

**OIL INDIA LIMITED**

(A Govt. of India Enterprise)  
P.O. Duliajan-786602, Assam.

Fax No. 91-374-2800533, E-mail: [material@oilindia.in](mailto:material@oilindia.in)

**Tender No. & Date : DFD3381L17/06 19.12.2016**

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 : 29.03.2017 at 13:00 hrs. (IST)  
Bid Opening On : 29.03.2017 at 13:00 hrs. (IST)

Performance Guarantee : Applicable

OIL INDIA LIMITED have issued Limited tenders to following parties for items detailed below. For General Terms & Conditions, please refer to Document No. MM/GLOBAL/01/2005 available in OIL's web site:

Item No./ Mat. Code	Material Description	Quantity	UOM
<b>10</b> 99030957	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 ANSI 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: 4" (100 mm) NB X 300 Class	15	PC

- Special Notes :**
- 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 despatch/shipment or 12 months from date of receipt/commissioning of the items 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 while quoting.
  - 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 pro-rata calculated and the same will be binding on the bidder.
  - The General Terms & Conditions for Global Tenders (MM/GLOBAL/01/2005) has been amended and the amendment dated 25.04.2016 have been issued in this regard which is uploaded in OIL Website. Bidders to note the changes made to "The General Terms & Conditions for Global Tenders (MM/GLOBAL/012005)" and to submit their offers complying with the same
  - Bidders to take note of clause no.10.1.3 which has been added in section- C, Special Terms and conditions for Indian bidders of General Terms & Conditions for Global Tender (MM/GLOBAL/E-01/2005) regarding transportation of consignment.
  - Bidders to note that Govt. of India under Micro, Small and Medium Enterprises

Development (MSMED) Act. 2006, has proclaimed the Public Procurement Policy, 2012 with effect from 1st April, 2012 in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Department and Public Sector Undertakings for promotion and development of Micro and Small Enterprises. A new clause on applicability of Public Procurement Policy for procurement of goods from Micro, Small and Medium Enterprises (MSME) in the tender is furnished vide Amendment to General Terms and Conditions for Global Tender (MM/GLOBAL/E-01/2005). Bidders are requested to take note of the same and to submit their offer accordingly.

6. Performance Security clause (Clause No. 10.0 of Section-A) of "General Terms & Conditions for Global Tenders (MM/GLOBAL/01/2005)" has been amended and the new clause is detailed in the Amendment dated 25.04.2016 issued to MM/GLOBAL/01/2005. Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. Bidders to note the same and to confirm its acceptance in their offers.

7. Bidders are required to quote with minimum validity of 90 days from the Bid Closing Date as per NIT requirement. Bids with lesser validity shall be rejected.

8. Quotation must be submitted in **triplicate**.

9. The items covered by this tender 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. However, deemed export benefit for domestic bidders is not applicable against this tender. Domestic bidders to quote their prices without considering the deemed export benefit. Domestic bidders to also quote the applicable rate of excise duty in their price bid. If a domestic bidder emerges L1 after loading of applicable rate of excise duty, order shall be placed upon the bidder inclusive of the excise duty amount.

10. Following annexures are attached, which are part of the tender document:

- i) Annexure-A: Valve data sheet
- ii) Annexure-B: Technical Specification
- iii) Annexure-c: Valve Marking
- iv) Annexure-D: Sample Quality Assurance plan.
- v) Annexure-E: Scope of supply.
- vi) Annexure-F: Deviation sheet
- vii) Annexure-G : Technical compliance check list.

**Tender No.** : DFD3381L17/06  
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**Tender issued to following parties only:**

Slno	V_Code	Vendor Name	City/Country
1	100123	PETROL VALVES S.R.L.	MILANO
2	100268	BREDA ENERGIA S P A	ITALY
3	100438	WEIR VALVES & CONTROLS UK LTD	WEST YORKSHIRE
4	101815	CAMERON ITALY S.R.L	ITALY
5	200947	MICROFINISH VALVES PVT. LTD.	ITIGATTI VILLAGE
6	201889	VIRGO VALVES & CONTROLS LTD.	KOLKATA
7	203117	TIRUPATI INDUSTRIAL STORES	TINSUKIA
8	204820	LACIER INDUSTRIES	MUMBAI
9	205891	LARSEN & TOUBRO LIMITED	Kolkata
10	208765	MICROFINISH VALVES PVT. LTD	KOLKATA

**Data Sheet**

1. Design Standard: API 6D 24th Edition January 2014, Fire Safe design and Fire Tests as per API6FA
2. Valve Location and function: Onshore Sweet Natural Gas Service
3. Valve Size: 4" NB ; Quantity: 15 Nos.
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/ Three piece, split body (double block)  
Primary Metal-to-Metal seating Secondary Soft Seal  
Internal Trunnion Mounting for Ball
8. End connection details:  
Ends (both): RF type Flanged ends  
Size & Pressure Class: As per ASME B16.5
9. Valve Operation: Wrench Operation
10. Valve components and material specification (equivalent or superior grade material will also be acceptable)

BODY Material	ASTM A216 GR WCB / ASTM A216 GR WCC / ASTM A352 LCB / ASTM A352 LCC / ASTM A105N / ASTM A350 LF2
BALL	(ASTM A216 GR WCB / ASTM A216 GR WCC / ASTM A352 LCB / ASTM A352 LCC / ASTM A105N / ASTM A350 LF2) + 75 Micron ENP / AISI 410
BODY SEAT RINGS	AISI 410/ASTM A182 Gr. F6A + PTFE/Devlon (High Molecular Weight Polyamide)
SEAT SEAL	Graphite
STEM	AISI 4140 + 75 Micron ENP / AISI 410
STEM SEAL	RPTFE / Graphite
STUD BOLTS	ASTM A193 GR B7
NUTS	ASTM A194 GR 2H
SEAT HOUSING	(ASTM A 216 GR WCB / AISI 4140) + 75 Micron ENP coated

12. Valve design conditions: Service Temperature (-) 28 deg C to 65 deg C  
Service : Sweet Natural Gas  
Corrosion allowance: 1.5 mm  
Installation: Above ground
13. Pressure relief vent for valve: Required
14. Emergency seat Sealant injector system for valve: Required
15. Drain for valve : Required
16. Lifting lugs : Required
17. Locking arrangement: Required
18. Painting (external): Zinc Chromate Primer + Aluminum paint
19. Quantity may be increased or decreased at the time of final placement of purchase order.

**Tender No.DFD3381L17/06****Technical specifications and Special Notes:****1.0 SCOPE:**

All valves shall be manufactured and supplied in accordance with the 24th Edition January 2014 American Petroleum Institute (API) Specification 6D/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) ASME B16.5 - Pipe Flanges and Flanged Fittings : NPS 1/2 through NPS 24 Metric/Inch Standard
- (ii) ASME B16.34 - Valves Flanged, Threaded and Welding End
- (iii) ASTM A370 - Standard Test Methods and Definitions for Mechanical Testing of Steel Products.
- (iv) ASTM B733 - Standard Specification for Autocatalytic (Electroless) Nickel-Phosphorus Coatings on Metal
- (v) MSS-SP-6 - Standard Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings
- (vi) API 6FA - Specification for Fire Test for Valves

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.

**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.

3.2 For all such valves where Carbon Steel is used as ball material, the ball shall have 75 Micrometers (0.003 inches) thick Electroless Nickel Plating (ENP) as per ASTM B733 with following classification: SC2, Type II, Class 2. The hardness of plating shall be minimum 50 RC.

**4.0 DESIGN AND CONSTRUCTION:**

4.1 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 B 31.3.

4.2 The manufacturer shall have valid license to use API monogram on valves manufactured as per API 6D.

4.3 Valve shall be two / three piece, split body (double block)

4.4 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 casing 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.

4.5 Ball mounting shall be on internal trunnion only as per valve data sheet. Valve design shall minimize the Possibility of debris ingress into the trunnion as far as practicable.

4.6 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 can not 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.

4.7 The 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.

4.8 Valves shall be provided with vent and drain connections.

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

4.10 Valve shall be provided with Ball Position Indicator and stops of rugged construction at the fully open and fully closed positions.

4.11 Tapped holes and eyebolts shall not be used for lifting lugs.

4.12 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.

4.13 Valves shall be suitable for above ground installation.

4.14 Valve ends shall be flanged as indicated in the Valve DATA Sheet. Flanges of the flanged end cast / forged body valves shall be integrally cast / forged with the body of the valve. Face to face / end to end dimensions shall conform to API 6D.

4.15 Flanged end shall have dimensions as per ASME B16.5 and as per MSS-SP-44/ASME B 16.47 Series A for valve sizes. Flange face shall be raised face as indicated in Valve Data Sheet.

4.16 The valve body castings and forging are to be procured from foundries as approved by M/s EIL or M/s Lloyds only.

## **5.0 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.

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 All valves shall be 100% radiographed.

(i) Radiographic testing of castings on 100% of critical areas in accordance with ASME B 16.34.

- (ii) Radiographic testing of castings on 100% of accessible areas. Examination shall be carried out in accordance with ASME Section V, article 22. The sensitivity, as indicated by wire penetrometers, shall be 1.5% or better. Acceptance shall be in accordance with ASME Sec VIII Div-1, appendix 7.
- (iii) If Valve Body MOC is forging, Ultrasonic testing of forgings on 100% of surface area shall be carried out in accordance with ASTM A388.

5.4 Cavity relief testing should be carried out for all the ball valves.

5.5 Hydraulic test shall be 100% for all valves and test pressure shall be as per API 6D Spec.

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 All valves shall be marked as per API 6D. The unit of marking shall be metric except nominal diameter, which shall be in inches also.

6.3 Packing and shipping instructions shall be as per API-6D.

6.4 On packages, following shall be marked legibly with suitable marking ink.

- a) OIL's Order Number
- 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 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 Valid API 6D certificates

7.2 Details sectional arrangement drawing showing all parts with reference numbers, materials specification.

7.3 Assembly drawing with detailed dimensions of bonnet, hand wheel stem, yoke etc.

Note: All valves of similar size, type and pressure rating will have same casting pattern, bonnet design, height and overall dimensions shall also be same.

7.4 Point wise compliance of NIT requirements. Deviations from the NIT, if any must be highlighted with documentation.

7.5 Technical catalogue / literature of the valves.

7.6 Testing and quality control procedures / QAP.

7.7 Supplier of valves has to get drawings supplied against 7.3 above approved before carrying out fabrication of the valves, incase order is placed on them.

7.8 Vendor to confirm that the valve body castings and forging will be procured from foundries as approved by M/s EIL or M/s Lloyds only. Valid documentary evidence in this regard shall be submitted along with the bid.

## **8.0 THIRD PARTY INSPECTION:**

The valves will be inspected by M/s OIL approved Third Party Inspection Agencies viz M/s Lloyds or M/s Bureau Veritas or RITES or M/s IRS or M/s DNV or M/S. Tuboscope Vecto only. Third Party Inspection charges to be quoted separately which will be considered for bid evaluation. Quotation received without TPI charges will be loaded with the maximum TPI charges received against this tender at the time of commercial 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 that valve body castings and forging are procured from foundries as approved by M/s EIL or M/s Lloyds only.

8.3 To ensure that proper technique and procedure as per relevant API standard and Purchase Order are followed by the manufacturer.

8.4 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.

8.5 To ensure and check that valves are tested as per API 6D specifications

8.6 To documents and issue all inspection certificates.

8.7 To ensure that the valves inspected are fully embossed with API monogram and other markings as per API 6D specifications.

8.8 To witness hydraulic, pneumatic test for the body and seat on each specified valve as per API 6D standards.

8.9 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.



## **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 6D 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 hydraulic test complete with records of timing and pressure of each test carried out.

9.4 TPI certified radiograph films of all the valves for casting material.

9.5 TPI certified Ultrasonic testing report of forgings on 100% of surface area as per ASTM A388

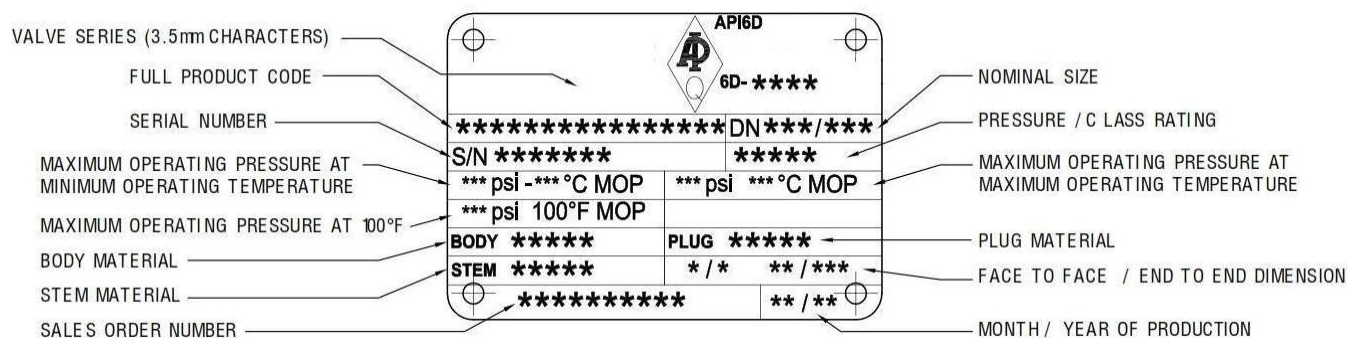
9.5 Above mentioned certificates shall be valid only when signed by Purchaser's Third party Inspection agency. Only those valves which have been certified by Purchaser's Third party Inspection agency shall be dispatched from Manufacturer's works.

10.0 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 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.

11.0 Quantity of Individual item may be increased or decrease at the time of final placement of order.

**Valve Marking –Tender No: DFD3381L17/06**

Sl. No.	Marking	Requirement
1.	Manufacturer's name or Trademark	On both body and Nameplate
2.	Pressure Class.	On both body and Nameplate
3.	Pressure / Temperature Rating a) Maximum operating pressure at maximum operating temperature b) Maximum operating pressure at minimum operating temperature	On Nameplate
4.	Face-to-face/end-to-end dimension	On Nameplate
5.	Body material designation: Material symbol, eg., AISI, ASME, or ASTM	On both body and nameplate. Cast or heat number on nameplate only.
6.	Bonnet/cover material designation: Material symbol e.g., AISI, ASME, or ASTM	On bonnet/cover, including heat number
7.	Trim identification: Symbols indicating material of stem and sealing faces of closure members (Plug, Rings etc.) if different from that of body	On Nameplate
8.	Nominal Valve size	On both body and Nameplate
10.	Unique serial number	On both bonnet/cover and Nameplate
11.	Date of manufacture (month and year)	On Nameplate
12.	API 6D	On Nameplate
13.	API-6D Certificate No.	On Nameplate



**QUALITY ASSURANCE PLAN (QAP) FOR BALL VALVES****1.0 GENERAL**

1.1 .QAP shall be submitted for each valve separately with break-up of assembly/sub-assembly & part/component or for group of component having same specification. A sample QAP is as given below .

**2.0 RAW MATERIAL AND IN PROCESS STAGE INSPECTION, TEST CERTIFICATES, DOCUMENTS ETC.****2.1 BODY**

<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
(A)	VISUAL & DIMENSIONAL	TPI (review) MFR (review)	APPROVED GAD,REPORT
(B)	PHYSICAL TEST (Sample)	TPI (review) MFR (review)	MATERIAL TEST CERTIFICATES
(C)	CHEMICAL TEST (Sample)	TPI (review) MFR (review)	MATERIAL TEST CERTIFICATES
(D)	ULTRASONIC TEST FOR FORGING	TPI (review) MFR (hold)	TEST REPORT
(E)	MAGNETIC PARTICLE TEST(MPI)	TPI (review) MFR (hold)	TEST REPORT
(F)	RADIOGRAPHIC TEST FOR CASTING	TPI (review) MFR (hold)	TEST REPORT
(G)	HEAT TREATMENT	TPI (review) MFR (review)	TERST REPORT MATERIAL TEST CERTIFICATES
(H)	CHARPY “V” NOTCH TEST	TPI (review) MFR (review)	MATERIAL TEST CERTIFICATES

TPI:THIRD PARTY INSPECTOR

MFR:MANUFACTURER

**2.2 COVER**

<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
(A)	VISUAL & DIMENSIONAL	TPI(review) MFR(review)	APPROVED GAD,REPORT
(B)	PHYSICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(C)	CHEMICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(D)	ULTRASONIC TEST	TPI(review) MFR(hold)	TEST REPORT
(E)	MAGNETIC PARTICLE TEST (MPI)	TPI(review) MFR(hold)	TEST REPORT
(F)	RADIOGRAPHIC TEST	TPI(review) MFR(hold)	TEST REPORT
(G)	HEAT TREATMENT	TPI(review) MFR(review)	TERST REPORT MATERIAL TEST CERTIFICATES
(H)	CHARPY “V” NOTCH TEST	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES

TPI:THIRD PARTY INSPECTOR

MFR:MANUFACTURER

<b>2.3 BALL</b>			
<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
(A)	VISUAL & DIMENSIONAL	TPI(review) MFR(review)	APPROVED GAD,REPORT
(B)	PHYSICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(C)	CHEMICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(D)	HEAT TREATMENT	TPI(review) MFR(review)	TEST REPORT MATERIAL TEST CERTIFICATES
(E)	ENP COATING	TPI(review) MFR(hold)	MATERIAL TEST CERTIFICATES FOR COMPOSITION,HARDNESS,THICKNESS & INTEGRITY
(F)	CHARPY "V" NOTCH TEST	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
TPI:THIRD PARTY INSPECTOR			
MFR:MANUFACTURER			

<b>2.4 STEM</b>			
<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
(A)	VISUAL & DIMENSIONAL	TPI(review) MFR(review)	APPROVED GAD,REPORT
(B)	PHYSICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(C)	CHEMICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(D)	HEAT TREATMENT	TPI(review) MFR(review)	TEST REPORT MATERIAL TEST CERTIFICATES
(E)	ENP COATING	TPI(review) MFR(hold)	MATERIAL TEST CERTIFICATES FOR COMPOSITION,HARDNESS,THICKNESS & INTEGRITY
TPI:THIRD PARTY INSPECTOR			
MFR:MANUFACTURER			

<b>2.5 SEAT</b>			
<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
(A)	VISUAL & DIMENSIONAL	TPI(review) MFR(review)	APPROVED GAD,REPORT
(B)	PHYSICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(C)	CHEMICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(D)	HEAT TREATMENT	TPI(review) MFR(review)	TEST REPORT MATERIAL TEST CERTIFICATES
(E)	ENP COATING	TPI(review) MFR(hold)	MATERIAL TEST CERTIFICATES FOR COMPOSITION,HARDNESS,THICKNESS & INTEGRITY
TPI:THIRD PARTY INSPECTOR			
MFR:MANUFACTURER			

**2.6 STUD & NUTS (BOLTING MATERIAL)**

<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
(A)	VISUAL & DIMENSIONAL	TPI(review) MFR(review)	APPROVED GAD,REPORT
(B)	PHYSICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(C)	CHEMICAL TEST (Sample)	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
(D)	HEAT TREATMENT	TPI(review) MFR(review)	TEST REPORT MATERIAL TEST CERTIFICATES
(E)	CHARPY “V” NOTCH TEST	TPI(review) MFR(review)	MATERIAL TEST CERTIFICATES
TPI:THIRD PARTY INSPECTOR			
MFR:MANUFACTURER			

**3.0 INSPECTION AFTER VALVE ASSEMBLY****3.1 ASSEMBLED VALVES(BALL)**

<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
(A)	VISUAL & DIMENSIONAL	MFR (hold) TPI (witness)	APPROVED GAD,REPORT
(B)	FITMENT & ALIGNMENT	MFR (hold) TPI (witness)	REPORT
(C)	PRESSURE TEST	MFR (hold) TPI (witness) OIL (witness)	REPORT, TEST CERTIFICATES
(D)	LEAKAGE TEST	MFR (hold) TPI (witness) OIL (witness)	REPORT, TEST CERTIFICATES
(E)	FIRE TEST (TYPE TEST)	MFR (review) TPI (review) OIL (review)	REPORT, TEST CERTIFICATES
(F)	OPERATIONAL TORQUE TEST	MFR (hold) TPI (witness) OIL (witness)	REPORT, TEST CERTIFICATES
(G)	CALIBRATION	MFR (hold) TPI (review) OIL (review)	CERTIFICATES
(H)	PAINTING	MFR (hold) TPI (review) OIL (review)	REPORT, TEST CERTIFICATES
(I)	HYDROSTATIC DOUBLE BLOCK & BLEED TEST	MFR (hold) TPI (witness) OIL (witness)	REPORT, TEST CERTIFICATES
(J)	FUNCTIONAL TEST	MFR (hold) TPI (witness) OIL (witness)	REPORT, TEST CERTIFICATES
TPI:THIRD PARTY INSPECTOR			
MFR:MANUFACTURER			
OIL INDIA LTD			

**4.0****4.1 FINAL DOCUMENTATION**

<b>S.N.</b>	<b>INSPECTION REQUIRED</b>	<b>INSPECTION BY &amp; PLAN</b>	<b>DOCUMENTS</b>
1.	FINAL DOCUMENTATION CHECK	MFR (hold) TPI (review)	FINAL REPORTS FINAL CERTIFICATES
TPI:THIRD PARTY INSPECTOR			
MFR:MANUFACTURER			
OIL INDIA LTD			

“hold” .....The test will be conducted

“review” .....The test report will be reviewed, verified

“witness” .....The test will be performed in the presence of the concerned personnel such as  
MFR, TPI and OIL.

**SCOPE OF SUPPLY FOR BALL VALVES**

Sl No	Valve Description	Total no. of valves reqd. in Nos.	No. of flanges reqd. per no of valve	No. of Gasket required per no of valve	No. of stud/bolt required per no of valves	Total nos of Flanges required against the Tender	Total no. of Gasket required against the Tender	Total no. of stud/bolt required against the Tender
(a)	(b)	(c)	(d)	(e)	(f)	(g)=(c )x( d)	(h)=(c)x(e)	(i)=( c)x(f)
1	4" X 300 Class API 6DBall Valve	15	2	2	16	30	30	240

In the event of placement of Purchase Order against our firm, we hereby confirm to supply the required numbers of Gaskets and Stud/Bolts under column (f) and (g) respectively as per tender specification.

**Also we confirm to supply the one no. of Lever Wrench with each Valve required for operation of the Valves.**

Signature \_\_\_\_\_

Name \_\_\_\_\_

Bidders' Seal

Deviation Sheet

Annexure - F

Tender No. ....	
Offer No.....	Item No.....
Requirement as per specification	Description of Waiver/Deviation
Why the Waiver/Deviation is required?	
Supporting evidence / Calculations enclosed / not enclosed	



**TECHNICAL COMPLIANCE CHECK-LIST**

Sl. No.	NIT Requirement	Compliance		Vendors' Deviation/ Remarks
		Yes	No	
1.0	Bidder confirm that the quoted Valves are as per Valve Datasheet as per Annexure-A			
2.0	Bidder Confirm that the they comply to all the points of Technical Specification and Special Notes as per <b>Annexure-B</b>			
3.0	Bidder Confirm that the they shall Mark their Valves as per Valve Marking <b>Annexure-C</b>			
4.0	Bidders Quality Assurance Procedure (QAP) (as <b>Annexure-D</b> ) is submitted along with the bid.			
5.0	Scope of supply under this tender shall be as per <b>Annexure-E</b> . Confirmation to the same is submitted.			
6.0	Bidders to confirm that they have filled up any Deviation from the tender in the Format as per <b>Annexure-F</b>			
7.0	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.			
8.0	Vendor to provide valid API 6D authorization certificate.			
9.0	Vendor to confirm that all valves shall meet the fire safe design requirement as per API-6FA.			
10.0	Vendor to confirm that delivery of materials will be done within 3 (three) months after PO placement.			
11.0	Vendor to confirm that all the Inspection and Test will be carried out as per the NIT and QAP.			
12.0	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.			
13.0	Vendor to confirm along with materials: The submission of Test certificates of raw material used, Hydraulic Test conducted, Air Test/Magnetic Particle test conducted and dimensional check.			
14.0	Vendor to confirm to provide API monogram on the valve body as per NIT.			
15.0	Vendor to confirm to provide permanent marks (i.e. Manufacturer name, Valve Size, Pressure Rating, Serial No, Manufactured for OIL, OIL PO No) in the valve body as per NIT.			
16.0	Vendor to confirm that all the material will be thoroughly cleaned & painted with anti-corrosive paint or varnish to avoid corrosion as per NIT.			
17.0	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.			
18.0	Vendor to confirm that packing and tagging of finished product for dispatch will be done as per NIT.			