



General Note: **BHARAT HEAVY ELECTRICALS LIMITED**

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

PHONE : 2577074
GRAMS : BHARATELEC
FAX NO: 2520719
E-mail :
Web :

429-002/A

| | | | |
|---|-----------------------|---------------------|-------------------------------|
| OFFICE COPY | Collective No. | Enquiry Date | Due Date For Quotation |
| | 1801400162 | 13.02.2014 | 14.03.2014 |
| Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order | | | |

| Item | Description | Unit | Quantity | Delivery Quantity | Schedule Date |
|------|--|------|----------|-------------------|---------------|
| 10 | L171514726302001 PNEUMATICALLY OPERATED COAL SHUT-OFF GATE + ACCESSORIES PIPED UP/WIRED UP AND AS PER BHEL DRAWING 2-47-003-01439/01 VAR. 01, TECH. SPEC 1041/Rev. 01 FOR 26" PIPE CARRYING PUL COAL + HOT AIR. | NO | 108.000 | 72.00 | 31.07.14 |
| | | | | 36.00 | 31.01.15 |

General Note:

- The tender will be opened in two part bid basis and you are requested to submit your offers in seperate sealed covers Techno-commercial bid and Price bid.
- You are requested to submit the offer on FOR/NABI NAGAR Project site basis inclusive of P&F, freight and Insurance charges.
- Kindly refer Annexure -A(Commercial terms and conditions) which is to be filled and submitted along with Techno-commercial offer for evaluation.
- You are requested to note our Loading terms -Annexure-B & B1 for finalizing the tender and the same will be taken for evaluation for arriving the L1 rate.
- Vendors to note that their offer shall be in line with our specification requirement only. Any deviation will lead to rejection of the offer.
- Annexure - I is form and part of this enquiry (Special Terms & Conditions/Pre-Qualification requirement) which is to filled with confirmation for all the points and to be submitted along with your offer for evaluation.

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**

R. Srinivas
MANAGER (FOSSIL BOILERS)
ENGINEER

Materials Management
BHEL, THIRUCHIRAPALLI



BHARAT HEAVY ELECTRICALS LIMITED

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

1801400162 / 13.02.2014

14130

Enclosures:

- 1)Annexure-A(Commercial Terms and conditions)
- 2)BHEL Specification TCC 1041/Rev 01
- 3)Drawing No : 2-47-003-01439/Rev 01
- 4)Annexure-B1&B2(Loading Factors)
- 5) Pre- Qualification Requirement(PQR)

"LD clause has to be confirmed without fail."

"Payment to vendors will be made only thro E-Payment mode."

PR Links

| Material. | PR.No | PR.Item. | Quantity | Acc. Assign | Customer Number |
|------------------|-----------|----------|----------|-------------------------|-----------------|
| L171514726302001 | 102980000 | 00010 | 36.000 | U6/1715-LU-415-1-47-263 | U6/1715 |
| L171514726302001 | 102980001 | 00010 | 36.000 | U6/1716-LU-415-1-47-263 | U6/1716 |
| L171514726302001 | 102980002 | 00010 | 36.000 | U6/1717-LU-415-1-47-263 | U6/1717 |

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Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

R. Srinivasan
MANAGER, PURCHASE
(FOSSIL BOILERS)
Yours faithfully / BOI
Materials Management / BOI
BHEL, TIRUCHY - 620 014.

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPALLI-620014**

FUEL SYSTEMS/PRODUCT ENGINEERING (FOSSIL BOILERS)

TITLE SHEET


**SPECIFICATION FOR
POWER OPERATED SHUT OFF GATE/KNIFE GATE VALVE WITH
PNEUMATIC ACTUATOR**

SPECIFICATION NUMBER: TCC 1041 / REVISION NO.01

REVISION STATUS

| Rev.No. | Date | Description | Altered | Checked & Approved |
|---------|----------|-----------------------|---------|--------------------|
| 01 | 16-09-08 | SPECIFICATION UPDATED | CSS | MTP |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | NAME | SIGNATURE | DATE |
|-----------|-----------------|-----------|------------|
| PREPARED | G.SARAVANAKUMAR | -Sd- | 21.03.2007 |
| CHECKED | M.THANDAPANI | -Sd- | 21.03.2007 |
| APPROEVED | S.V.SIVARAMULU | -Sd- | 21.03.2007 |

| | | | |
|---|--|---|-----------------------|
|  | <p style="text-align: center;">SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR</p> | <p>SPECN.NO. TCC-1041 REV-01</p> | <p>PAGE 02/09</p> |
|---|--|---|-----------------------|

1.0 SCOPE

The scope covers the design, supply, manufacture, testing, certification, marking and identification and packing for shipment of Round port Knife Gate Valve assembly with Pneumatic Actuator for the specified duty conditions in Annexure.

The accessories those are to be supplied with gate, are tabulated in this document. This list is to be considered as non-exhaustive. The supplier is requested to state the items that he has to supply to meet the intent of the requirements, which will be used during the evaluation of all potential suppliers.

The use of Supplier references, catalogue numbers shall not be deemed to supersede the performance requirements of the purchase order.

2.0 EXTENT OF SUPPLY

The following extent of supply given is not necessarily exhaustive and shall not relieve the contractor of his responsibility to provide plant, equipment and services necessary to satisfy the performance criteria and guarantees specified, safely and efficiently.

Provide 6 numbers of Operation and Maintenance (O&M) instructions.

2.1 EXCLUSIONS

None.

3.0 TERMINAL POINTS


The terminal points for the extent of supply of the valves shall be,

Fuel inlet elbow flange at valve inlet

Coal nozzle flange at valve outlet

All terminals connected to JUNCTION BOX (JB) & JB shall be on vendor's scope

Single instrument air connection to air filter regulator (interconnecting pipes by Supplier)

| | | | |
|---|---|--|-----------------------|
|  | SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR | SPECN.NO. TCC-1041 REV-01 | PAGE 03/09 |
|---|---|--|-----------------------|

4.0 TECHNICAL REQUIREMENTS

This knife gate is vertically mounted between the fuel inlet elbow of coal – air piping and coal burner nozzle. One valve per coal pipe is envisaged. Pulverized coal – air mixture at a temperature of 90°C to 120°C flows through these gates at a velocity of 25 m/sec. The leading edge of the valve blade shall contain a 45° chamfer to eject out the accumulated dust and clean the blade guides during closing. Vendor shall include necessary provision in the valve to prevent ingress of dust and ensure friction free movement. The supplier has to ensure that the valves are suitable for operation in the specified conditions.

The supplier shall provide suitable body tapping for air purge out the dust collected in the dead space between the body inner faces when the blade is retracted. To the body tapping supplier shall provide means for an air purge prior to closing the valve. All valves shall be capable of safe, reliable operation and shall comply with the requirements of NFPA 85 in particular to the sub-section 6.4.5.1.2 and dust tight valve application.

As the coal particles are highly erosive, the valve supplier shall provide measures to combat erosion of valve internals. Vendor shall indicate the details in the offer.


Proper cable glands and tube fittings, for taking out/in cables and air tubing shall be provided. The limit switches shall be mounted on to gate valve to give signal for valve open/close condition. Overall dimensions of the gate shall be as per the attached drawing 2-47-003-01439 with this specification.

4.1 VALVE OPERATION

During service the valve is always in opened condition and will be closed only during pulveriser maintenance. The valves are remote operated by a double acting pneumatic actuator with limit switch indicating the open & closed position of the valve. Each valve shall be provided with one solenoid valve. The solenoid valve shall be energized to open and energized to close.

4.2 OPERATING ENVIRONMENT

The equipment will be required to operate in dust laden pulverized coal-air mixture, which can be expected to settle on the valve components during normal operation. The coal-air mixture is very erosive in nature and hence the interior surfaces of the valve shall be protected suitably.

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|  | SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR | SPECN.NO. TCC-1041 REV-01 | PAGE 04/09 |
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5.0 ACCESSORIES

The following accessories shall be assembled with knife gate valves. The valve shall be integral part of the assembly with the power cylinder, limit switches, solenoid valve and filter regulator and shall be supplied in fully piped up condition. Purchaser to provide only inlet air connection to the Air filter regulator.

5.1 AIR CYLINDER

The air cylinder shall be of double acting type and of heavy duty. The cylinder body shall be corrosion resistant and shall have a fine finish preferably honed that ensures minimum friction and long seal life. A self-centering cushion sleeve shall be provided at both sides of the piston. The piston rod shall be covered with leather gaiter to prevent dust and water intrusion for smooth operation.

The power cylinder shall be capable of stroking the valve to full travel on load at an air pressure of 3.0 Kg/Sq.cm (g). The material of gland seal/piston shall be suitable to withstand temperature of 120°C and a pressure of 7.0 Kg/Sq.cm (g).

5.2 SOLENOID VALVE (SV)


The heavy-duty dual coil solenoid valve shall be of ASCO make or ROTEX make with 5 ports, 2 way type and shall be as per Clause 11.3.3 of data sheet. The Solenoid valve shall be mounted at upstream side of the valve to enable easier approach at site. Also refer special contract requirements for make of SV

5.3 AIR FILTER CUM REGULATOR (AFR)

A suitably sized air filter cum regulator of make of PLACKA / AIRMATIC / NUCON / FESTO shall be provided. The filter cum regulator shall be of metallic bowl only. The air filter cum regulator shall have the range of regulation from 6.0 kg/sq.cm (g) to 1.0 kg/sq.cm (g).

5.4 LIMIT SWITCH (LS)

Two numbers heavy duty limit switches of OMRAN or HONEYWELL make with DPDT contacts to indicate open/closed position of the valve with rating of 5A 230V AC / 0.5A 220V DC shall be provided. The enclosure shall be of IP55 class with ¾" NPT conduit for cable entry. The limit switch shall be firmly fixed on to a mounting plate.

| | | | |
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|  | SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR | SPECN.NO. TCC-1041 REV-01 | PAGE 05/09 |
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5.5 COPPER TUBING & FITTINGS

Necessary PVC sheathed copper tubing of sufficient wall thickness and good quality of fittings shall also form part of the assembly.

6.0 INSPECTION AND TESTING

Supplier shall submit QP for Purchaser's review and approval. It is expected that Quality plan shall encompass the Supplier's standard inspection to satisfy all applicable design code and its testing requirements and will involve, as a minimum, the examination of material certificates, dimensional checks on parts and sub-assemblies, examination by visual or other methods for welds and material surfaces. The Purchaser's inspecting authority is to be allowed reasonable access to the Supplier's works during manufacture/ testing before delivery, in accordance with the approved Quality plan.

6.1 TESTING


1. The smooth operation of the valve shall be tested for an instrument air pressure of 3.0 kg/sq.cm.
2. Body and seat shall be tested accordingly as called for in API or MSS or any other equivalent standard.
3. Each valve shall be tested for leak as per API or MSS or any other equivalent standard for "no visual leak" condition.

7.0 CODES AND STANDARDS

The Supplier is required to list all the standards applicable to the equipment covered in this specification. To be provided and agreed before manufacture proceeds. Where the Supplier considers that the standards used in the design, manufacture or operation of the equipment may vary with the contents of this specification, then the matter shall be immediately brought to the written attention of Purchaser.

8.0 DOCUMENTATION

- 8.1 Technical offer shall contain complete details as called for specification confirming the requirements point by point.
- 8.2 Completely filled in data sheet CLAUSE 11.0.
- 8.3 Supplier shall submit the dimensional drawing giving details of MOC, accessories, dimensions, pneumatic hook up diagram in AutoCAD format and legible hard copies.

| | | | |
|---|---|--|-----------------------|
|  | SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR | SPECN.NO. TCC-1041 REV-01 | PAGE 06/09 |
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- 8.4 Confirmation for BHEL dimensional drawing (Page 10/10 of this specification).
- 8.5 Supplier may separately quote for the list of spares for two years of trouble free operation.
- 8.6 Supplier to quote for commissioning spares along with the main offer.
- 8.7 Reference list.

9.0 GUARANTEE

The performance guarantee shall be given for minimum a period of 12 months from the date of commissioning or 18 months from the date of shipment whichever is earlier.

10.0 PACKING AND DESPATCH

After inspection, the assembly shall be cleaned, prepared and suitably protected for despatch in such a way as to minimize the possibility of damage and deterioration during transit and storage.

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|  | SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR | SPECN.NO. TCC-1041 REV-01 | PAGE 07/09 |
|---|---|--|---------------|

11.0 DATA SHEET


BHEL MATERIAL CODE:

11.1 VALVE DATA SHEET

| | BHEL SPECIFICATION | VENDOR CONFIRMATION |
|--------------------------------|--|---------------------|
| DESIGN PRESSURE | To comply with NFPA 85, Valve body/ flanges shall be designed for 250 class. | |
| NORMAL WORKING PRESSURE | 300-400 mm WC | |
| Design temperature | 120°C | |
| Normal working temperature | 90°C | |
| Indoor or outdoor installation | Outdoor | |
| Design pressure drop | Vendor to furnish | |
| Maximum pipe velocity | 25 m/s | |
| Operation/frequency of use | Normally open. Closed during mill maintenance | |
| Flow medium | Hot air and coal particles | |
| Coal particle size | 75 um and less – 75% through 200 Mesh | |
| Erosion | The coal particles are highly erosive and the supplier shall provide measures to combat erosion of valve internals | |

11.2 Mechanical Data sheet for Power operated shut-off gate

| | | |
|--------------------------|--|--|
| Model No. | Supplier to furnish | |
| Service | Coal pipe shut-off | |
| Valve performance code | NFPA 85 – Dust tight Valve | |
| Size | Valve ID = 632 mm | |
| End Connection - Flanged | Flange details as per the applicable VARIANT of enclosed drawing | |
| Body Tapping (Yes/No) | Yes | |
| Remote Operation Details | Double acting pneumatic actuator, energized to open and energized to close | |
| Maximum Leakage Rate | "Visual leak" as per API/MSS or equivalent specification | |
| Quality Plan | Supplier to furnish | |
| Painting Details | As per approved QP | |

| | | | |
|---|---|--|---------------|
|  | SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR | SPECN.NO. TCC-1041 REV-01 | PAGE 08/09 |
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BHEL MATERIAL CODE:

| | BHEL SPECIFICATION | VENDOR CONFIRMATION |
|-------------------------------------|---------------------------------|---------------------|
| Body Ends Sealed (Yes/No) | Yes | |
| Joining Surfaces Protected (Yes/No) | Yes | |
| MATERIAL SELECTION | | |
| Body | Carbon steel (Specify grade) | |
| Slide | Stainless Steel (Specify grade) | |
| Seals | Supplier to furnish | |
| Body Connector | Supplier to furnish | |
| Insert | Supplier to furnish | |
| Cover | Supplier to furnish | |


11.3 ACCESSORIES

11.3.1 POWER CYLINDER

| BHEL SPECIFICATION | VENDOR CONFIRMATION |
|--------------------------------------|--------------------------|
| TYPE | |
| MAKE | |
| SIZE | |
| SELECTION CRITERIA OF POWER CYLINDER | ATTACH CALCULATION SHEET |
| END CONNECTION DETAILS (Air entry) | |
| BELLOWS PROVIDED FOR POWER CYLINDER | YES / NO |
| AIR CONSUMPTION | NM ³ /Hr. |

11.3.2 LIMIT SWITCH

| | |
|--------------------------|----------|
| TYPE | |
| MAKE | |
| CONTACT | |
| RATING | |
| ENCLOSURE IP55 CLASS | YES / NO |
| CABLE ENTRY CONDUIT SIZE | |

| | | | |
|---|---|--|-----------------------|
|  | SPECIFICATION FOR POWER OPERATED SHUT-OFF GATE /KNIFE GATE VALVE WITH PNEUMATIC ACTUATOR | SPECN.NO. TCC-1041 REV-01 | PAGE 09/09 |
|---|---|--|-----------------------|

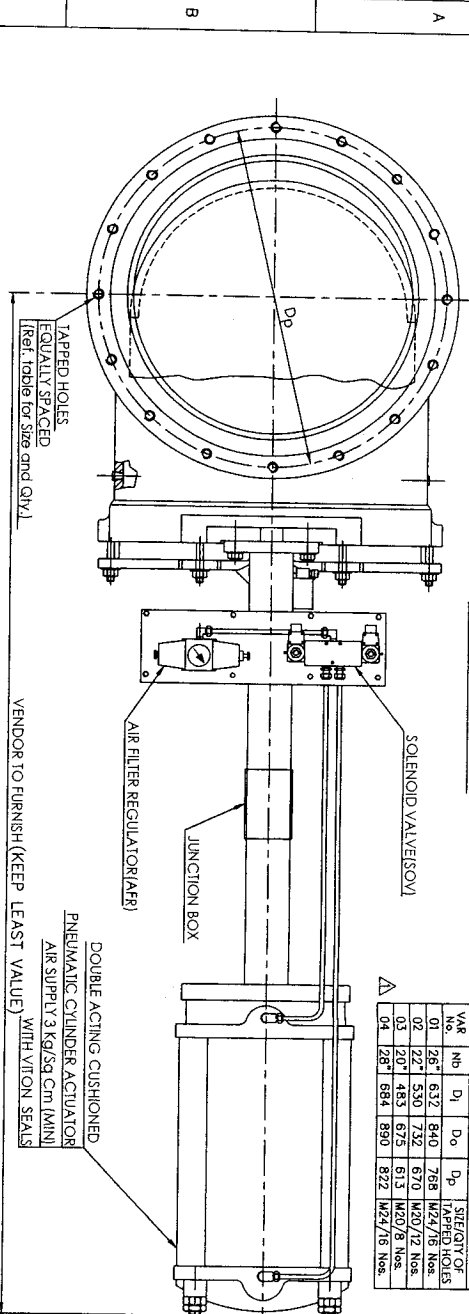
BHEL MATERIAL CODE:

| BHEL SPECIFICATION | VENDOR CONFIRMATION |
|---|----------------------------|
| 11.3.3 SOLENOID VALVE | |
| TYPE | |
| MAKE & MODEL | |
| POWER SUPPLY / COIL RATING | 24V DC ± 10% |
| 11.3.4 AIR FILTER CUM REGULATOR | |
| MAKE | |
| SIZE | |
| END CONNECTION AT BHEL TP | NPT (F) |
| 11.3.5 COPPER TUBING & FITTING PROVIDED | YES/ NO |
| 11.3.6 HOUSING PROVIDED | YES / NO |
| Confirm provision of box housing filter/regulator & solenoid valves | |
| 11.3 COMMISSIONING SPARES QUOTED WITH MAIN OFFER | YES / NO |
| 11.4 2/3 YEARS OPERATIONAL SPARES QUOTED SEPARATELY | YES / NO |
| 11.6 GENERAL ARRANGEMENT DRAWING NO. | |

NOTE:

Vendor shall fill-up the valve data sheet, Mechanical data sheet (Cl.11.2), Data sheets for accessories and others (Cl. 11.3.1 through 11.6), submit along with the offer duly signing the same.

ARRANGEMENT-P



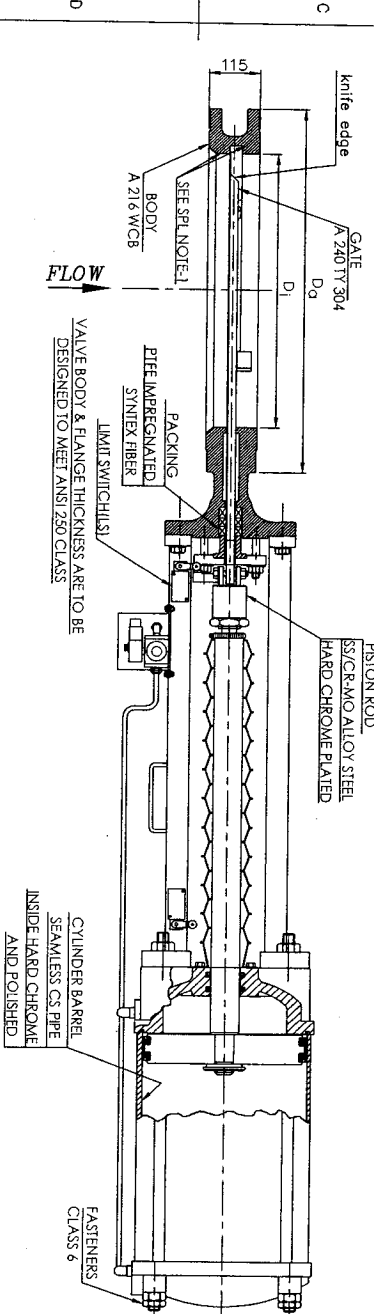
SELECTION TABLE

| VALV No. | Hb | D1 | D2 | Dp | WEIGHT OF FLANGES |
|----------|-----|-----|-----|-----|-------------------|
| 01 | 26T | 632 | 840 | 768 | M24/16 Nos |
| 02 | 22T | 530 | 732 | 670 | M20/12 Nos |
| 03 | 20T | 483 | 675 | 613 | M20/8 Nos |
| 04 | 26T | 684 | 880 | 822 | M24/16 Nos |

SPECIAL NOTE

- AS THE PUL COAL PARTICLES ARE OF HIGHLY EROSION, THE VENDOR HAS TO PROVIDE SUITABLE MEASURES TO COMBAT EROSION OF VALVE INTERNALS. VENDOR TO INDICATE / CONFIRM IN THE OFFER.
- VENDOR TO SHOW PNEUMATIC HOOK UP (SCHEMATIC) DIAGRAM.
- VENDOR TO MAKE 50% QTY AS PER 'ARRANGEMENT-P'; TO MAKE 50% QTY AS PER 'ARRANGEMENT-Q'.

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER PLANT STD. NO TP 023 0299



VALVE DESIGN DATA:

- FLOW MEDIUM: HOT AIR + PUL. COAL
- FLOW TEMPERATURE: 90 DEG. C
- DESIGN TEMPERATURE: 120 DEG C
- FLOW MEDIUM VELOCITY: 25 M / SEC
- SERVICE: COAL PIPE SHUT-OFF
- CODE REQUIREMENT TO MEET: NPSA B5

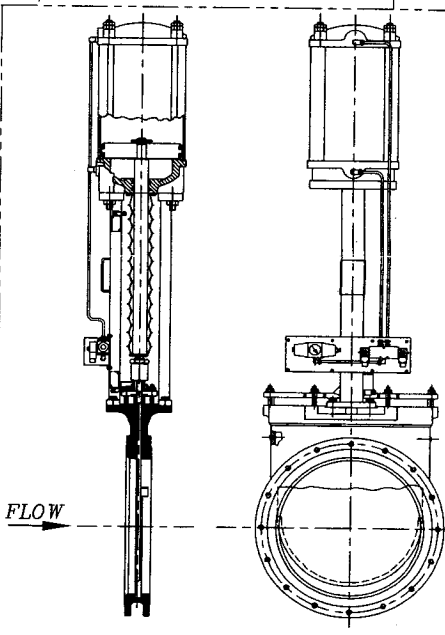
ACCESSORIES DATA: (VENDOR SCOPE)

- SOLENOID VALVE (SOV)
 - AIR FILTER REGULATOR (A/R)
 - LIMIT SWITCH (LS)
 - JUNCTION BOX (JB)
 - TUBING
 - FASTENERS
 - GASKETS
- DUAL COIL, HEAVY DUTY, 5 PORT, 2 WAY CURRENT RATING, REFER BHEL TECH SPECN. ASCO OR EQUIVALENT
- 3/8" SIZE METALIC BOWL, AIR SUPPLY: 0.7 BAR, MAKE: PLACKA / AIRMATIC / NICON / FESTO
- 2NO+2NC, 240V AC-5A, / 0.5A 220V DC
- IP 65 / IP 55, 3/4" NPT(F) CABLE ENTRY, MAKE: HONEYWELL, OMRON, QTY=2 Nos.
- ELECTRICAL TERMINAL FOR LS & SOV, 3/8" PVC COVERED COPPER
- SUITABLE FOR COMPANION FLANGES SHOWN IN 'DETAIL-R' FOR COMPANION FLANGES -1+3 FPM

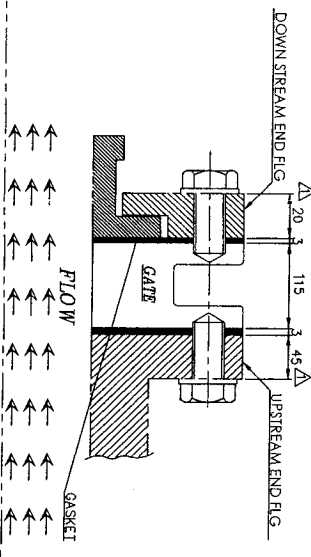
TERMINAL POINTS OF THE VALVE:

- UPSTREAM END FLANGE t=45 mm Δ
- DOWN STREAM END FLANGE t=20 mm
- ELECTRICAL TERMINAL POINT AT JUNCTION BOX (LS & SOV TO BE INTERNALLY WIRED BY VENDOR)
- SINGLE INSTRUMENT AIR CONNECTION TO A/R (INTER CONNECTING PIPES BY VENDOR)

ARRANGEMENT-Q



DETAIL-R



| REV. NO. | DATE | ALT. | CHD. | APPROVED |
|----------|----------|------|------|----------|
| 01 | 28.11.12 | ARK | CSK | MPP/JVA |

1. VARIANT NO. 4 ADDED IN THE SELECTION TABLE. FLANGE WIDTHS ARE CORRECTED

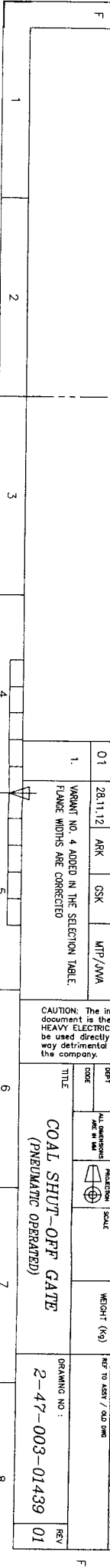
CAUTION: The information on this drawing is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT

| | |
|---|--|
| <p>Bharat Heavy Electricals Ltd UNIT: HIGH PRESSURE BOILER PLANT TIRUCHIRAPPALLI - 620014</p> | <p>NAME: C.S. SANKAR DESIGNER: S.S. JAYARAJ DATE: 09/08/08</p> |
|---|--|

COAL SHUT-OFF GATE
(PNEUMATIC OPERATED)

DRAWING NO: 2-47-003-01439 01





An ISO 9001
Company

Bharat Heavy Electricals Limited
(High Pressure Boiler Plant)
Tiruchirappalli-620 014, Tamil Nadu, India
Dept : PURCHASE-MATERIALS MANAGEMENT/TB

ANNEXURE- A

ACCEPTANCE OF TECHNO - COMMERCIAL TERMS AND CONDITIONS BY THE BIDDERS
(To be Filled and submitted for evaluation and to consider for Price-Bid opening)

| Description of the Items: | | Power Operated Gate with Pneumatic Actuator |
|---------------------------|---|---|
| BHEL Tender No. & Date | | 1801400162/04 dated 13.02.2014 |
| SI No. | Description | Vendor's confirmation |
| 1. | The tender will be operated on Two -Part Bid basis and the vendors are requested to submit their offers in Two separate sealed covers Viz. Techno-Commercial Bid and Price-Bid. | |
| 2. | Technical : Supply shall be as per BHEL's respective Specification/Datasheet & Drawings and Vendor's drawings/datasheets/QAP approved by BHEL. Vendors shall submit their Data Sheet & Drawings in line with BHEL's Specifications/Drawings along with Techno-Commercial offer for evaluation. Deviation will lead to rejection of your offer. | |
| 3. | Firm Price: The quoted/Finalised rates shall be Firm till execution of the supplies. | |
| 4. | Price Basis: The rates are to be quoted on FOR/NabiNagar Project Site (Bihar State)basis inclusive of Packing & Forwarding, Freight and Insurance to your account. | |
| 5. | Payment terms: The following payment term shall be acceptable by BHEL. "100% direct payment against site acknowledged copy of LR/Delivery Challan after 45 days " | |
| 6. | Taxes & Duties: All Taxes, Duties, Service Taxes etc. Payable as extra to the quoted price should be specifically stated in offers along with CST & TIN 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, Assessment circle Tiruverumbur | |
| 7. | Liquidated damages: Our standard LD term is 0.5% per week subject to a maximum of 10% shall be applicable for late deliveries. | |

| | | |
|-----|--|--|
| 8. | Risk Purchase: If the supplier fails to deliver the goods within the delivery specified in the purchase order, BHEL 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 delivery period mentioned in the purchase order. | |
| 9. | Submission of Documents for approval: In case of order, vendor shall submit necessary documents (Drawing, Data Sheet, Quality Plan, etc.), with in 15 days from the date of Purchase Order, for approval. | |
| 10. | Delivery Period: Bidder shall indicate the firm delivery period required for the delivery of the materials (FOR dispatching station), from the date of Purchase Order/date of document approval, required for delivery of the materials (FOR dispatching station). | |
| 11. | Validity: Validity of the offer should be 120 days minimum from the date of Techno-Commercial Bid opening | |
| 12. | Guarantee: Guarantee clause 24 months from the date of supply or 18 months from the date of commissioning, whichever is earlier. | |

Date :

Signature with seal

ANNEXURE-B**Loading factors for the tender enquiry for the requirement of Power Operated Gate
Nabi Nagar- project**

| Sl No. | BHEL Commercial terms | Vendor Confirmation to BHEL Commercial terms | Loading Criteria for Deviations |
|--|--|--|---|
| 1 | Payment terms: Payment term is 100% direct payment after 45 days from the date of dispatch documents against site acknowledgement. | | 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. |
| 2 | Liquidated damages: 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. | | 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). |
| 3. | Guarantee: Guarantee clause 18 months from the date of supply or 12 months from the date commissioning, whichever is earlier. | | No deviation permitted and the deviated offers are liable for rejection. |
| <u>Important Note:</u> <ul style="list-style-type: none"> i) 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. In case of despatches Direct to Site (DTS), only 90% through bank will be considered. ii) BHEL will evaluate the offers and consider the ranking after the loading is applied as referred above wherever deviations are observed. | | | |

ANNEXURE-B1(Import)**Loading factors for the tender enquiry for the requirement of Power Operated Gate
Nabi Nagar– project**

| SI No. | BHEL Commercial terms | Vendor Confirmation to BHEL Commercial terms | Loading Criteria for Deviations |
|--|--|--|---|
| 1 | Payment terms: BHEL Payment term is 100% payment on CAD basis after 45 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account. | | Any deviation in the above payment term will attract loading as 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. |
| 2 | Liquidated damages: 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. | | 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). |
| 3. | Guarantee: Guarantee clause 18 months from the date of supply or 12 months from the date commissioning, whichever is earlier. | | No deviation permitted and the deviated offers are liable for rejection. |
| Important Note: <ul style="list-style-type: none"> i) In the case of Usance LCs the loading will be considered @ 1.5% on the offered Value. ii) For LC at sight the loading will be considered @ 3.5% on the offered Value. iii) Normally CAD at sight and Confirmed LCs are liable for rejection iv) BHEL will evaluate the offers and consider the ranking after the loading is applied as referred above wherever deviations are observed. | | | |

BHEL TRICHY

MM/BOI **ANNEXURE – I**

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Ref:42ISV/MM/BOI

Date:14.02.11

SPECIAL Terms & CONDITIONS / Pre Qualification requirements (PQR)

| SI.NO | Description | Vendor Confirmation |
|--------------|---|----------------------------|
| 1 | This tender is for the supply of Power Operated Gate/ Knife Edge Gate Valve for Nabi Nagar NTPC Project, as per technical specifications /Drawings attached and quantity mentioned in our enquiry. | |
| 2 | The vendor shall have adequate experience in manufacturing and supply of these Items and shall produce credentials for the same without which their offer will not be considered. | |
| 3 | The tender will be operated in two part bid system. One part consisting of Technical bid with Commercial terms & conditions and other part is Price Bid. Techno-Commercial bid and Price bid are to be submitted in separate sealed covers | |
| 4 | Based on the above and other conditions, as well as technical capability, vendors will be short-listed. Both these covers are to be put in a single cover duly super scribing the Enquiry Number. The Techno-commercial bid will be opened on the due date and based on the suitability of techno-commercial bid, the price Bid of the techno-commercial suitable qualified vendors will be considered and opened on a suitable date with due intimation. | |
| 5 | In addition to technical and commercial conditions, you have to submit all the documents duly filled in "Supplier Registration Forms" through online (available in http://www.bheltry.co.in/ - Online Vendor Registration- Material Management) . Duly filled- in Supplier Registration Forms, along with all credentials and supporting documents, Certificate of Rating from D&B (Dun & Brad) sheet or equivalent agencies (For Foreign vendors) , Financial Performance / Profit & Loss Account / Balance sheet for last three years etc. (With Techno-Commercial Bid). Availability of minimum manufacturing, handling, testing and measuring facilities, to be detailed are to be mentioned clearly. All the documents to be uploaded. Apart from Qualifying the Techno- Commercial requirements of the enquiry, BHEL has the right for spot assessment of the facilities for evaluation, approval and for registration. | |
| 6 | The offers will be considered for Price Bid opening/Ordering subject to approval by BHEL/Customer (NTPC) | |
| 7 | Offers from Manufacturers alone will be considered for evaluation. | |
| 8 | Tender will be evaluated on package basis and on Total cost to BHEL only. | |
| 9 | BHEL may negotiate the L1 rate, if not meeting our budget/estimated cost. | |
| 10 | BHEL may re-float the tender opened, if L1 price is not the acceptable price to BHEL. | |
| 11 | LD Clause: Our standard LD condition is 0.5 % per week to a maximum of 10 % for the undelivered portion of materials. | |

| SI.NO | Description | Vendor Confirmation |
|--|--|---------------------|
| 12 | Risk Purchase clause: "If the supplier fails to deliver the goods within the delivery specified in the purchase order, BHEL 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 delivery period mentioned in the purchase order". | |
| 13 | For Import orders, 100% payment on CAD basis after 45 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account (Further subject to Loading Conditions as per Annexure B1) | |
| 14 | For indigeneous vendor, payment terms is 100% direct payment after 45 days from the date of dispatch documents against site acknowledgement. (Further subject to Loading Conditions as per Annexure B) | |
| 15 | In case of foreign vendors, they have to indicate Country of origin and prices shall be quoted on FOB Nearest Sea port basis. | |
| 16 | For Indigenous vendors, the quoted price is FOR/Nabi Nagar Project Site inclusive of P&F, Freight and Insurance to your account. | |
| 17 | All bank charges outside India to Seller's account (for Import orders) | |
| 18 | For Foreign offers, Foreign Exchange rate (of SBI) prevailing on Techno-Commercial bid opening date will be taken for calculation | |
| 19 | Prices shall be firm and shall have validity of 120 days from Techno- Commercial Bid Opening date. | |
| 20 | All applicable Taxes, Duties and any other extra cost applicable shall be indicated clearly in the offer. | |
| 21 | Guarantee clause: 24 months from the date of supply or 18 months from the date of commissioning, whichever is earlier. | |
| 22 | Document approval (Drawings/Datasheet/QAP) is applicable. Materials are to be dispatched after Inspection and Clearance | |
| 23 | Earliest possible delivery period shall be indicated in the offer. | |
| Offers are liable for rejection, if not satisfying above qualifying criteria. | | |

R.SrijaMol
 Engineer/Purchasing
 srija@bheltry.com