Oil India Limited
(A Govt. of India Enterprise)
P.O. Duliajan – 786602, Assam

Telephone No. (91-374) 2808724
Fax No: (91-374) 2800533
Email: materials@oilindia.in ; erp_mm@oilindia.in

Tender No. : **SDG3368L15/07**

Bidding Type : SINGLE BID (COMPOSITE)
Bid Closing on : As mentioned in the Basic Data of e-portal
Bid Opening on : -do-
Bid Security Amount : Not Applicable
Performance Guarantee : Not Applicable

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No. / Mat. Code	MATERIAL DESCRIPTION	QTY.	UOM
10	API 6D BALL VALVE 8"NPS X 300 CLASS, TWO PIECE SPLIT BODY TRUNOION MOUNTED AS PER FOLLOWING SPECIFICATION: 1 Design Standard. API 6D 22nd Edition January 2002, Fire safe design and testing as API 6FA. 2. Valve location and function Onshore #sweet natural gas service 3. Valve size 200 mm DN/8# NPS 4. Valve pressure class 300 5. Type of Valve BALL VALVE 6. Special Flow requirement Full bore, Through Conduit type, Piggable 7. Design features Two piece, split body (double block) Primary metal to metal seating. Internal Trunnion mounting for ball . 8. Stem extension requirement NR Stem extension length NA 9. End connection details Connecting pipe(both ends) 8# (219.1 mm) OD Grade NA Thickness NA Ends (both) RF type Flanged ends Size and pressure class As per ASME B 16.5 10. Valve Operation Gear mounted hand wheel operation.(manual) 11. Valve components and material Specification.(equivalent or superior grade material will also be acceptable) BODY Material ASTM A 216 GR WCB BALL ASTM A 216 GR WCB + ENP BODY SEAT RINGS AISI 410/ASTM A 182 gr. F6A +PTFE/ENP SEAT SEAL Graphite STEM AISI 410 STEM SEAL Graphite	20	No.

	STUD BOLTS ASTM A 193 GR B7 NUTS ASTM A 194 GR 2H STEM HOUSING ASTM A 216 GR WCB 12. Valve Design conditions. Service temperature -28 deg C to 65 deg C Service Sweet Natural Gas. Corrosion allowance 1.5mm Installation Above Ground. 13. Pressure relief vent for valve Required 14. Emergency seat Sealant injection system for valve Required 15. Drain for valve Required 16. Lifting lugs Required (tapped holes and eyebolts not to be used) 17. Locking arrangement Required 18. Foot support Required 19. Painting(external) Primer + aluminum paint		
20	Ball valves for Natural Gas (Sweet) Service, Full Bore, Through Conduit configuration, Cast Carbon Steel Flanged, valve design Manufacturing and testing as per API 6D standard (Latest Edition), With Companion Flanges as per ANSI B 16.5 and face to face dimensions as per ASNI B 16.10 std. Materials conforming to ASTM A 105 with suitable High Tensile studs and nuts as per ASTM A 193 Gr. B-7 and ASTM A 194 Gr. 2H respectively. Size: 6" (150 mm) NB X 300 Class	12	PC.
30	API 6D BALL VALVE 4"NPS X 300 CLASS, TWO PIECE SPLIT BODY TRUNION MOUNTED AS PER FOLLOWING SPECIFICATION 1 Design Standard. API 6D 22nd Edition January 2002, Fire safe design and testing as API 6FA. 2. Valve location and function Onshore #sweet natural gas service 3. Valve size 100 mm DN/4# NPS 4. Valve pressure class 300 5. Type of Valve BALL VALVE 6. Special Flow requirement Full bore, Through Conduit type, Piggable 7. Design features Two piece, split body (double block) Primary metal to metal seating. Internal Trunnion mounting for ball. 8. Stem extension requirement NR Stem extension length NA 9. End connection details Connecting pipe(both ends) 4# (114.3 mm) OD Grade NA Thickness NA Ends (both) RF type Flanged ends Size and pressure class As per ASME B 16.5 10. Valve Operation Gear mounted hand wheel operation.(manual) 11. Valve components and material Specification.(equivalent or superior grade material will also be acceptable) BODY Material ASTM A 216 GR WCB BALL ASTM A 216 GR WCB + ENP	10	No.

	BODY SEAT RINGS AISI 410/ASTM A 182 gr. F6A +PTFE/ENP SEAT SEAL Graphite STEM AISI 410 STEM SEAL Graphite STUD BOLTS ASTM A 193 GR B7 NUTS ASTM A 194 GR 2H STEM HOUSING ASTM A 216 GR WCB 12. Valve Design conditions. Service temperature -28 deg C to 65 deg C Service Sweet Natural Gas. Corrosion allowance 1.5mm Installation Above Ground. 13. Pressure relief vent for valve Required 14. Emergency seat Sealant injection system for valve Required 15. Drain for valve Required 16. Lifting lugs Required (tapped holes and eyebolts not to be used) 17. Locking arrangement Required 18. Foot support Required 19. Painting(external) Primer + aluminum paint		

(A) General Notes for e-tender :

1. The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet No.MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendment and Addendum.
2. The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions. The details of items tendered can be found in the Item Data and details uploaded under Technical RFX.
3. Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.
4. Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with tender no. and due date to The Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender.
   a) Details Catalogue and any other document which have been specified to be submitted in original.

   All documents submitted in physical form should be signed on all pages by the authorized signatory of the bidder and to be submitted in triplicate.
5. Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.
6. Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications.
7. All the Bids must be Digitally Signed using "Class 3" digital certificate *(e-commerce application)* with organisation name as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.
8. Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.

(B) Special Notes

1.0 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(eighteen) months from the date of dispatch/shipment or 12(twelve) months from the date of receipt at site whichever is earlier. The defective materials, if any, rejected by us shall be replaced by the supplier at their own expense. Bidders must confirm the same in their quotation.

2.0 Bidders other than OEM (Original Equipment Manufacturer) must submit proper valid authorization certificate along with the warranty back-up from OEM failing which offer shall be rejected

3.0 All valves shall be manufactured and supplied in accordance with the 22nd Edition January 2002 or latest edition, American Petroleum Institute (API) Specification 6D, with additions and modifications as indicated in the following sections of this specification.

4.0 REFERENCE DOCUMENTS:

4.1 Reference has also been made in this specification to the latest edition of the following codes, Standards and Specifications.

ASME B 31.3 - Process Piping.

ASME B31.4 - Pipeline Transportation System for Liquid Hydrocarbon and other liquids.

ASME B31.8 - Gas Transmission and Distribution Piping Systems

ASME B16.5 - Pipe Flanges and Flanged Fittings.

ASME B16.47 - Large Diameter Steel Flanges.

ASME B16.25 - Butt-welding Ends.

ASME B16.34 - Valves-Flanged, Threaded and Welding Ends.

API 1104 - Welding Pipeline and Related Facilities.

ASME Sec VIII/IX - Boiler and Pressure Vessel Code.

ASTM A # 370 - Standard Test Methods and Definitions for Mechanical Testing of Steel Products.

ASTM B 733 - Auto catalytic Nickel Phosphorous Coating on Metals.

MSS-SP-6 - Standard Finishes for Contact Faces of Pipe Flanges and Connecting-end Flanges of Valves and Connecting end Flanges of Valves and Fittings.

MSS-SP-44 - Steel Pipeline Flanges.

SSPC-VIS-1 - Steel Structures Painting Council Visual Standard

4.2 In case of conflict between the requirements of this specification, API 6D and the Codes, Standards and specifications referred in clause 2.1 above, the requirements of this specification shall govern.

5.0 MATERIALS:

5.1 The material shall meet the requirements specified herein. Other components shall be as per Manufacturer's standard, which shall be subject to approval by Purchaser.

5.2 For all such valves where Carbon Steel is used as ball material, the ball shall have 0.075 micrometers (.003 inches) thick Electroless Nickel Plating (ENP) as per ASTM B 733 with following classification # SC2, Type II, Class 2. The hardness of plating shall be minimum 50 RC.

6.0 DESIGN AND CONSTRUCTION:

6.1 Valve design shall meet the requirements of API specification 6D. The ASME Boiler & Pressure Vessel Code, Section VIII, Division 1 shall be used to design the valve body. Allowable stress requirements shall comply the provisions of ASME B31.3.

6.2 The manufacturer shall have valid license to use API monogram on valves manufactured as per API6D.

6.3 Valve shall be two piece, split body(double block) and valves above 150 mm NB shall have gear mounted/gear operated hand wheel.

6.4 Valves shall be full bore (FB) shall be suitable for the passage of all types of pipeline scraper and inspection pigs on regular basis without causing damage to either the valve component or the pig. The full bore valve shall provide an unobstructed profile for pigging operations in either direction. Full bore valves shall be designed to minimize accumulation of debris in the seat ring region to ensure that valve movement is not impeded.

6.5 Ball mounting shall be internal trunion only , Valve design shall minimize the possibility of debris ingress into the trunnion as far as practicable.

6.6 Valve seats shall be with primary metal to metal contact. O-rings or other seals if used for drip tight sealing shall be encased in a suitable groove in such a manner that it cannot be removed from seat ring and there is not extrusion during opening or closing operation at maximum differential pressure. The seat rings shall be so designed as to ensure sealing at low as well as high differential pressure.

6.7 Full Bore valves shall have provision for secondary sealant injection under full line pressure for seat and stem seals. All sealant injection connections shall be provided with an internal non-return valve. Valve design shall have a provision to replace the sealant injection fitting under full line pressure.

6.8 Valves shall be provided with vent and drain connections.

6.9 Valve design shall ensure repair of stem seals / packing under full line pressure.

6.10 Valve shall be provided with ball position indicator and stops of rugged construction at the fully open and fully closed positions.

6.11 Full Bore valve shall be equipped with support foot and lifting lugs. Tapped holes and eyebolts shall not be used for lifting lugs. Height of support foot shall be kept minimum.

6.12 Valves shall have locking devices to lock the valve either in full open (LO) or full close (LC) positions. Locking devices shall be permanently attached to the valve operator and shall not interfere with operation of the valve.

6.13 Valves shall be suitable for either buried or above ground installation.

6.14 Valve ends shall be flanged end. Flanges of the flanged end cast / forged body valves shall be integrally cast / forged with the body of the valve. Face to face and dimensions shall conform to API 6D.

6.15 Flanged end shall have dimensions as per ASME B16.5.Flange face shall be raised face. The valves should be accompanied by companion flange.

6.16 Design of weld end valves shall be such that during field welding operation, soft seals are not liable to be damaged.

a) Vent and drain connections and sealant injection lines shall be terminated adjacent to the valve operator by means of suitable piping anchored to the valve body. The pipe used shall be API 5L Gr. B / ASTM A 106 Gr. B, with Sch. 160. Fittings shall be ASTM A 105 / ASTM A234 Gr. WPB, Socket welded ANSI class 6000.

c) Stem extension and stem housing design shall be such that the complete assembly will form a rigid unit giving positive drive under all conditions with no possibility of free movement between valve body, stem extension or its operator.

b) Outer casing of stem extension shall have 3/8# or ½# NPT plugs at the top and bottom, for draining and filling with oil to prevent internal corrosion.
c) Valve stem shall be capable of withstanding the maximum operating torque required to operate the valve against the maximum differential pressure corresponding to applicable class rating. The combined stress shall not exceed the maximum allowable stresses specified in ASME section VII, Division 1

7.0 INSPECTION AND TESTS: The manufacturer shall perform all inspection and tests as per requirement of API 6D specifications and relevant codes, prior to shipment, at his works. Such inspection and tests shall be, but not limited to the following.
7.1 All valves shall be visually inspected.
7.2 Dimension check on all valve shall be carried out as per the purchaser approved drawings
7.3 All valves of 300 class and above shall be 100% radiographed.# Radiographic testing of castings on 100% of critical areas in accordance with ASME B 16.34.Acceptance shall be in accordance with ASME Sec VIII Div-1, appendix 7.
7.4 Cavity relief testing should be carried out for trunnion mounted ball valves.

8.0 PAINTING, MARKING AND SHIPMENT

8.1 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#.
8.2 All valves shall be marked as per API 6D. The unit of marking shall be metric except nominal diameter, which shall be in inches.
8.3 Packing and shipping instructions shall be as per API-6D.
8.4 On packages, following shall be marked legibly with suitable marking ink.
a) Order Number
b) Manufacturer's Name
c) Valve size and rating
d) Tag Number
e) Serial Number
8.5 Valve ends shall be suitably protected to avoid any damage during transit. All valves shall be provided with suitable protectors for flange faces, securely attached to the valves.

9.0 DOCUMENTS TO BE SUBMITTED DURING BID: The following documents are required to be submitted at the time of bidding
9.1 Valid API 6D certificate
9.2 Details sectional arrangement drawing showing all parts with reference numbers, materials specification.
9.3 Assembly drawing with detailed dimensions of bonnet, hand wheel stem, yoke etc. Drawing shall also indicate the number of turns of hand wheel (in case of gear operators) required for operating the valve from full open to full close position and the painting scheme. Complete dimensional details of support foot (where applicable) shall be indicated in these drawings.
9.4 Point wise compliance of NIT requirements. Deviations from the NIT, if any must be highlighted with documentation.
9.5 Technical catalogue / literature of the valves.
9.6 Testing and quality control procedures / ITP / QAP.

10.0 THIRD PARTY INSPECTION: Valve shall be inspected by OIL enlisted Third Party Inspection Agency. OIL official shall also visit the factory during manufacturing process at works. Party shall extend necessary facilities at factory for witness the manufacturing process .Scope for Third Party Inspection shall be as under.

10.1 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.
10.2 To ensure that valve body castings are procured from foundries as approved by M/s EIL or M/s Lloyds only.
10.3 To ensure that proper technique and procedure as per relevant API standard and Purchase Order are followed by the manufacturer.
10.4 To ensure that different components of the valve conform to purchase order, API 6D specification and all referred standard, codes and specifications in point 2.0 above of the special terms and conditions.
10.5 To ensure and check that valves are tested as per API 6D specifications
10.6 To documents and issue all inspection certificates.
10.7 To ensure that the valves inspected are fully embossed with API monogram and other markings as per API 6D specifications.
10.8 To witness hydraulic, pneumatic test for the body and seat on each specified valve as per API 6D standards.
10.9 To review and check the radiograph films of body and bonnet of all the valves of rating ANSI 300 Class and above. Certified radiography film shall be submitted along with the supplied valves.

11.0 SUBMISSION OF DOCUMENTS ALONG WITH SUPPLY OF VALVES. The manufacturer must submit the following along with the supply of the valves.
11.1 All test reports and certificates as required by API 6D specifications.
11.2 Mill test certificates relevant to the chemical analysis and mechanical properties of the materials used for the valve construction as per the relevant standards.
11.3 Test certificate of hydraulic test complete with records of timing and pressure of each test carried out.
11.4 TPI certified radiograph films of all the valves.
11.5 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.

12 Packing should be adequate to avoid transit damage and ingress of water.

13 Bidder is to mention the name of manufacturer, country of origin and port of shipment.

14 Validity of the Bids shall be minimum 4 months (120 days) from the Bid closing date of the tender. Bids with lesser validity will be rejected.

15 The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued/ renewed after 01/04/99 and hence Nil Customs Duty during import will be applicable. Indigenous bidder shall be eligible for Deemed Export Benefit against this purchase. Details of Deemed Export are furnished vide Addendum to MM/GLOBAL/E-01/2005 attached.

16 The minimum FOB/FCA charges in case of partial order for reduced quantity/items shall have to be indicated by the bidder. In case this is not indicated specifically, the charges quoted would be prorata calculated and the same will be binding on the bidder

17. Other terms and conditions of the tender shall be as per "General Terms & Conditions" for e- Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders). However, if any of the Clauses of the Bid Rejection Criteria (BRC) / Bid Evaluation Criteria (BEC) mentioned here contradict the Clauses in the "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

TENDER ISSUED TO FOLLOWING PARTIES ONLY

Sl. No.	Vendor Code	Vendor Name
1	100123	M/S PETROL VALVES S.R.L
2	100268	M/S BREDA ENERGIA S.P.A
3	100438	M/S WEIR VALVES & CONTROLS U.K LTD
4	101815	M/S CAMERON ITALY S.R.L
5	200947	M/S MICROFINISH VALVES PVT .LTD
6	201889	M/S VIRGO VALVES & CONTROLS LTD
7	204820	M/S LACIER INDUSTRIES
8	205891	M/S LARSEN & TOUBRO LIMITED