OIL INDIA LIMITED

(A Govt. Of India Enterprise) Tel :033 2230 1657, 1658 4, India Exchange Place, Fax :91 33 2230 2596 Kolkata-700001 E-mail :oilcalmn@oilindia.in

Tender No. & Date: KID0257L19/03 16.01.2019

Bid Security Amount : INR 0.00 OR USD 0.00

(or equivalent Amount in any currency)

Bidding Type : Single Bid (Composite Bid)

Bid Closing On : 19.02.2019 at 14:00 hrs. (IST) Bid Opening On : 19.02.2019 at 14:00 hrs. (IST)

Performance Guarantee : Applicable

OIL INDIA LIMITED invites Limited tenders for items detailed below:

Item No./ Mat. Code	Material Description	Quantity	UOM
1 <u>0</u> 99078440	"Ball Valve, DN8 (1/4 Inch) as per BS EN ISO 17292 Ball Valve, Fire-Safe & 2/3-Piece Swing Out Design, containing Mirror-Finished SS (Solid) floating ball, lever operated, through conduit full bore screwed to NPT (F) ends. Valve Design Standard: BS EN ISO 17292 Valve Inspection & Testing Standard: API 598 Fire Test Standard: API 607 Nominal Size: DN8 (1/4 Inch) Salient Design Features: Blow-Out Proof Stem, Double Body-Sealing, Multiple Stem Sealing, Antistatic Feature to ensure electrical continuity between ball, stem and body. Material of Construction: Body and End Piece: ASTM A 105/ASTM A 216 Gr WCB Seat & Seal: RPTFE Ball: ASTM A351 Gr. CF8M / ASTM A182 Gr. F316 / ASTM A 217 CA15 Stem: ASTM A479 SS316 / ASTM A182 F316 Bolts & nuts: ASTM A193 Gr.B7 / ASTM A194 Gr.2H Rating: Suitable for working pressure up to 70 kg/cm2 Operation: Hand lever operated"	30	NO
20 99078443	"Ball Valve, DN15 (1/2 Inch) as per BS EN ISO 17292 Ball Valve, Fire-Safe & 2/3-Piece Swing Out Design, containing Mirror-Finished SS (Solid) floating ball, lever operated, through conduit full bore screwed to NPT (F) ends. Valve Design Standard: BS EN ISO 17292 Valve Inspection & Testing Standard: API 598 Fire Test Standard: API 607	150	NO

Tender No. & Date: KID0257L19/03 16.01.2019

Item No./ Mat. Code	Material Description	Quantity	UOM
	Nominal Size: DN15 (1/2 Inch) Salient Design Features: Blow-Out Proof Stem, Double Body-Sealing, Multiple Stem Sealing, Antistatic Feature to ensure electrical continuity between ball, stem and body. Material of Construction: Body and End Piece: ASTM A 105/ASTM A 216 Gr WCB Seat & Seal: RPTFE Ball: ASTM A351 Gr. CF8M / ASTM A182 Gr. F316 / ASTM A 217 CA15 Stem: ASTM A479 SS316 / ASTM A182 F316 Bolts & nuts: ASTM A193 Gr.B7 / ASTM A194 Gr.2H Rating: Suitable for working pressure up to 70 kg/cm2 Operation: Hand lever operated"		
30 99078439	"Ball Valve, DN20 (3/4 Inch) as per BS EN ISO 17292 Ball Valve, Fire-Safe & 2/3-Piece Swing Out Design, containing Mirror-Finished SS (Solid) floating ball, lever operated, through conduit full bore screwed to NPT (F) ends. Valve Design Standard: BS EN ISO 17292 Valve Inspection & Testing Standard: API 598 Fire Test Standard: API 607 Nominal Size: DN20 (3/4 Inch) Salient Design Features: Blow-Out Proof Stem, Double Body-Sealing, Multiple Stem Sealing, Antistatic Feature to ensure electrical continuity between ball, stem and body. Material of Construction: Body and End Piece: ASTM A 105/ASTM A 216 Gr WCB Seat & Seal: RPTFE Ball: ASTM A351 Gr. CF8M / ASTM A182 Gr. F316 / ASTM A 217 CA15 Stem: ASTM A479 SS316 / ASTM A182 F316 Bolts & nuts: ASTM A193 Gr.B7 / ASTM A194 Gr.2H Rating: Suitable for working pressure up to 70 kg/cm2 Operation: Hand lever operated"	20	NO
40 99078442	"Ball Valve, DN25 (1 Inch) as per BS EN ISO 17292 Ball Valve, Fire-Safe & 2/3-Piece Swing Out Design, containing Mirror-Finished SS (Solid) floating ball, lever operated, through conduit full bore screwed to NPT (F) ends. Valve Design Standard: BS EN ISO 17292 Valve Inspection & Testing Standard: API 598 Fire Test Standard: API 607	100	NO

Tender No. & Date: KID0257L19/03 16.01.2019

Item No./ Mat. Code	Material Description	Quantity	UOM
	Nominal Size: DN25 (1 Inch) Salient Design Features: Blow-Out Proof Stem, Double Body-Sealing, Multiple Stem Sealing, Antistatic Feature to ensure electrical continuity between ball, stem and body. Material of Construction: Body and End Piece: ASTM A 105/ASTM A 216 Gr WCB Seat & Seal: RPTFE Ball: ASTM A351 Gr. CF8M / ASTM A182 Gr. F316 / ASTM A 217 CA15 Stem: ASTM A479 SS316 / ASTM A182 F316 Bolts & nuts: ASTM A193 Gr.B7 / ASTM A194 Gr.2H Rating: Suitable for working pressure up to 70 kg/cm2 Operation: Hand lever operated"		
5 <u>0</u> 99078444	"Ball Valve, DN50 (2 Inch) as per BS EN ISO 17292 Ball Valve, Fire-Safe & 2/3-Piece Swing Out Design, containing Mirror-Finished SS (Solid) floating ball, lever operated, through conduit full bore, Flanged ends. Valve Design Standard: BS EN ISO 17292 Valve Inspection & Testing Standard: API 598 Fire Test Standard: API 607 Nominal Size: DN50 (2 Inch), ANSI 300 Class Face-to-face dimensions ASME B16.10 End flange dimensions: ASME B16.5 Salient Design Features: Blow-Out Proof Stem, Double Body-Sealing, Multiple Stem Sealing, Antistatic Feature to ensure electrical continuity between ball, stem and body. Material of Construction: Body and End Piece: ASTM A 105/ASTM A 216 Gr WCB Seat & Seal: RPTFE Ball: ASTM A351 Gr. CF8M / ASTM A182 Gr. F316 / ASTM A 217 CA15 Stem: ASTM A479 SS316 / ASTM A182 F316 Bolts & nuts: ASTM A193 Gr.B7 / ASTM A194 Gr.2H Rating: Suitable for working pressure up to 70 kg/cm2 Operation: Hand lever operated"	10	NO

Special Notes: 1. Materials must be inspected and certified by any one of the OIL authorized third party inspection agencies viz. M/s. BV / IRCLASS Systems and Solution Private Limited / Lloyds / RITES / DNV / Tubescope Vetco prior to despatch. Bidders must quote the inspection charges separately in % (percentage) in the offer for evaluation of offer, failing which it shall be construed that the quoted rates are inclusive of 3rd party inspection charges.

When a bidder mentions third party inspection charges as extra without specifying the amount, the offer will be loaded with maximum value towards third party inspection charges quoted against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading and in the event of order on that bidder, third party inspection charges mentioned by OIL on the Purchase Order will be binding on the bidder. Please also quote minimum TPI charges in case of part order or the same will be calculated on pro-rata basis.

- 2. Performance Guarantee is applicable against this tender. 10% of the ordered value shall be given as performance guarantee in the form of bank guarantee and shall be valid for 90 days beyond applicable warranty / guarantee / defect liability period (if any). Bidders should undertake in their bid to submit Performance Security as stated above.
- A. Bidders should note that the bank guarantee issued by the bank must be routed through SFMS platform as per following details:
- (i) MT 760 / MT 760 COV for issuance of bank guarantee.
- (ii) MT 767 / MT 767 COV for amendment of bank guarantee.

The above message / intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Corporate Banking Branch, IFSC Code - UTIB0001164. Branch Address - AXIS Bank Ltd, Corporate Banking Branch, 3rd Floor, AC Market, 1, Shakespeare Sarani, Kolkata 700071."

- B. The Bidder shall submit to OIL the copy of SFMS message as sent by the issuing bank branch along with the original bank guarantee.
- 3. Bidder are advised to fill Annexure A, B & C and submit the compliance to the same along with the offer to enable OIL to evaluate the offer.
- 4. Validity of offer: 75 days from the date of tender opening. Offer with validity less than 75 days will be rejected.
- 5. Bidders are advised to fill up the Undertaking of authenticity of information/documents submitted (Annexure E) along with their technical bid.
- 6. PAYMENT TERMS:
- 6.1 Payment will generally be made against completed supply. Where phased delivery is indicated in the order, payment will be made against each lot as per phasing.
- 6.2 In certain cases, payment to the extent of 90% maximum of the value of the supply will be made against proof of dispatch presented through Bank or to OIL directly. Balance 10% of the value will be released not later than 30 days of receipt of goods at OIL's site. Adjustments, if any, towards liquidated damage shall be made from the balance 10% payment. OIL may consider releasing 100% payment against dispatch documents for suppliers having good track record with OIL and where 10% Performance Security is submitted in time and no installation/commissioning is involved.
- 7. Bidders are advised to submit their prices & other relevant details in attached price bid format.
- 8. (A) Taxes:
- I. For the purposes of levy and imposition of GST, the expressions shall have the following meanings:
- (a) GST means any tax imposed on the supply of goods and/or services under GST Law.
- (b) Cess means any applicable cess, existing or future on the supply of Goods and Services as per Goods and Services Tax (Compensation to States) Act, 2017.

- (c) GST Law means IGST Act 2017, CGST Act 2017, UTGST Act, 2017and SGST Act, 2017and all related ancillary Rules and Notifications issued in this regard from time to time.
- II. The rates quoted by the bidders shall be inclusive of all taxes, duties and levies. However, bidders are required to provide separately the rate and amount of all types of taxes, duties and levies. In case, the quoted information related to various taxes, duties and levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have the right to recover the difference in case the rate of duty/ taxes finally assessed is on the lower side. Further, bidders have to clearly show the amount of GST separately in the Tax invoices. Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST complaint in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.
- III. Offers without giving any of the details of the taxes (including rates and amounts) as specified above will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates and amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ contracts will be binding on the bidder.
- IV. Bidder is required to pass on the benefit arising out of introduction of GST, including seamless flow of Input Tax Credit, reduction in Tax Rate on inputs as well as final goods by way of reduction of price as contemplated in the provision relating to Anti-Profiteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the bidder must confirm that benefit of lower costs has been passed on to OIL by way of lower prices/taxes and must also provide details of the same as applicable. OIL reserves the right to examine such details about costs of inputs/input services of the bidder to ensure that the intended benefits of GST have been passed on to OIL.
- V. Statutory variation (increase/decrease) of GST within the contractual delivery period will be to the account of OIL subject to documentary evidence. However, any increase in statutory levy after the expiry of the scheduled date of delivery shall be to the supplier's account.
- VI. Bidder agrees to do all things but not limited to providing GST compliant Tax Invoices or other documentation as per GST law relating to the supply of goods and/or services covered in the instant contract like raising of and /or acceptance or rejection of credit notes / debit notes as the case may be, payment of taxes, timely filing of valid statutory Returns for the tax period on the Goods and Service Tax Network (GSTN), submission of general information as and when called for by OIL in the customized format shared by OIL in order to enable OIL to update its database etc. that may be necessary to match the invoices on GSTN common portal and also for claiming input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.
- VII. In case Input Tax Credit of GST is denied to OIL or demand is recovered from OIL by the Central / State Authorities on account of any non-compliance by Bidder/Supplier, including non-payment of GST charged and recovered, the Bidder/Supplier shall indemnify OIL in respect of all such claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. OIL, at its discretion, may also withhold/recover such an amount demanded and recovered by the authorities'/ state authorities from the pending payments of the Bidder/Supplier.
- VIII. GST liability, if any on account of supply of free samples against any tender/purchase order (wherever applicable) shall be to bidder's/ supplier's account.

(B) Comparison of Offers:

Comparison of bids shall be done on the basis of "Total FOR DESTINATION VALUE" quoted by

the bidders against each individual item as per Price Bid format given in Annexure-A. Therefore, bidders are required to submit prices as per said price bid format.

(C) Price Bid Format: attached as per Annexure-D.

Annexure – A of Tender No. KID0257L19

TECHNICAL COMPLIANCE CHECK-LIST							
SL.	NIT Requirement	Com	pliance	Vendors'			
NO		Yes	No	Deviation/ Remarks			
1.0	The bidder's quote should indicate each and every item serially as given in the technical specification of the enquiry.						
2.0	Scope of supply under this tender shall be as per Annexure-B. Confirmation to the same is submitted.						
3.0	Bidders Quality Assurance Procedure (QAP) (sample QAP in Annexure-C) is submitted along with the bid.						
4.0	Vendor to confirm that all the items offered are exactly as per specification, size, material of construction, design & testing standards etc. as per Valve Datasheet.						
5.0	Vendor to confirm that all valves shall meet the fire safe design requirement as per API-607.						
6.0	Vendor to confirm that delivery of materials will be done within 2 (two) months from the date of PO placement.						
7.0	Vendor to confirm that all the Inspection and Test will be carried out as per the NIT and QAP.						
8.0	Vendor to confirm that the materials will be tested, inspected and certified by OIL's approved Third Party Inspection Agency and inspection report must be forwarded to us along with the materials as per the NIT. Vendor to confirm that scope of test and inspection by OIL's approved third party inspection agency will be as per NIT.						
9.0	Vendor to confirm along with materials: The submission of Test certificates of raw material used, Hydraulic Test conducted, chirpy V notch and dimensional check.						
10.0	Vendor to confirm to provide permanent marks (i.e. Manufacturer name, Valve Size in Inches & mm both, Pressure Rating, Serial No, in the valve body as per NIT.						
11.0	Vendor to confirm that all the material will be thoroughly cleaned & painted with anti-corrosive paint or varnish to avoid corrosion as per NIT.						
12.0	Vendor to confirm that materials will be guaranteed for workmanship & performance for a period of 18 months from the date of receipt at Duliajan or 12 months from the date of commissioning, whichever is earlier and relevant guarantee certificate in duplicate must be provided along with the supply.						
13.0	Vendor to confirm that packing and tagging of finished product for dispatch will be done as per NIT.						
14.0	Valves are through conduit full bore.						
15.0	Valves have Antistatic Feature to ensure electrical continuity between ball, stem and body.						
16.0	Valves have Blow-Out Proof Stem						
17.0	Valves have Double Body-Sealing, Multiple Stem Sealing feature.						
18.0	Valve design ensures repair of stem seals / packing under full line pressure.						

Annexure - B of Tender No. KID0257L19

Special Notes:

1.0 SCOPE:

All valves shall be manufactured and supplied in accordance with the BS EN ISO 17292 Latest edition, with additions and Modifications as indicated in the following sections of this specification.

2.0 REFERENCE DOCUMENTS:

- 2.1 Reference has also been made in this specification to the latest edition of the following Codes, Standards and Specifications:
- i) API 607 Specification for Fire Test for Valves
- ii) API 598 Valve Inspection & Testing Standard
- iii) ASTM A370 Standard Test Methods and Definitions for Mechanical Testing of Steel Products
- iv) ASME B16.5 Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 2 Metric/Inch Standard.
- v) ASME B16.10 Face to Face dimensions of flanged Valves
- vi) ASME B16.34 Valves Flanged, Threaded and Welding End

In case of conflict between the requirements of this specification, BS EN ISO 17292 and the Codes, Standards and specifications referred in clause 2.1 above, the requirements of this specification shall govern.

3.0 MATERIALS:

3.1 Material of construction for major components of the valves shall be as indicated in Valve Data Sheet. In addition, the material shall also meet the requirements specified herein. Other components shall be as per Manufacturer's standard, which shall be subject to approval by Purchaser.

4.0 DESIGN AND CONSTRUCTION:

- 4.1 Valve design shall meet the requirements of BS EN ISO 17292.
- 4.2 Valve shall be two / three piece, swing out Design containing Mirror-Finished SS (Solid) floating ball
- 4.3 Valves shall be through conduit full bore.
- 4.4 Valves shall have Antistatic Feature to ensure electrical continuity between ball, stem and body.
- 4.5 Valves shall have Blow-Out Proof Stem
- 4.6 Valves shall have Double Body-Sealing, Multiple Stem Sealing feature.
- 4.7 Valve design shall ensure repair of stem seals / packing under full line pressure.
- 4.8 Valve shall be provided with Ball Position Indicator and stops of rugged construction at the fully open and fully closed positions.
- 4.9 Each valve shall be provided with a wrench.

Note: Vendor to provide 1 No. of wrench along with each valve supply.

- 4.10 Valve ends shall be flanged as indicated in the Valve DATA Sheet.
- 4.11 End Flanges shall have dimensions as per ASME B16.5

5.0 INSPECTION AND TESTS:

The manufacturer shall perform all inspection and tests as per requirement of API 598 specifications and relevant codes, prior to shipment, at his works. Such inspection and tests shall be, but not limited to the following. Materials shall be inspected and certified by OIL's approved Third Party Inspection Agency and their inspection certificate (original + duplicate) must be provided along with bill / dispatch.

- 5.1 All valves shall be visually inspected.
- 5.2 Dimensional check on all valves shall be carried out as per the purchaser approved drawings

- 5.3 Hydraulic test shall be 100% for all valves and test pressure shall be as per API 598 Spec.
- 5.4 Detailed dimensional drawings showing cross-section with part numbers and materials shall be submitted for Purchaser's approval along with the bid.
- 5.5 Charpy V- Notch test for body, ball, gland, stem & studs/ nuts will be conducted at -20°C on five samples having average value of 35J and minimum value shall be 28J.
- 5.6 Gland packing assembly shall permit repair of gland packing under full line pressure.
- 5.7 Stops shall be provided to ensure positive alignment of ball with ports and ensure proper installation of handle.

Note: OIL may depute its representative at the vendor's works during manufacturing / testing stage. bidder to ensure that OIL representative shall get fair opportunity to witness the manufacturing of critical component and testing of the valve(s). Party to inform OIL at least 15 days ahead of such inspection.

Valves may be subjected to Hydrostatic Testing after receipt at OIL's warehouse and in case of any observance of deviation from test reports, supplier will be asked to depute its Engineer/Technician to witness and repair the same at their own cost.

6.0 PAINTING, MARKING AND SHIPMENT

- 6.1 Valve surface shall be thoroughly cleaned, freed from rust and grease and applied with sufficient coats of corrosion resistant paint. Surface preparation shall be carried out by shot blasting to SP-6 in accordance with Steel Structures Painting Council Visual Standard SSPC-VIS-1.
- 6.2 Packing and shipping instructions shall be as per BS EN ISO 17292.
- 6.3 Valve Body Marking shall be as per BS EN ISO 17292.
- 6.4 On Valve packing's, following shall be marked legibly with suitable marking ink.
- a) OIL's Order Number with Date
- b) Manufacturer's Name
- c) Valve size and rating
- d) Tag Number
- e) Serial Number
- 6.5 Valve ends shall be suitably protected to avoid any damage during transit. All threaded/flanged and machined surfaces subject to corrosion shall be well protected by a coat of grease or other suitable material. All valves shall be provided with suitable protectors for flange faces, securely attached to the valves.

7.0 DOCUMENTS TO BE SUBMITTED ALONG WITH THE OFFER:

The following documents are required to be submitted at the time of bidding

- 7.1 Detailed sectional arrangement drawing showing all parts with reference numbers, materials specification for our scrutiny and approval.
- 7.2 Assembly drawing with detailed dimensions
- 7.3 Point wise compliance of NIT requirements. Deviations from the NIT, if any, must be highlighted with documentation. (As per Technical Checklist)
- 7.4 Technical catalogue / literature of the valves.
- 7.5 Testing and quality control procedures / QAP in line with OIL's sample QAP (Annexure-C)

8.0 THIRD PARTY INSPECTION:

The valves must be inspected & certified by M/s OIL approved Third Party Inspection Agency viz M/s Lloyds or M/s Bureau Veritas or RITES or M/s IRCLASS Systems and Solution Private Limited or M/s DNV or Tuboscope Vetco only prior to despatch. Third Party Inspection charges to be quoted separately which will be considered for bid evaluation.

The scope of Third Party Inspection will be as under: -

- 8.1 To review heat number wise foundry certificates of castings and material certificates in order to ensure that the materials used are as per purchase order.
- 8.2 To ensure and check that valves are tested as per API 598 specifications
- 8.3 To documents and issue all inspection certificates.
- 8.4 To witness Hydro Static Testing, Pneumatic Test for the Body and Seat on each specified valve as per *API 598* standards.

9.0 SUBMISSION OF DOCUMENTS ALONG WITH SUPPLY OF VALVES:

The manufacturer must submit the following along with the supply of the valves.

- 9.1 All test reports and certificates as required by API 598 specifications.
- 9.2 Mill test certificates relevant to the chemical analysis and mechanical properties of the materials used for the valve construction as per the relevant standards.
- 9.3 Test certificate of Hydro Static Testing complete with records of timing and pressure of each test carried out.
- 9.4 Above mentioned certificates shall be valid only when signed by Purchaser's Third Party Inspection agency. Only those valves which have been certified by Purchaser's Third Party Inspection agency shall be dispatched from Manufacturer's works.
- 9.5 The items shall be brand new, unused & of prime quality. Bidder shall warrant (in the event of an order) that the product supplied will be free from all defects & fault in material, workmanship & manufacture and shall be in full conformity with ordered specifications. This clause shall be valid for 18 months from date of receipt or 12 months from date of commissioning of the items. The defective materials, if any, rejected by us shall be replaced by the supplier at their own expense. Bidders must confirm the same while quoting.
- 10.0 Quantity of Individual item may be increased or decrease at the time of final placement of order.

Data Sheet

- 1. Design Standard: BS EN ISO 17292, Fire Safe design and Fire Tests as per API607
- 2. Valve Location and function: Onshore Sweet Natural Gas Service
- 3. Valve Size: 1/4" to 2" NB; Quantity: as mentioned in the NIT
- 4. Valve Pressure Class: Suitable for 70 Kg/cm2
- 5. Type of Valve: Floating Ball Valve
- 6. Special flow requirement: Full Bore, Through Conduit Type.
- 7. Design features: Two/ Three piece, Swing Out Design, containing Mirror-Finished SS (Solid) floating ball
- 8. End connection details:

Ends (both): NPT (F) up to 1" NB, 2" NB Flanged Ends

Size & Pressure Class: As per ASME B16.5

- 9. Valve Operation: Hand Lever operation as applicable.
- 10. Valve components and material specification (equivalent or superior grade material will also be acceptable)

BODY Material ASTM A 105/ASTM A 216 Gr WCB

BALL ASTM A351 Gr. CF8M / ASTM A182 Gr. F316 / ASTM A 217 CA15

SEAT SEAL RPTFE

STEM ASTM A479 SS316 / ASTM A182 F316

STUD BOLTS ASTM A193 GR B7

NUTS ASTM A194 GR 2H

11. Valve design conditions: Service Temperature (-) 28 deg C to 65 deg C

Service: Sweet Natural Gas Corrosion allowance: 1.5 mm

12. Painting (external): Zinc Chromate Primer + Aluminium paint

Sample QAP for Ball Valve

SI.	Description	Characteristic	Type of Check	Reference	Acceptance Criteria	Format of Records	MFR	TPIA	OIL	Remarks		
۷o				Documents								
1.0	DOCUMENTATION											
	General Arrangement Drawing & Cross Sectional Drawing	Major				Approved Drawing	Н	R	А			
	Quality Assurance Plan	Major	Conformance to PO	PO copy, Drawing,	PO copy, Drawing,	Approved QAP	Н	R	A			
	Shell Test Procedure & Seat Leakage Test Procedure	Major		Other applicable	standards, Sample	Approved Written Procedure	Н	R	А			
1.4	Third Party Inspection Report	Major			QAP	Inspection Report & Inspection Release Note	-	Н	R			
2.0	IN-COMING MATERIAL											
2.1	Body	Major	i) Visual, ii) Dimensional, iii) Physical Test, iv) Chemical Test, v) Charpy "V" Notch Test, vi) Heat treatment				H-100%	R-100%	R-100%			
2.2	Cover, Ball, & Stem	Major	iv) Chemical Test,	Approved Drawing, Other applicable	Approved Drawing, Other applicable	PO copy, Approved Drawing, Other applicable PO copy, Approved Drawing, Something and the provided pro	Drawing, Approved Drawing, icable & other applicable	Approved Drawing, Inspection Report, Test Report, Material Test	H-100%	R-100%	R-100%	
2.3	Seat	Major	i) Visual, ii) Dimensional, iii) Physical Test, iv) Chemical Test,			Certificate	H-100%	R-100%	R-100%			
2.4	Studs & Nuts (Fasteners)	Major	i) Visual, ii) Dimensional, iii) Physical Test, iv) Chemical Test, v) Heat Treatment				H-10%	R-10%	R-10%			

3.0 IN-PROCESS INSPECTION										
3.1 Machining of above items	Major	Visual, Dimensional	Approved Drawing,	PO copy, Approved Drawing, Other applicable standards		H-100%				
4.0 ASSEMBLY & TESTING										
4.1 Assembly & Completeness	Major	Visual			Inspection Report	H-100%	W-100%	R-100%		
4.2 Painting	Major	Visual	Approved Drawing, Other applicable	Approved Drawing, Other applicable	20	Inspection Report	H-100%	W-100%	R-100%	
4.3 Functional Test	Major	Visual			PO copy,	Inspection Report	H-100%	R- 100%, W-10%	R- 100%, W-10%	
4.4 Overall Dimensions	Major	Dimensional			Approved Drawing,	Inspection Report	H-100%	R- 100%, W-10%	R- 100%, W-10%	
4.5 Fitment & Alignment	Major	Dimensional			Other applicable standards	Inspection Report	H-100%	R- 100%, W-10%	R- 100%, W-10%	
4.6 Shell Test	Critical	Hydraulic Test		Standards	Test Certificate	H-100%	R- 100%, W-10%	R- 100%, W-10%		
4.7 Seat Leakage Test	Critical	Pneumatic Test			Test Certificate	H-100%	R- 100%, W-10%	R- 100%, W-10%		
4.8 Fire Test	Critical	Fire - Type Test			Test Certificate	R	R	R		

MFR- Manufacture, TPIA- Third Party Inspection Agency, OIL- Oil India Limited.

H- Hold (Perform), W- Witness, R- Review, A- approve.

Tender No. : KID0257L19/03 Tender Date : 16.01.2019

Bid Closing On : 19.02.2019 at 14:00 hrs.(IST)
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Tender issued to following parties only:

Slno	V_Code	Vendor Name	City/Country
1	200000	AUDCO INDIA LIMITED	CHENNAI
2	200007	AUTOMECH ENGINEERS PVT LTD	MUMBAI
3	200033	LARSEN & TOUBRO LTD.	MUMBAI
4	200080	FOURESS ENGINEERING (INDIA) LIMITED	KOLKATA
5	200101	MASCOT VALVES PVT. LTD.	AHMEDABAD
6	200363	MACNEIL & MAGOR LTD.	KOLKATA
7	200596	BHARAT HEAVY ELECTRICALS LIMITED	KOLKATA
8	200884	KIRLOSKAR BROTHERS LIMITED	KOLKATA
9	201945	BLISS ANAND PVT. LTD.	GURGAON
10	202423	FOURESS MARKETING INT'L. PVT. LTD.	BARODA
11	202649	KSB PUMPS LIMITED	KOLKATA
12	203117	TIRUPATI INDUSTRIAL STORES	TINSUKIA
13	203177	INDUSTRIAL VALVES & TUBES CO	MUMBAI
14	203179	BANKIM & COMPANY	KOLKATA
15	204069	EMAMI INDUSTRIES LIMITED	KOLKATA