accessories required for connecting the oil pumping unit to the hydraulic cylinder including the hoses, manifold, etc., shall be supplied. All the hydraulic oil equipment shall be designed to withstand an operating pressure of 375 bar.

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01	08.05.15	M.S.V	N.R	02	06.02.16	M.S.V	N.R	
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A directional control valve shall be mounted on the actuator to allow for extension/retraction of the piston rod of the actuator.

4.0 HYDRO TEST STATION REQUIREMENTS:

4.1 Valve orientation in the test station:

Loading and testing of the valves will be done with the valve stem in horizontal position. For testing, the valve body will be placed on the test bench by BHEL using BHEL crane.

4.1.1 Inlet / Outlet:

The valve body shall be pressurized from both inlet and outlet sides alternately for checking seat tightness on both sides of the seat in one setting. The clamping system shall be suitably designed for this feature.

4.1.2 Sump:

A Stainless Steel water sump shall be provided with filtering and re-circulation facility. Capacity of sump shall be minimum 500 litres.

4.2 AIR EVACUATION SYSTEM:

4.2.1 Vacuum pump:

A vacuum pump has to be provided for evacuating the air from the valve body to a level of approximately -1 bar. Suitable gauge to measure the vacuum shall also be provided.

4.3 WATER PRE-FILLING SYSTEM:

4.3.1 Pre-filling:

A centrifugal pump shall be provided for prefilling of the valve body with **de-mineralised (DM) water** from the sump. Discharge capacity of Centrifugal pump shall be approximately 125 LPM at around 4 bar. The pre-filling pump shall switch off automatically once the designed prefilling pressure is achieved. Vendor to specify the prefilling details.

4.3.2 Interlock:

The pre-filling system shall operate only after the designed vacuum level (approx -1 bar) is achieved in the valve body. Suitable interlocks shall be provided.

4.4 PRESSURIZING SYSTEM

4.4.1 Direction selector:

Direction selector mechanism shall be provided to enable pressurizing test body from any side (Inlet side or outlet side).

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4.4.2 DM Water Station:

The DM water pressurizing system shall consist of multiple stages of pump to achieve a maximum test pressure of 1600 kg / cm². Vendor to specify make, number of stages and the discharge details.

Suitable controls shall be provided to control the rate of pressurizing. The pressurizing system shall have suitable isolating valves to isolate the pumps from the test body. ON/OFF controls for operating the pumps shall be provided. Tapping points to be provided to read pressure inside the test body, on both inlet and outlet sides. The pressure shall be tapped from both sides of the test body for pressure measurement purpose. The gauge mounting shall be M20 with necessary isolating valves.

Four pressure gauge mounting points shall be provided (2 on inlet side and 2 on outlet side)

2 Nos of Glycerine filled pressure gauges with dial size not less than 200 mm and rating 0-2000 kg / cm² with accuracy of $\pm 1\%$ shall be supplied along with the Hydro test station other than those mounted on the test bench.

Suitable accumulators shall be provided to even out pressure surges in the hydro / pneumatic circuit. The pressure inside the test body shall be held for a minimum period of 45 minutes. No leakage is acceptable.

4.5 LEAK MEASUREMENT:

Suitable system shall be provided for assessing the quantum of leak during seat leak test. Vendor to specify the details of recording facility.

4.6 DEPRESSURIZING:

After pressure testing is completed, the pressure inside the test body shall be relieved slowly by means of suitable drain valve. Provision (automatic with manual override) to be made for draining the de-mineralised water back to the sump.

4.7 OIL POWER PACK

The hydro test station shall be equipped with a mineral oil power pack with the following specification.

4.7.1 Operating pressure - 375 bar.

4.7.2 Capacity of tank – 250 L

4.7.3 Material of construction of tank – Stainless Steel

4.7.4 – Material of construction of piping and fittings – Stainless Steel

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4.7.2 Two motor-pump assemblies. Pumps shall be capable of developing continuous pressure of 420 bar. It should be possible to isolate and remove either of the motor-pump assemblies without shutting down the power pack.

4.7.3 Two filter-assemblies with individual motor-pump unit for continuous filtration of oil shall be provided. It shall be possible to isolate and remove either of the filter assemblies without shutting down the power pack. Absolute filtration rating of the filters used shall be 3 microns with a beta ratio of 1000. The filters shall be equipped with an electrical clogging indicator.

4.7.4 Oil filling, filtration and draining shall be carried out through the filter motor-pump unit by use of 3-way ball valves.

4.7.3 Two accumulators of 50L capacity - It should be possible to isolate and remove either of the accumulators without shutting down the power pack.

4.7.4 Two pressure transmitters, two level transmitters and two-temperature transmitters shall be provided and the wiring shall be terminated to a local junction box.

4.7.5 Level, temperature and pressure gauges shall be provided for local indication.

4.7.6 The pressure of the oil to be delivered to the hydraulic cylinder shall be maintained constant by use of a pressure reducing valve in the P-line. The pressure of oil at the outlet of the pressure reducing valve shall be adjustable from 100 bar to 375 bar.

4.7.7 Pressure relief valves for ensuring safety of the power pack and accumulator shall be provided at required locations, as per standard practice of the manufacturer.

4.7.8 All the equipment shall be placed outside the tank for ease of maintenance.

4.7.9 Suitable man holes for inspection and cleaning of the tank shall be provided.

4.7.10 Hydraulic hoses shall be provided immediately after the port connections of the oil tank manifold and immediately before the directional control valve mounted on the actuator. The distance between the two shall be covered using Stainless steel piping and fittings.

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4.8 OPERATOR CONTROL PANEL:

The control panel shall have the following minimum essential controls:

1. Pressurizing system controls
2. Test Load indicator and Control system
3. Direction selector for Pressurizing
4. Air evacuation system and controls
5. Prefilling system controls
6. Draining system valves
7. Provision for Pressure gauge mounting.
8. Independent pressure gauges for each line.
9. Leak measurement device.
10. On-line chart and print / recording device.

Details of any other controls required on the operator panel, shall be specified by the vendor

4.9 FOUNDATION DETAILS:

Foundation of the machine shall be designed by BHEL suitably. Vendor to provide details of foundation layout and loads.

5.0 SPECIMEN TEST BODY:

Vendor shall supply one suitable specimen test body to meet the commissioning and prove-out trial requirements. Vendor has to submit the design drawing to obtain BHEL's approval. The specimen test body shall be capable of withstanding the maximum pressure of 1600 kg / cm² and hydraulic cylinder load of 1,75,000 kgf.

6.0 SAFETY:

- a. Safety features shall be built into the equipment system. The supplier shall indicate all details and safety interlocks provided in the equipment. Vendor to furnish details of safety interlocks for critical operations.
- b. All high-pressure equipment including pressure vessels if any are to be provided with safety relief valve.
- c. Sliding safety doors fitted with transparent, impact resistant polycarbonate sheet window shall be provided, for visual inspection of the test body under pressure. Vendor to submit details on this arrangement.
- d. All moving mechanical components are to be suitably guarded for safe operation.
- e. The test bench shall have test pressure limiting device.
- f. The test bench shall also have test load limiting device.

7.0 GENERAL:

- a. The air evacuation system, water prefilling system, pressurizing and depressurizing systems of the Hydro test station shall be used for testing the valves. Suitable high pressure hoses and needed accessories shall be quoted item wise.

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- c) All electrical motors, limit switches etc, on the machine shall be wired using PVC sheathed cable, running in conduits and converging to common terminal block
- d) External wiring from / to control panel, control desk, external motors etc., shall be by means of screened multi-core cables.
- e) Control Voltage for all Solenoid Valves shall be 24Volt DC.
- f) Electrical Control panel shall have built in 230V, 5 amps, 3pin plug.
- g) Electrical control panel shall be adequately illuminated for maintenance purpose.
- h) Machine is to be fitted with 2 Nos of 24 V hand lamp one in the front and one in the rear side of the equipment.
- i) All components/devices/terminals shall be identified with numbered ferrules.
- j) IP54 protection for all electrics. Totally enclosed Motors shall be used.
- k) All Electric Motors shall be of any of the following makes: SIEMENS / ABB / Other reputed makes acceptable to BHEL, conforming to IEC Standards.
- l) All electrical devices like contactors, relays, limit switches, push buttons etc., shall be from Siemens / L&T/ Cutler hammer / Telemecanique.
- m) The centrifugal pump and vacuum pump shall be of reputed makes, acceptable to BHEL.

11.0 PNEUMATICS:

Nylon reinforced synthetic rubber hoses shall connect Pneumatics forming part of the machine and associated equipment and / or steel tubes.

12.0 HYDRAULICS:

- a) Vendor to furnish details of hydraulic circuits.
- b) Such Hydraulic circuits shall be designed with minimum number of control valves and to suit oil of ISO VG 46 grade only.
- c) Vendor to provide details of Oil chiller used, Hydraulic Tank Capacity, Hydraulic power pack.
- d) All hydraulic pipelines to be neatly laid out.
- e) All Hydraulic elements shall be of reputed/proven make.

13.0 LUBRICATION

Automatic timer controlled lubrication system is to be provided for sliding surfaces and all mechanical drives.

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14.0 AMBIENT ATMOSPHERIC CONDITION:

The Hydro test station with all Sub-Systems shall be suitable for operation in an ambient temperature of +45°C and with a Relative Humidity of 90%, both values do not occur simultaneously. The entire equipment shall be tropicalized in design and construction.

15.0 PAINTING:

Painting colour scheme shall be RAL 6011. Apple Green (Polyurethane Paint).

16.0 ERECTION & COMMISSIONING:

- a) Supplier shall take full responsibility for supervision of the erection, start up, testing of machine, its control system & all other supplied equipment etc.
- b) Service requirement like power and de-mineralised water shall be provided by BHEL at only one point to be indicated by supplier in their foundation or layout drawings.
- c) Requirement like crane and helping personnel will be provided by BHEL free of cost.
- d) The supplier shall depute his engineer(s) & personnel for prove-out trials and supervision of erection and commissioning of the machine at BHEL.

17.0 INSPECTION AND PERFORMANCE PROVE-OUT AT SUPPLIER'S WORKS:

The Machine shall be offered for inspection at supplier's works by BHEL for performance trials to test the design features and capacity of the test station. The tests shall be conducted using specimen test body. Supplier shall Prove-out the performance of Hydro test station for the following points:

- a) The vendor shall prove out the working of the test load safety device, at the maximum test load, by pressurizing the specimen test body with de-mineralised water.
- b) The vendor shall prove-out the leak tightness of the entire test station by holding pressure at 1600 kg/cm² (de-mineralised water) for a minimum period of 45 minutes continuously. Leak tightness shall be proved out for 3 such cycles. During each cycle the specimen test body will be unloaded and loaded into the clamping system. Any visual leak and pressure drop indicated on the pressure gauges will not be acceptable.

18.0 PERFORMANCE PROVE-OUT AT BHEL:

Supplier shall prove-out the performance of Hydro test station for the following points:

The vendor shall prove out the working of the test load safety device, at the maximum test load, by pressurizing the specimen test body with de-mineralised water.

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The vendor shall prove-out the leak tightness of the entire test station by holding pressure at 1600 kg/cm² (de-mineralised water) for a minimum period of 45 minutes continuously. Leak tightness shall be proved out for 5 such cycles. During each cycle the specimen test body will be unloaded and loaded into the clamping system. Any visual leak and pressure drop indicated on the pressure gauges will not be acceptable.

19.0 TRAINING:

The Supplier shall train two BHEL Engineers in the Operation, Trouble Shooting and Maintenance of the Hydro test station at the Supplier's Works for a minimum period of 5 working Days.

The Supplier's Service Engineer / Application Engineer shall train BHEL Engineers in the Operation, Trouble Shooting and Maintenance of the Hydro test station for a minimum period of 6 Working Days, after commissioning of the Equipment, at BHEL Works.

The training shall include the following:

- a) Safety
- b) Operation of the machine
- c) Trouble-Shooting
- d) All special features of the machine
- e) Electrical / Mechanical / Hydraulic / Pneumatic / Electronics systems

20.0 DOCUMENTS AND MANUALS:

20.1 Documents to be submitted along with offer:

- a) Details of hydraulic/pneumatic circuits employed
- b) Minimum/Maximum clamping distance between plugs for each valve shall be indicated
- c) List and details of clamping fixtures for all valves shall be indicated
- d) Stroke length of hydraulic cylinder
- e) Details and calculations with regard to hydraulic cylinder force vs oil pressure
- f) List and details of sealing plugs for all valves
- g) Pre-filling pump details
- h) Leak measuring and recording facility
- i) Circuit of the DM water station and oil power pack
- j) Electrical power ratings of all the motors used in the hydro test station
- k) GA drawing of the hydro test station
- l) List of repair kits and tool kits
- m) List of spares required for two years of trouble free operation

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20.2 Documents required along with supply:

Operation manual shall include all operations of the machine and its accessories with full details and safety instructions. All the features of the machine and how to operate them shall be explained in detail.

Maintenance manual shall include all machine construction drawing, Component drawings, assembly drawings, explanation and details about the sequence of operations of Electrical, Electronic, Pneumatic & Hydraulic circuits. **Hard copy : 3 Nos ; CD Media: 1 No.**

20.3 Detailed spare parts specification for the electrical, electronics, mechanical, hydraulics (and pneumatic if any) to be furnished for items made by the supplier and for the items bought out and assembled by the supplier. **Hard Copy : 3 Nos.**

20.4 Electrical Wiring Drawings – Power & Control Circuits. Pneumatic/Hydraulic Circuit Diagrams. Specifications/Ratings of All Bought-Out-Items. Trouble Shooting Chart for Main and all Sub-Systems. **Hard copy : 3 Nos.**

20.5 Equipment data / commissioning data to be provided.

21.0 PERFORMANCE GUARANTEE:

Equipment has to be guaranteed for its performance, for a minimum of 12 months from the date of commissioning.

22.0 GENERAL INFORMATION:

The vendor should submit the following information also along with the offer:

- a. Machine Model
- b. Total Connected Load (KVA)
- c. Floor area required (Length, Width, Height) for complete machine & accessories:
- d. Painting of Machine/ Electrical Panels: RAL 6011 Apple Green (Polyurethane Paint) : Vendor to Confirm
- e. Total weight of the machine
- f. Weight of heaviest part of machine
- g. Weight of the heaviest assembly/ sub-assembly of the Machine
- h. Dimensions of largest part / subassembly of the machine

Record of Revisions:

Rev 00: Initial Release

Rev 01: Major portion of the specification revised.

Rev 02: Major portion of the specification revised.

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Prepared		M.S.V	Chd & Appd	N.R		SPEC:HP:0052		02
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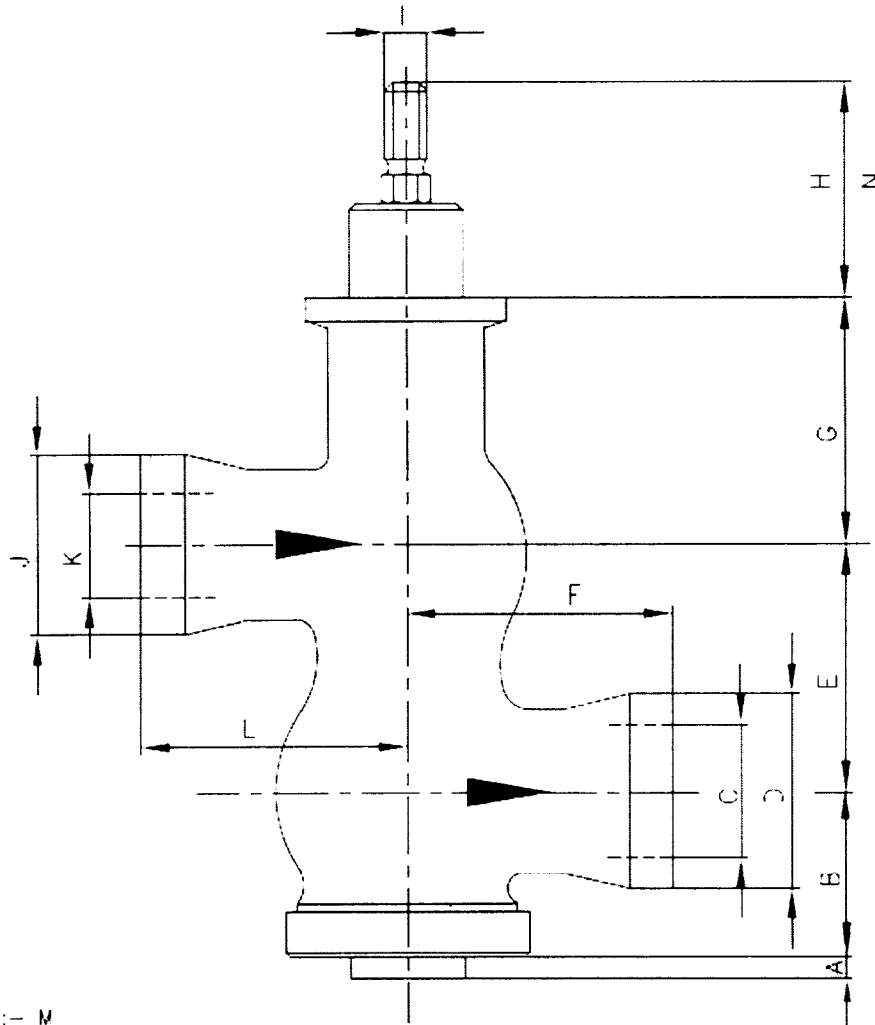


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ANNEXURE-1: FIG 1. VALVE -TYPE ARS (SI Nos 1 to 8 in chart)



WEIGHT: - M

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Prepared		M.S.V	Chd & Appd	N.R		SPEC:HP:0052		02
Date		10.02.2015	Date	10.02.2015				

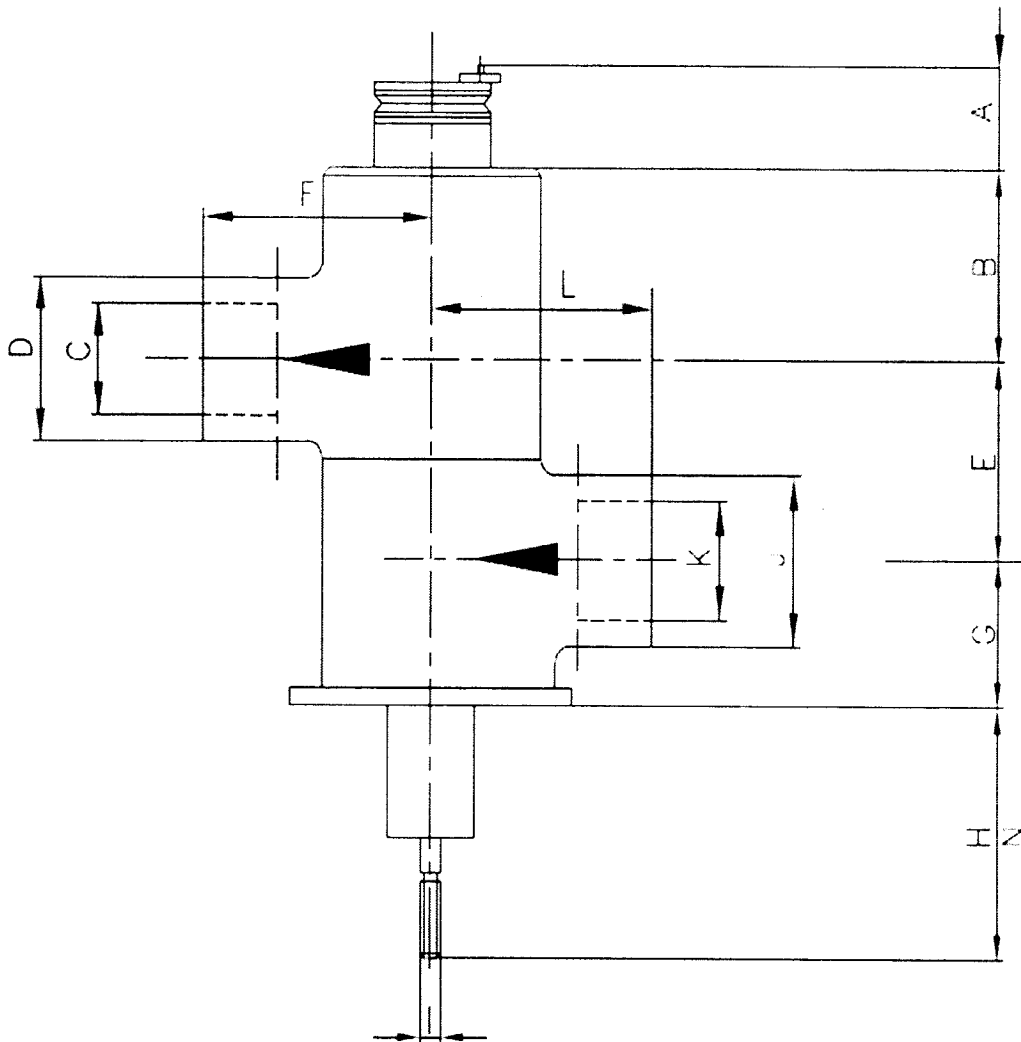


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ANNEXURE-1: FIG 2. VALVE -TYPE E22S, E32S, E45S (SI Nos 15 to 17 in chart)



WEIGHT: M

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Prepared		M.S.V	Chd & Appd	N.R				SPEC:HP:0052
Date	10.02.2015	Date	10.02.2015					

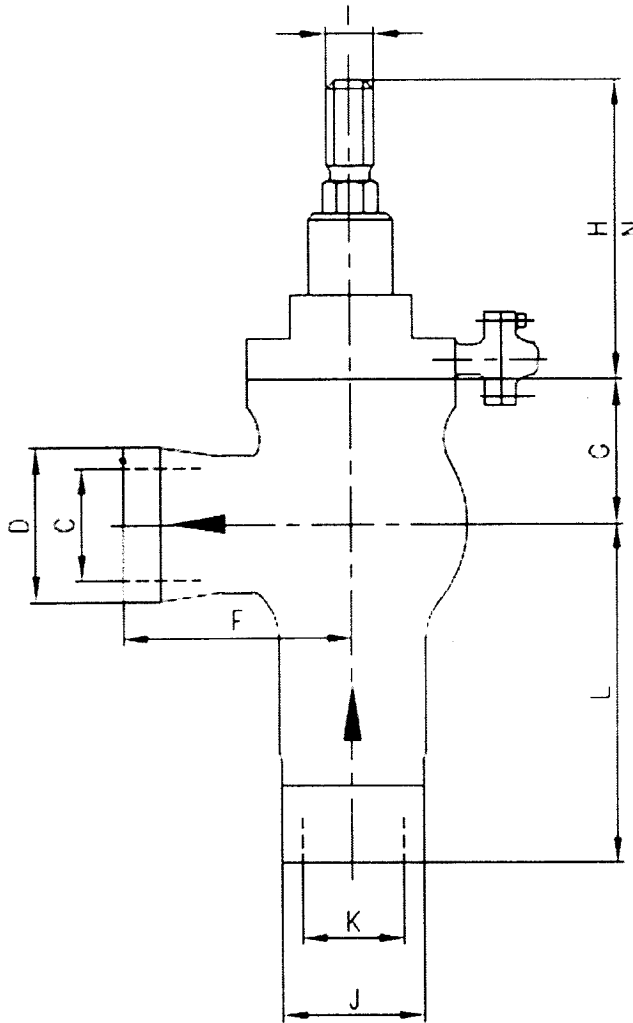


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ANNEXURE-1: FIG 3. VALVE -TYPE AV (SI Nos 9, 10, 13 & 14 in chart)



WEIGHT: M

Revision	Date	Altered	Chd & Appd	Revision	Date	Altered	Chd&Appd	Sheet 14 of 21
01	08.05.15	M.S.V	N.R	02	06.02.16	M.S.V	N.R	
Prepared	M.S.V		Chd & Appd	N.R		SPEC:HP:0052		02
Date	10.02.2015	Date	10.02.2015					

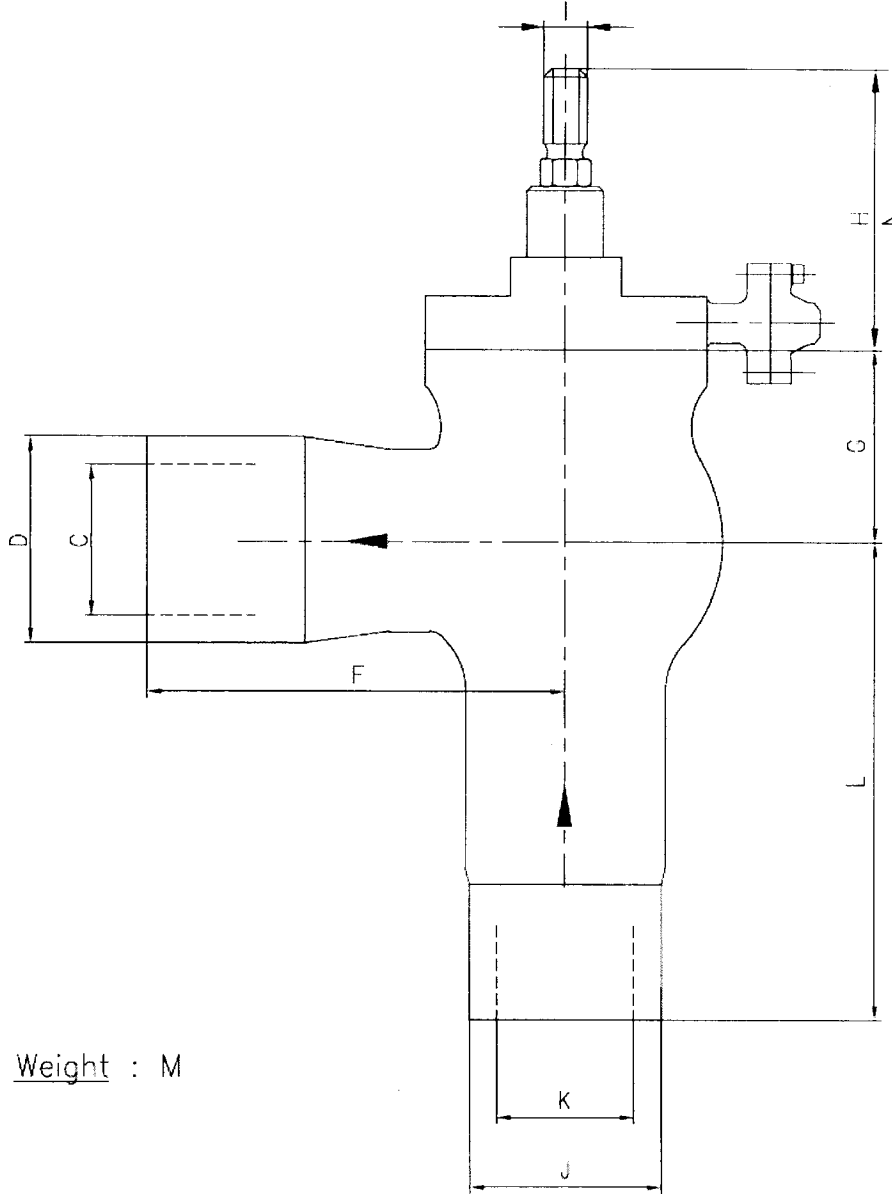


365-147

PE/ VALVES
BHEL/TRICHY-14

TECHNICAL SPECIFICATION
FOR
HP BYPASS VALVE HYDRO TEST STATION

ANNEXURE-1: FIG 4. VALVE -TYPE AV (SI Nos 11 & 12 in chart)



Weight : M

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01	08.05.15	M.S.V	N.R	02	06.02.16	M.S.V	N.R	
Prepared		M.S.V	Chd & Appd	N.R				SPEC:HP:0052
Date	10.02.2015	Date	10.02.2015					

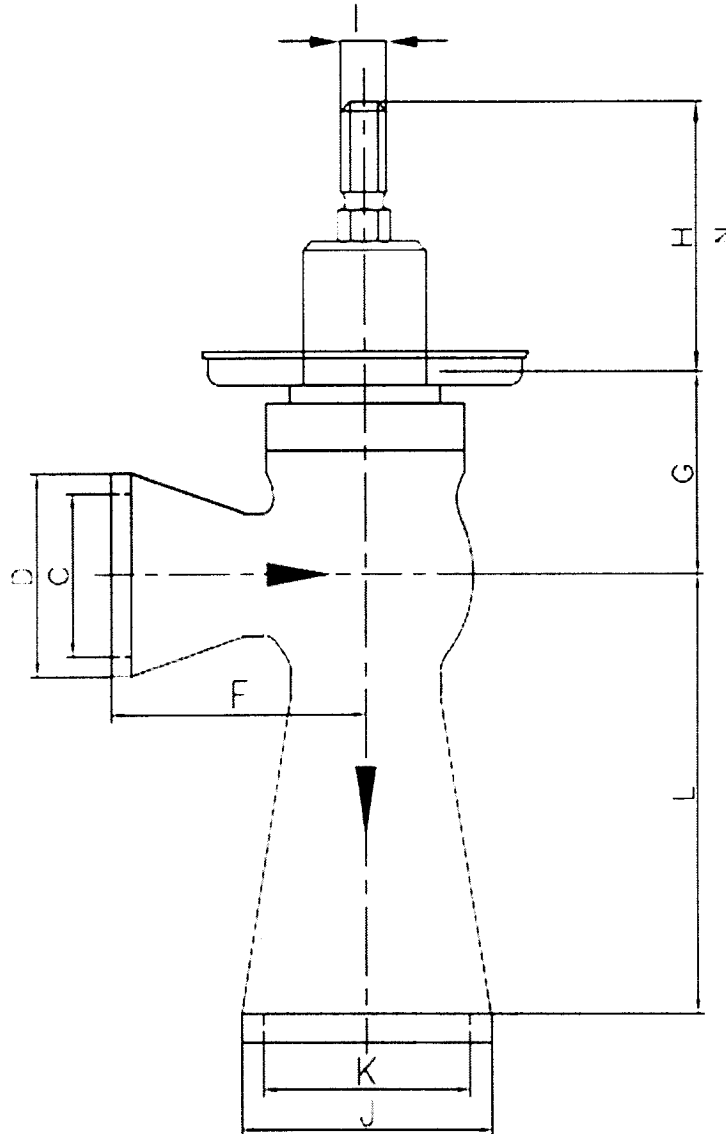


365-147

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BHEL/TRICHY-14

TECHNICAL SPECIFICATION
FOR
HP BYPASS VALVE HYDRO TEST STATION

ANNEXURE-1: FIG 5. VALVE -TYPE NR 64 (SI No 18 in chart)



WEIGHT: M

Revision	Date	Altered	Chd & Appd	Revision	Date	Altered	Chd&Appd	Sheet 16 of 21
01	08.05.15	M.S.V	N.R	02	06.02.16	M.S.V	N.R	
Prepared		M.S.V	Chd & Appd	N.R				SPEC:HP:0052
Date	10.02.2015	Date	10.02.2015					

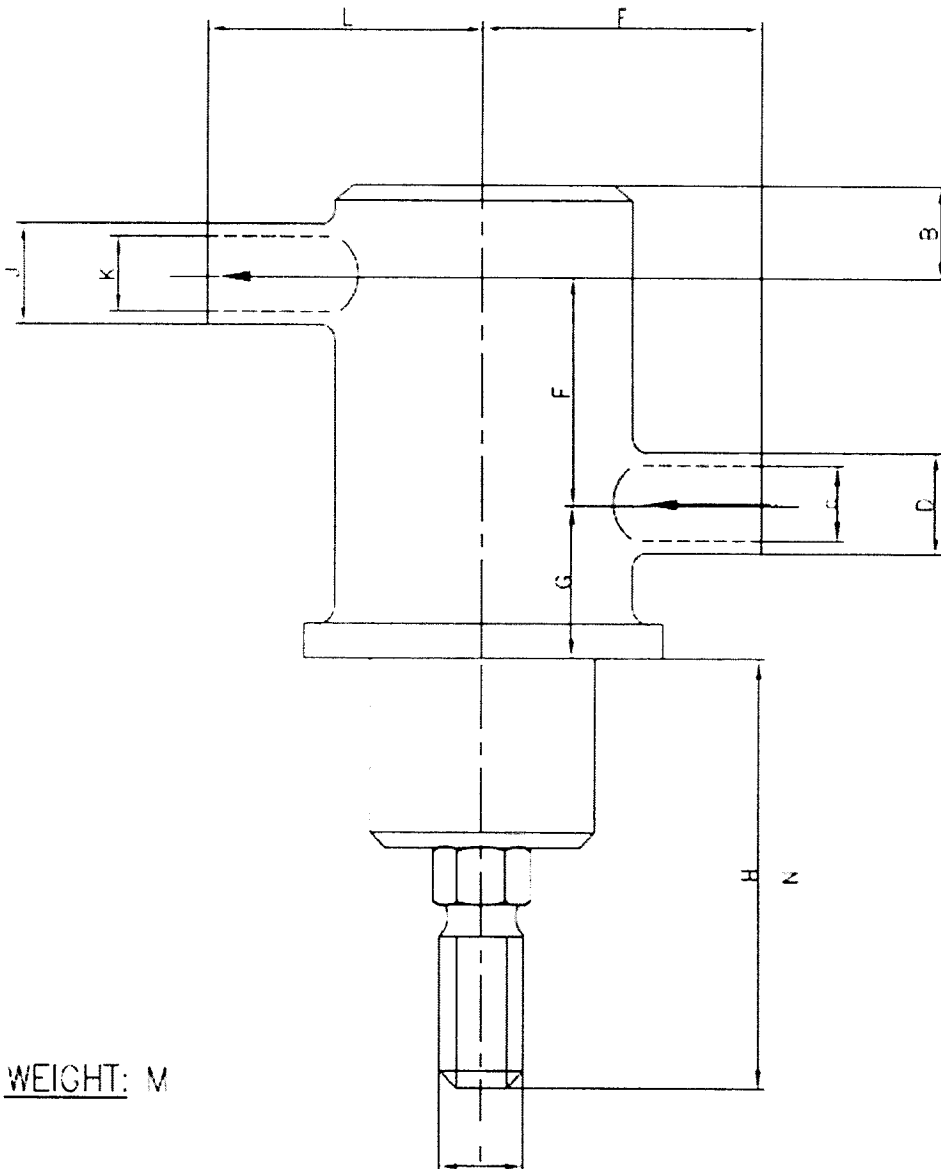


365-147

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TECHNICAL SPECIFICATION
FOR
HP BYPASS VALVE HYDRO TEST STATION

ANNEXURE-1: FIG 6. VALVE -TYPE NR 100 (SI No 19 in chart)



WEIGHT: M

Revision	Date	Altered	Chd & Appd	Revision	Date	Altered	Chd&Appd	Sheet 17 of 21
01	08.05.15	M.S.V	N.R	02	06.02.16	M.S.V	N.R	
Prepared		M.S.V	Chd & Appd	N.R				SPEC:HP:0052
Date	10.02.2015	Date	10.02.2015					

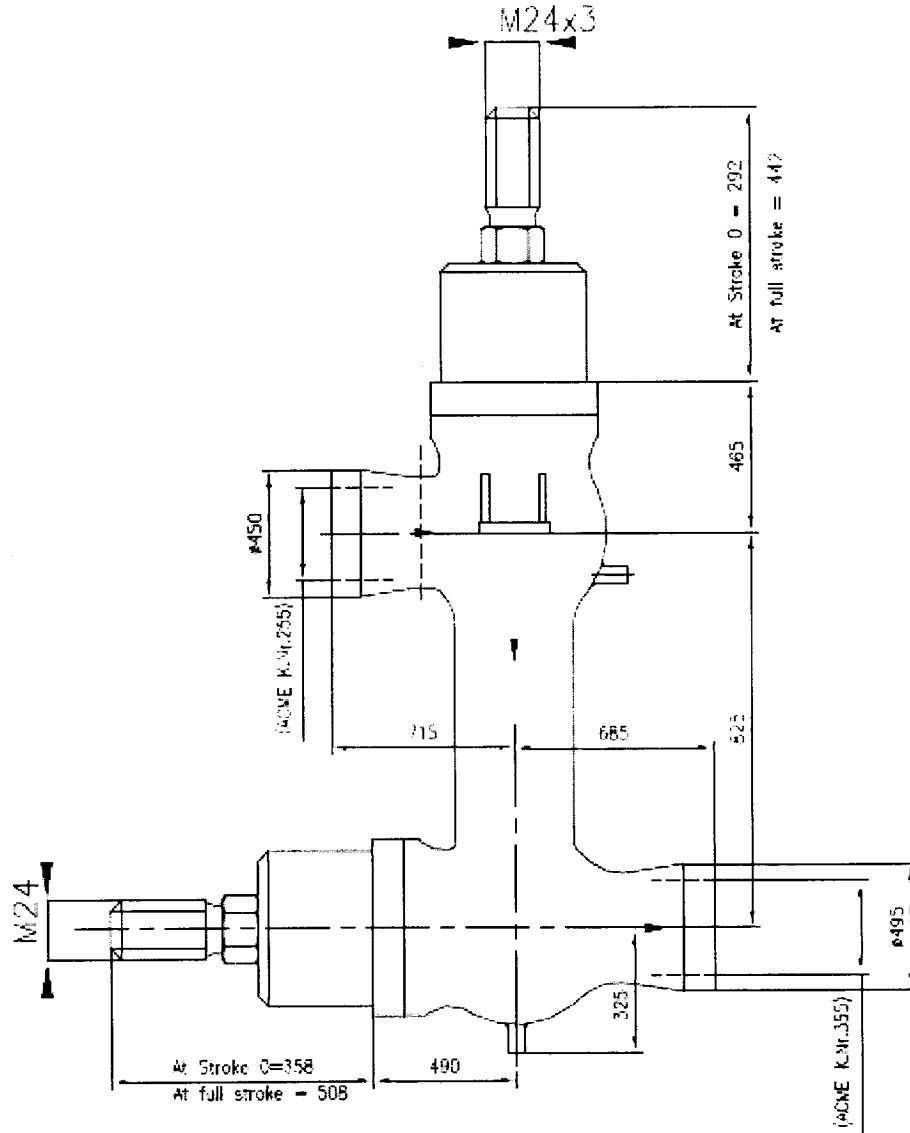


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TECHNICAL SPECIFICATION
FOR
HP BYPASS VALVE HYDRO TEST STATION

ANNEXURE-1: FIG 7. VALVE -TYPE LP BP (SI No 20 in chart)



Weight: 2157 Kg

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01	08.05.15	M.S.V	N.R	02	06.02.16	M.S.V	N.R	
Prepared		M.S.V	Chd & Appd	N.R				
Date		10.02.2015	Date		10.02.2015			

SPEC:HP:0052 02



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PE/ VALVES
BHEL/TRICHY-14

TECHNICAL SPECIFICATION
FOR
HP BYPASS VALVE HYDRO TEST STATION

VALVE DETAILS FOR TEST BENCH

S.no.	VALVE TYPE	A	B	C	D	E	F	G	H (at lift=0)	I	J	K	L	M	N (at lift=max)	Action required on stem for closing the valve
1	ARS72	25	210	Tr140x6	Max Dia225	270	320	280	337	M40x2	Max Dia210	Tr 120x6	320	298 Kg	277	Pull
2	ARS90	25	230	Acme Power Thread No. 175	Max Dia250	300	360	300	321	M40x2	Max DIA230	Acme Power Thread no. 122	360	418.7 Kg	261	Pull
3	ARS100	25	255	Acme Power Thread No. 185	Max Dia280	340	400	340	337	M40x2	Max DIA275	Acme Power Thread No.142	400	530 Kg	277	Pull
4	ARS112	35	307	Acme Power Thread No. 225	Max DIA330	380	450	370	341	M40x2	Max DIA320	Acme Power Thread No. 155	450	689 Kg	261	Pull
5	ARS 140 (WITH SPOOL)	35	380	Acme Power Thread No. 285	Max DIA390	470	510	475	356	M50x2	Max DIA368	Acme Power Thread No. 205	830	1189 Kg	276	Pull
6	ARS100 (WITH SPOOL)	25	255	Acme Power Thread No. 185	Max DIA280	340	400	340	321	M40x2	Max DIA265	Acme Power Thread No.142	680	617 Kg	261	Pull
7	ARS112 (WITH SPOOL)	35	307	Acme Power Thread No. 225	Max DIA330	380	450	370	341	M40x2	Max DIA295	Acme Power Thread No. 155	740	804 Kg	261	Pull
8	ARS 140A	35	380	Acme Power Thread No. 285	Max DIA390	470	510	475	346	M50x2	Max DIA400	Acme Power Thread No. 205	560	1173 Kg	266	Pull

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Prepared	M.S.V		Chd & Appd	N.R		SPEC:HP:0052		02
Date	10.02.2015		Date	10.02.2015				



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BHEL/TRICHY-14

TECHNICAL SPECIFICATION
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HP BYPASS VALVE HYDRO TEST STATION

S.no.	VALVE TYPE	A	B	C	D	E	F	G	H (at lift=0)	I	J	K	L	M	N (at lift=max)	Action required on stem for closing the valve
9	AV100	NA	NA	Acme Power Thread No. 185	Max DIA330	NA	450	280	438	M40x2	Max DIA275	Acme Power Thread No. 142	450	507.8 Kg	498	Push
10	AV140 (WITH SPOOL)	NA	NA	Acme Power Thread No. 325	Max DIA420	NA	560	363	443	M50x2	Max DIA368	Acme Power Thread No. 205	937	1322 Kg	523	Push
11	AV140 (WITH SPOOLS at inlet and outlet)	NA	NA	Acme Power Thread No. 325	Max DIA420	NA	762	363	443	M60x2	Max DIA368	Acme Power Thread No. 205	959	1460 Kg	524	Push
12	AV140 (WITH SPOOLS at inlet and outlet)	NA	NA	Acme Power Thread No. 325	Max DIA420	NA	762	363	443	M72x2	Max DIA368	Acme Power Thread No. 205	959	1460 Kg	524	Push
13	AV112 (WITH SPOOL)	NA	NA	Acme Power Thread No. 245	Max DIA340	NA	450	276	444	M40x2	Max DIA295	Acme Power Thread No. 155	800	959 Kg	524	Push
14	AV140	NA	NA	Acme Power Thread No. 325	Max DIA420	NA	560	363	443	M50x2	Max DIA373	Acme Power Thread No. 205	657	1182 Kg	523	Push
15	E22S	80.1	92.9	M33x2-6H	Max DIA75	97	160	63	173.4	M14x1.5	Max DIA75	M33x2	160	29 Kg	148.4	Pull

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Prepared		M.S.V	Chd & Appd	N.R				SPEC:HP:0052
Date		10.02.2015	Date	10.02.2015				

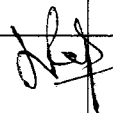


365-147

PE/VALVES
BHEL/TRICHY-14

TECHNICAL SPECIFICATION
FOR
HP BYPASS VALVE HYDRO TEST STATION

S.no.	VALVE TYPE	A	B	C	D	E	F	G	H (at lift=0)	I	J	K	L	M	N (at lift=max)	Action required on stem for closing the valve
16	E32S	80.1	92.9	Tr. 48x3	Max DIA130	160	205	125	232.4	M22x1.5	Max DIA130	Tr.48x3	205	120 Kg	192.4	Pull
17	E45S	80.1	92.9	Tr. 48x3	Max DIA130	160	205	125	236.7	M22x1.5	Max DIA 130	Tr.48x3	205	120 Kg	191.7	Pull
18	NR64-500EK	NA	NA	Tr. 355x12	Max DIA575	NA	750	508	540	Acme Power No. 70	Max DIA 575	Tr.355x12	885	2600 Kg	640	Push
19	NR100-50	NA	44	M42x2	Max DIA65	70	120	95	157	M16x1.5	Max DIA 65	M42x2	120	15 Kg	187	Push
20	LPBP 150 MW	DIMENSIONS INDICATED IN DRAWING														

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Prepared		M.S.V	Chd & Appd	N.R				SPEC:HP:0052
Date		10.02.2015	Date	10.02.2015				

02

PART A**HYDRO TEST STATION – 1600 kg/cm²****SECTION – I: QUALIFYING CRITERIA**

The BIDDER has to compulsorily meet the following requirements to get qualified for consideration of the offer

S. No.	REQUIREMENTS	VENDOR's RESPONSE
1	Only those vendors (OEMs), who have supplied and commissioned at least ONE HYDRO TEST STATION with test pressure of 1,500 kg/cm ² and with hydraulic cylinder force of 1,50,000 kgf or higher, for testing valves in the past and such station is presently working satisfactorily for more than one year (as on the date of opening of this Tender), should quote. However, if such station (s) has/ had been supplied to BHEL, then such station should presently be working satisfactorily for more than six months after its commissioning and acceptance (as on the date of opening of this Tender) in BHEL.	
The vendor should submit the following information where similar station has been supplied, for qualification of their offer.		
1.1	Name and postal address of the customer / company where similar station is installed.	
1.2	Name and designation of the contact person of the customer.	
1.3	Phone, FAX no. and email address of the contact person of the customer.	
1.4	Month and Year of commissioning.	
1.5	Application for which the station is supplied	
1.6	Performance certificate from the customer regarding satisfactory performance of test station supplied to them.	
2.0	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	
2.1	DELIVERY: The bidder shall quote the best possible delivery. However the delivery shall not exceed 8 months with an additional grace period of 2 months. The additional grace period will attract a penalty, which is explained in the commercial terms of the enquiry. The delivery period shall be reckoned from the date of purchase order to dispatch from the vendor works.	



SECTION – II

The BIDDER / VENDOR is requested to provide the following information:

S. No.	REQUIREMENTS	VENDOR'S RESPONSE
3.0	The BIDDER/VENDOR to furnish Reference List of Customers, with full address, details of contact person, where HYDRO TEST STATION has been supplied in the past.	
4.0	Details of HYDRO TEST STATION supplied to other BHEL units, if any, (Year of commissioning, Max test Pressure, maximum hydraulic cylinder force).	
5.0	Details on SERVICE-AFTER-SALES Set-Up in India including the Addresses of Agents / Service Centers in South India.	
6.0	Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment.	

SECTION – III

The BIDDER to note:

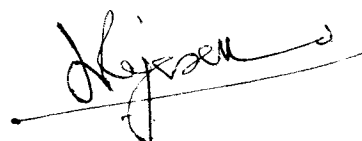
S. No.	PARTICULARS	VENDOR'S RESPONSE.
7.0	The BIDDER / VENDOR shall submit the offer in TWO PARTS. 1. Technical Offer [with PART A & PART B] and Commercial offer. 2. Price Bid.	
8.0	The Offer shall contain a comparative statement of Technical Specifications demanded by BHEL and Offer Details submitted by the Bidder , against each clause. A just 'CONFIRMED' or 'COMPLIED' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
9.0	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details of 'Bought-Out-Items' with copies of Product Catalogue and Selection Criteria	
10.0	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation	
11.0	For obtaining the performance certificate from the customer, a suggestive format is provided in SECTION - IV .	

SECTION – IV

The Performance Certificate should be produced on Customer's Letter Head.

PERFORMANCE CERTIFICATE

1. Supplier of the Hydro Test station	
2. Make & Model of the Test station	
3. Month & Year of Commissioning	
4. Area of application for which the test station is used.	
5. a. Max. Test Pressure of Test station. b. Max. hydraulic cylinder force of Test station c. Max. Distance between the sealing plugs. d. The diameter of the largest sealing plug.	
6. Performance of the Station (Strike off whichever is not applicable)	Best in the market Satisfactory Good Average Not Satisfactory
7. Any Other remarks	
<p>Date:</p> <p style="text-align: right;">Signature & Seal of the Authority Issuing the Performance Certificate</p>	



BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI
CAPITAL PURCHASE

Annexure-A

PART - I

ACCEPTANCE OF COMMERCIAL TERMS AND CONDITIONS BY THE VENDORS.

(This should be essentially filled in and sent along with the techno-commercial offer without fail. If this check list is not filled and submitted along with techno-commercial offer (Part I) or if the vendor does not confirm acceptance to the terms and conditions proposed herein, BHEL reserves the right to reject such offers)

CHECK-LIST FOR INDIGENOUS VENDORS

DESCRIPTION
<p>The Bidders shall submit their offer in TWO INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.</p> <ul style="list-style-type: none">❖ Envelope I: This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "Part I - Technical and commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.❖ Envelope II: This sealed envelope should contain price details. This envelope should be clearly marked "Part II - Price bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder. This part should contain the schedule of price particulars and must be co-related to the technical details provided in Part I. <p>All the two envelopes (Part I&II) shall be put in one cover, duly sealed, super scribing as "Part I and Part II of Enquiry No., due date of opening" and the address and reference of the Bidder. The offer received without the above guidelines, will not be considered for opening.</p> <p>The above offer should reach this office on or before the due date by 14.00 Hrs (IST). Late offers will not be considered.</p> <p>Tender should not be addressed to any Individual's name but only by designation to:</p> <ol style="list-style-type: none">1) Please submit your offer on F.O.R - BHEL, TRICHY (Tamilnadu) basis and in two part (part-i: techno-commercial bid and part-ii: price bid) in a separate covers and both covers to be placed in an envelope which is super scribed with enquiry no, enquiry date and due date of tender opening.2) If the offer is submitted in single part and the same will be liable for rejection.3) All the Tenders may be addressed to the following address to The Tender Opening Cell/MM Room No-26, Building – 24, Ground Floor Bharat Heavy Electrical Limited Tiruchirappalli- 620014., TAMILNADU, INDIA4) In case personal delivery of the offer, it shall be dropped into the respective box after duly entering the data in the system kept in room no. 26.5) Offers will be accepted received till 14.00 hrs on the due date. Therefore Vendors shall ensure to submit the offers before this time.6) Vendors are requested to avoid submission of offers thro email / fax. In case of any unavoidable situation, offers shall be sent thro email to the following mail ID only "tender_cell@bheltry.co.in " <p>Tenders should be free from CORRECTIONS AND ERASURES. Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. In case of any difference between amount quoted in words and figures, amount quoted in words shall prevail.</p> <p>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.</p>
<p><u>OPENING OF TENDERS</u></p> <p>The Part I- Technical & commercial bid would be opened on the Tender opening date.</p> <p>Part-II, Price bid of technically suitable Bidders alone would be opened after complete evaluation of Part-I. Hence the Bidders are required to submit their best competitive price in the price bid in a sealed cover (Part-II).</p> <p>Date and time of Price Bid (Part-II) opening date shall be intimated to the technically and commercially acceptable bidders only. Clarifications if any required by BHEL for Technical evaluation would be sought from bidders before opening of Part II - Price Bid</p>

TAXES AND DUTIES :
 All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No / Tariff No. etc., failing which the purchaser will not be liable for payment of such Taxes and Duties. Our TIN No. 33243560005, TNGST No. 3560005, CST. No. 239383 Dt. 11-06-1991 & BHEL ECC No. AAACB4146PXM012, Service Tax Reg No (STC)- AAACB4146PST006. Assessment circle Tiruverambur.

Cenvat credit & VAT credit (for Indian Bidders only): If any Excise Duty is payable, the chapter head / sub-head reference and the rate of the duty should be quoted. If the tenderer is availing **CENVAT** credit for his input materials, the effect of Proforma credit should be passed on to the purchaser

Income Tax applicable
 Any service charges payable towards supervision of E&C, training, performance prove-out etc., will be released after deduction of Income Tax as per Indian Income Tax Act / as per the Govt. of India rules and TDS certificate will be issued by BHEL for such deductions. Applicable service tax on E&C charges will be payable extra. The liability of depositing the same to the Govt. will be of the supplier

SL. NO.	<u>BHEL COMMERCIAL TERMS AND CONDITIONS FOR INDIGENOUS SUPPLIES</u>	Vendor's Confirmation / Comments
1	<p><u>Bid should be submitted in Two Parts.</u></p> <p>1. Techno-commercial Bid (Part-I) and 2. Price Bid (Part-II) in a separate sealed cover and both the covers must be placed in a Third Cover and Sealed. Our Enquiry No., Enq. Date & Enq. Due date must be written on all Three covers</p>	
2	<p><u>ARBITRATION:</u> All disputes or differences whatsoever which may arise at any time during execution of the Contract shall be mutually settled by BHEL and Contractor as per provision of the Contract. However, in the event such disputes cannot be settled mutually, such disputes shall be settled as per the Arbitration and reconciliation Act, 1996 of the Govt. of India and it's subsequent amendments. In case of disputes with the Central PSUs, the same shall be settled at Tiruchirappalli as per the Guidelines of the Govt. of India.</p> <p>However, during the period such disputes are settled either by mutual discussions between the parties or by legal means, Contractor shall continue to do the work as per terms & conditions of Contract.</p>	
3	<p>If offer is received from both OEM/Manufacturer and authorized dealers or Agent, then OEM/Manufacturer offer will only be considered and dealers or Agent offer will be ignored.</p>	
4	<p>Technical confirmation to BHEL's Specification shall be furnished. If needed additional sheets shall be used.</p>	
5	<p>Prices shall be quoted item wise only.</p>	
6	<p>Delivery INCO TERMS- Price quoted -FOR BHEL TRICHY (TN), STORES or ex-WORKS Basis or, FOR WORKS (DESPATCHING STATION) In case of EX works / FOR WORKS basis, indicate the Despatching station.</p> <p>Prices shall be quoted on "FIRM PRICE" basis only.</p>	
7	<p>Validity of offer shall be for a minimum period of 120 days from the date of Tender opening</p>	
8	<p>Delivery period from the date of Letter of Intent / Purchase order (Days/Weeks)</p>	
9	<p>Liquidated damages shall be 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value.</p> <p>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.</p>	

	<p>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).</p>	
10	<p><u>Payment term for supply portion:</u></p> <p>Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials. Note: Only Direct Payment after goods receipt & acceptance will be accepted .Above payment term acceptance is essential for consideration of your offer</p> <p>Any deviation in the above payment term will attract loading as mentioned below. “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.</p> <p>Payment through Bank is not preferred. In case of Payment through Bank is opted by Supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to Stores with Consignee copy attached. In this case Loading will be 3% on the offered value. Offers of indigenous Suppliers with payment terms as <u>LC/Advance Payment are liable for rejection.</u></p> <p><u>Important Note:</u> BHEL will consider the ranking after the loading is applied as referred vide Sl. No. 9 &10 above wherever deviations are observed.</p>	
11	<p><u>Following Risk Purchase clause shall be applicable:</u></p> <p>The purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.</p>	
12	<p><u>Erection / commissioning: (if applicable only)</u></p> <p>Erection / commissioning charges if any has been mentioned in the offer or else confirmation that Erection / commissioning shall be done at free of cost is available in the offer.</p>	
13	<p>The equipment shall be guaranteed as per tender condition from the date of receipt & acceptance /(commissioning date ,if applicable as per tender condition). Normally No deviation permitted and the <u>deviated offers are liable for rejection.</u></p>	
14	<p>Equipment will be inspected at vendor’s works prior to dispatch if applicable. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy and Tamilnadu.</p>	
15	<p>The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost.</p>	
16	<p>Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy, Tamilnadu basis.</p>	

17	<p>The bidder may also be a Micro and Small Enterprises (MSE) vendor registered as per MSE act. As per the public procurement policy notified by the Central government,</p> <p>20% of the tendered quantity is earmarked for MSE suppliers in this tender. Out of the 20% tendered quantity reserved for MSE suppliers, 4% shall be earmarked for procurement from MSE owned by SC / ST entrepreneurs. In case MSE vendor participating in the tender quotes within the price band of L1 + 15%, they will be allowed to supply the portion of the requirement subject to acceptance of L1 price by MSE vendor. In case of more than one such MSE, the supply shall be shared proportionately.</p> <p>"MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM, II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure -V where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part I in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. Documents should be notarized or attested by a Gazetted officer for consideration of MSE certificate."</p> <p>Such Micro/Small Enterprises registered vendors must state the sub-category to which they belong and submit documentary proof for the same. The sub-categories: (a) Enterprises owned by Scheduled Castes. (b) Enterprises owned by Scheduled Tribes. (c) Enterprises owned by other than above two categories</p> <p>The enterprises under (a) & (b) means the proprietor in case of single owned firm and all partners in case of partnership firm and all directors in case of partnership firm and all directors in case of private/public limited must belong to SC/ST category</p>
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OTHER DETAILS REQUIRED

18	% of Excise Duty with cess	
19	% of TAX (VAT) (TNGST with FORM-17)	
20	% of TAX (VAT) without form	
21	% of TAX (CST) (CST with C-FORM)	
22	% of TAX (CST) without form	
23	Packing & Forwarding Charges (in % only)	
24	Freight & transit insurance charges , if any((in % only) Freight charges from Dispatching station to BHEL TRICHY (TN) (Note: If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only ,in this case the freight will be borne by BHEL)	
25	Approximate Net weight of the total consignment	
26	Approximate Gross weight of the total consignment	
27	Approximate Dimensions of the Consignment	
28	Name of the contact person	
29	Land Line Number	
30	Fax Number	
31	Mobile Number	
32	E-mail ID	
33	PAN No.	
34	CST No.	TIN No.

- a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- b) Applicable % of ED, Sales Tax -CST or VAT, Service Tax), Freight, Insurance and Installation and Commissioning Charges etc., are indicated in offer.

Full postal Address:

Signature & Office Seal of the vendor

Note:-

Your specific acceptances to our Payment terms, LD & Risk Purchase (RP) Clause are essential for consideration of your offer. Otherwise your offer is liable for rejection.

No row shall be left blank. Please indicate NA, in case the item is "not applicable"

PART - II

MODEL PRICE BID FORMAT FOR INDIAN BIDDERS

Enquiry No. & Date:

Bidder's Offer No. & Date:

Sl No	Description of item	Unit (SET /No)	QTY	Rate /Qty in Rs. (excluding of all taxes)	VAT/CST in % (TNGST with FORM-17 or CST with C-FORM)	ED in %	Service Tax in %	Total Value in Rs. (inclusive of all taxes)
	Packing & Forwarding charges (if any) in percentage (or) Lumpsum							
	FOR Dispatching station value in Rs.							
	Percentage of Freight & transit insurance charges, if any (Lumpsum or %) Freight & Insurance charges from Dispatching station to BHEL, TRICHY (TN) (Note:If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only, in this case the freight & Insurane will be borne by BHEL)							
	Approximate Net weight of the total consignment							
	Approximate Gross weight of the total consignment							
	Approximate Dimensions of the Consignment							

Signature & Seal of Vendor

The price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is "not applicable"

MSE Annex -I

Certificate by Chartered Accountant on letter head

This is to Certify that *M/s* _____, (hereinafter referred to as 'company') having its registered office at _____

_____ is registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part-II) _____

dtd: _____, Category: _____ (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on date _____ as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (Le. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated October 5,2006 :

Rs _____ Lakhs

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:

Rs _____ Lakhs

The above investment of Rs _____ Lakhs is within permissible limit of Rs _____ Lakhs for _____ Micro / Small (Strike off which is not applicable) Category under MSMED Act 2006.

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI
CAPITAL PURCHASE

Annexure-A

ACCEPTANCE OF COMMERCIAL TERMS AND CONDITIONS BY THE VENDORS.

(This should be essentially filled in and sent along with the techno-commercial offer without fail. If this check list is not filled and submitted along with techno-commercial offer (Part I) or if the vendor does not confirm acceptance to the terms and conditions proposed, BHEL reserves the right to reject such offer)

FOREIGN VENDORS

SI No	DESCRIPTION
1.	<p>The Bidders shall submit their offer in TWO INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.</p> <ul style="list-style-type: none"> • Envelope I: This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "Part I - Technical and commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder. • Envelope II: This sealed envelope should contain price details. This envelope should be clearly marked "Part II - Price bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder. This part should contain the schedule of price particulars and must be co-related to the technical details provided in Part I. <p>All the two envelopes (Part I&II) shall be put in one cover, duly sealed, super scribing as "Part I and Part II of Enquiry No., due date of opening" and the address and reference of the Bidder. The offer received without the above guidelines, will not be considered for opening.</p> <p>The above offer should reach this office on or before the due date by 14.00 Hrs (IST). Late offers will not be considered.</p> <p>Tender should not be addressed to any Individual's name but only by designation to:</p> <ol style="list-style-type: none"> 1) Please submit your offer on F.O.R - BHEL, Trichy (Tamilnadu) basis and in two part (part-i: techno-commercial bid and part-ii: price bid) in a separate covers and both covers to be placed in an envelope which is super scribed with enquiry no, enquiry date and due date of tender opening. 2) If the offer is submitted in single part and the same will be liable for rejection. 3) All the Tenders may be addressed to the following address to The Tender Opening Cell/MM Room No-26, Building - 24, Ground Floor Bharat Heavy Electrical Limited Tiruchirappalli- 620014., TAMILNADU, INDIA 4) In case personal delivery of the offer, it shall be dropped into the respective box after duly entering the data in the system kept in room no. 26. 5) Offers will be accepted received till 14.00 hrs on the due date. Therefore Vendors shall ensure to submit the offers before this time. 6) Vendors are requested to avoid submission of offers thro email / fax. In case of any unavoidable situation, offers shall be sent thro email to the following mail ID only "tender_cell@bheltry.co.in " <p>Tenders should be free from CORRECTIONS AND ERASURES. Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. In case of any difference between amount quoted in words and figures, amount quoted in words shall prevail.</p> <p>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.</p>
2.	<p><u>OPENING OF TENDERS</u></p> <p>The Part I- Technical & commercial bid would be opened on the Tender opening date. The Part II - Price bid of Technically suitable Bidders alone would be opened. The Technically suitable Bidders would be informed about the tender opening date. Clarifications if any required by BHEL for Technical evaluation would be sought from bidders before opening of Part II - price bid.</p>

3.	<p><u>Taxes and Duties</u> All Taxes, Duties etc. as required to be paid in the country of export shall be included in the price quoted by the foreign vendor. All duties (like customs duty etc.) payable in India will be paid by BHEL (however, the same would be loaded to the offer during our evaluation process). For the supplies made from India taxes & duties payable shall be clearly mentioned in the offer, failing which such taxes and duties shall have to be borne by the vendor.</p> <p>Income Tax applicable Any service charges payable towards supervision of E&C, training, performance prove-out etc., will be released after deduction of Income Tax as per Indian Income Tax Act / as per the Govt. of India rules and TDS certificate will be issued by BHEL for such deductions. The TDS certificate will be issued after 3 months from the date of E&C payment.</p>	
4.	<p><u>Currency of payment:</u> Indian bidders should submit the prices only in Indian Rupees. Foreign vendors should indicate the currency like Euro (€) / US\$ / GBP / JY etc. which should be clearly indicated in the un-priced commercial bid as well as in the price bid.</p> <p>In case the foreign vendor sources some components from India for direct supply to BHEL, the payment for those components shall only be in Indian Rupees</p>	
No row shall be left blank. Please indicate NA, in case the item is "not applicable"		Vendor's confirmation
5.	Validity: Validity of the offer should be 120 days from the date of tender opening	
6.	<p>Payment terms: BHEL Payment term is 80% 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. Balance 20% will be paid within 45-90 days after Minutes of Meeting for E&C shall be issued on satisfactory completion of erection, commissioning, job proving, performance tests, training to operators etc as envisaged in PO against submission of PBG for 10% of total order value</p> <p>Any deviation in the above payment term will attract loading as mentioned below. "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.</p> <ul style="list-style-type: none"> • In the case of Usance LCs the loading will be considered @ 1.5% on the offered Value. • For LC at sight the loading will be considered @ 3.5% on the offered Value. • Normally CAD at sight and Confirmed LCs are liable for rejection. 	
7.	Payment terms for Indian Agent: Indian Agency commission, if any, shall be clearly specified in the offer and the same will be paid in Indian Rupees against acceptance / commissioning of the equipment	
8.	<p><u>Liquidated damages (LD):</u> The delivery of the goods specified in the purchase order should be made within the prescribed time. LD for delay in 'Supply' and/or 'E&C' will be applicable to the delays attributed to vendor. LD will be considered separately for 'Delivery' and 'E&C'.</p> <p>The rate of LD for delayed Supply shall be @ 0.5% per week of delay of total PO value in supply subject to a maximum of 10% of total PO value</p> <p>The rate of LD for delayed E&C shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in E&C subject to a maximum of 10% of total PO value (Supply + E&C).</p> <p>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.</p> <p>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).</p> <p>(For the purpose of Imposing LD, the delivery (B/L date) shall be considered.)</p>	
9.	<u>Risk Purchase:</u> 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 despatch within the time stipulated as aforesaid or if the same were not available from the best and the nearest available substitute. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases..	

Bharat Heavy Electricals Limited TIRUCHIRAPPALLI/CAPITAL PURCHASE Annexure-A

10	<p><u>Delivery terms and evaluation process:</u></p> <p>Terms of Delivery: Bidders are required to quote their best delivery period. Foreign vendors should quote for delivery on CFR/CIF (Chennai Sea Port / Airport as the case may be with detailed price breakup for ocean freight/air freight etc.) or on FOB/FCA basis (as the case may be) based on INCOTERMS 2010, The transfer of title of the goods supplied by the vendor takes place in line with the INCOTERMS 2010</p> <p>The bidder has to quote charges for 'Supply' and 'Erection & Commissioning' separately. The evaluation of tender shall be on the basis of "NET CASH OUTFLOW VALUE (total cost to BHEL).</p> <p>For evaluation, exchange rate (TT selling rate of State Bank of India) as on scheduled date of tender opening (Part - I in case of Two Part Bid) shall be considered.</p> <p>Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL)</p>	
11	<p><u>Guarantee:</u></p> <p>Vendors shall provide a guarantee for a period of 12 months from the date of commissioning of the equipment or 18 months from date of supply, whichever is earlier. The date of B/L or AWB shall be taken as the date of supply.</p> <p>Normally No deviation permitted and the deviated offers are liable for rejection.</p>	
12	<p><u>Short shipment / Warranty replacement:</u> In case, any shortage is noticed vis-a-vis PO requirement in the main equipment / spares, such shortages shall be replenished by supplier on DDP - Incoterms 2010 basis without any cost implication to BHEL i.e. Custom Duty and freight charges etc. up to destination for such short supplies shall be borne by the supplier.</p> <p>Warranty Replacements during Guarantee period at supplier's cost on DDP - Incoterms 2010 basis.</p>	
13	<p><u>Inspection & Testing:</u> All goods shall be subject to inspection by BHEL or its authorized representatives at supplier's works or at BHEL stores or at any other place in India indicated by BHEL as the case may be. The supplier will not charge for the facilities provided for inspection of goods. In case of machine tools, the machine would be inspected and proved at supplier's works prior to dispatch however, final inspection and acceptance of the machine will be carried after installation of the machine at BHEL, Tiruchirappalli.</p>	
14	<p><u>Test certificates / Operating and Maintenance manuals :</u> The Bidders shall clearly mention in their offer, that Test Certificates and Operating Maintenance Manuals, etc., as called for in the Technical Specification, in the required number of copies will be provided at no extra cost</p>	
15	<p>BHEL will consider the ranking after the loading is applied as referred above wherever deviations are observed.</p>	
16	<ul style="list-style-type: none"> • Prices shall be quoted item wise only as per the model format enclosed. An unpriced copy shall be submitted along with technical bid where in the applicable Taxes and Duties Shall be clearly specified • Equipment offered shall be "New". Re-built / Re-conditioned / Used equipments will not be accepted. Incomplete offers will not be considered for further processing 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. • The Supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit. 	
	<ul style="list-style-type: none"> • BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / units. • BHEL shall be at liberty to reject or accept any tender, part or in full, at their own discretion and any such action is not liable for any question or claim against BHEL. • All Equipments / Services including concern Personal for carrying out the erection and commissioning of the Equipment shall be arranged by the vendor. If any Services is availed from BHEL, it is only on chargeable basis unless otherwise specified. • The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost 	

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17. Company Details & Contact	
Full Address of the company:	
Company Email ID:	
Phone No.:	
Name of the contact person:	
Mobile No.:	
e-mail ID	
18 TO BE CONFIRMED BY VENDOR	
Country of origin:	
Station of dispatch/Port Of Shipment	
Delivery Terms (For destination/Ex-works or CIF/CFR/FCA/FOB as per clause 9)	
19 Price break-up details like FOB price, ocean freight/air freight etc., should be indicated in the offer. The transfer of title of the goods supplied by the vendor takes place in line with INCOTERMS 2010.	
20 Delivery from the date of Letter of Intent / Purchase Order. (This should be inclusive of Order acceptance, drawing approval and time period required for dispatch (B/L or AWB date) etc., Period for completion of the Retrofitting / Reconditioning (erection & Commissioning) work at BHEL shall be clearly specified in the offer (if available in enquiry scope only)	
21 ARBITRATION: All disputes or differences whatsoever which may arise at any time during execution of the Contract shall be mutually settled by BHEL and Contractor as per provision of the Contract. However, in the event such disputes cannot be settled mutually, such disputes shall be settled as per the Arbitration and reconciliation Act, 1996 of the Govt. of India and it's subsequent amendments. In case of disputes with the Central PSUs, the same shall be settled at Tiruchirappalli as per the Guidelines of the Govt. of India. However, during the period such disputes are settled either by mutual discussions between the parties	
22 Weight & Cubage of package: Approximate Net weight of the total consignment: Approximate Gross weight of the total consignment: Approximate volume of the total consignment:	
For any queries / clarifications the bidders may contact us through our FAX NO. +91 431 2520719 or through e-mail dcm@bheltry.co.in	

NOTE:-

- It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- The prices are to be offered only on FOB/FCA basis, inclusive of Packing & Forwarding charges if any.
- Your specific acceptance to our Payment terms, LD, Risk Purchase Clause is essential for consideration of your offer. Otherwise your offer is liable for rejection
- No row shall be left blank. Please indicate NA, in case the item is "not applicable"

Declaration:-

We have gone through and understood the 'General guidelines & instructions to bidders for submitting offer' enclosed as a part of the Tender and confirm that our offer has been made in line with the same.

(AFFIX OFFICIAL SEAL HERE)

Signature with date:

Name:

Designation:

Bharat Heavy Electricals Limited TIRUCHIRAPPALLI/CAPITAL PURCHASE Annexure-A

Department:

(PLEASE AFFIX YOUR SIGNATURE WITH SEAL ON EACH PAGE)

MODEL PRICE BID FORMAT FOR FOREIGN BIDDERS

Enquiry No. & Date:

Bidder's Offer No. & Date:

Sl No.	Description of item	Unit	Quantity	Rate in Currenc	Value in Currency
	The price indicated shall be inclusive of all accessories, spares etc. as given in the scope of supply. Individual item-wise break-up price shall be attached as an annexure to this price bid format.				
	Ex-Works value.				
	Type of Incoterms (CIF / CFR / FCA / FOB)				
	Packing & Forwarding charges, if Extra				
	Approximate Freight Charges (Freight charges to Chennai Port)				
	Approximate Transit Insurance Charges in Currency				
	Chennai Airport/ Seaport Value in Currency				
	Erection & Commissioning charge in currency				
	Service tax for E&C				
	Approximate Net weight of the total consignment				
	Approximate Gross weight of the total consignment				
	Dimensions of the Consignment				

Signature & Seal of Vendor

The price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is "not applicable"