



Oil India Limited
(A Govt. of India Enterprise)
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Tender No. & Date : SDG 4681P18/06 dated: 12.05.2017

Tender Fee : INR 6,000.00 OR USD 100.00

Bid Security Amount : INR 46,400.00 OR USD 720.00

Bidding Type : **SINGLE STAGE COMPOSITE BID SYSTEM**

Period of Sale of
Bid Documents : **From 05.06.2017 to 12.07.2017; 15:30 Hrs.(IST)**

Bid Closing on : **19.07.2017 (at 11.00 Hrs. IST)**

Bid Opening on : **19.07.2017(at14.00 Hrs. IST)**

Bid Validity : Bid should be valid for **90 days** from bid closing date.

Bid Bond Validity : Bid Bond Should be valid up to **20.01.2018**

Performance Guarantee : **Applicable @ 10% of Order value**

Integrity Pact : **Not Applicable**

Annexures : **A, B, C& D**

Note : If GST is roll-out during the course of execution of the contract then the same will be applicable.

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No.	MATERIAL DESCRIPTION	QTY.	UOM
10	Supply of 20" X 16" O.D. Scrapper Launcher as per Note-1, Datasheet-1 & drawing-1 along with pig signaller as per Note - 2 and Datasheet-3.	01	NO.

E-Tender No. SDG4681P18/06

20	Supply of 22" X 16" O.D. Scraper Receiver as per Note-1, Datasheet-2 & drawing-2 along with pig handling plus fitted with pig signaller as per Note-2 and Datasheet-3	01	NO.
30	Supply of pipe line Monolithic insulating joint as per ASME VIII DIV.1 for 400 MM NB (16"), API 5L Gr.X-60, PSL-2, ERW/LSAW/HSAW, Natural gas transportation pipeline as per Datasheet-4.	02	NOS.

(A) General Notes for e-tender :

- 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.
- Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.
- 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 **DGM- Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam or before 13:00 hrs (IST)** on the Bid Closing Date mentioned in the Tender.
 - Original Bid Security along with two duplicate copies of Bid Security.
 - Any other document which have been specified to be submitted in original.
- 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.
- 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.
- All the Bids must be Digitally Signed using "Class 3" digital certificate (*e-commerce application*) with organisation names 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.
9. The tender is invited under SINGLE STAGE-COMPOSITE BID SYSTEM. The bidder has to submit both the “TECHNO-COMMERCIAL UNPRICED BID” and “PRICED BID” through electronic form in the OIL’s e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The “Techno-commercial Unpriced Bid” shall contain all technical and commercial details except the prices which shall be kept blank. Details of prices as per Bid format / Commercial bid to be uploaded as attachment in the Attachment Tab “Notes and Attachments”.

Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.

Notes and Attachments	→ Only Price Details Should Be Uploaded
Technical attachments	→ All technical bid documents except price details

Please do refer “**NEW INSTRUCTION TO BIDDER FOR SUBMISSION**” for the above two points and also please refer “ **New Vendor Manual (effective 12.0.2017)** ” available in the login Page of the OIL’s E-tender Portal.



Oil India Limited e-Procurement

User ID *

Password *

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Click here for the New Manual & Instruction

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9. Payment against Tender Fee should be made only through online mode and no other instrument (Cash/DD/Cheques/Cashier Cheque, etc) will be acceptable.

10. Against Bid Security/EMD/Performance Bank Guarantee – Only payments through online mode or Submission of Bank Guarantee/LC will be acceptable. No DD/Cheques/Cashier Cheque or any other mode will be acceptable.

(B) Special Notes for Bidders :

FOR ITEM NO 10 AND 20

SCOPE OF SUPPLY FOR ITEM 10 & 20:

Design, manufacture, assembly at shop, inspection, testing at manufacturers works, packing and supply of the following, including supply of all commissioning spares and documentation as per enclosed specification, instruction to vendors, data sheets etc. and other codes and standards attached or referred.

Item No.	Material Description	Quantity
10	Supply of 20" X 16" O.D. Scraper Launcher as per Note-1, Datasheet-1 & drawing-1 along with pig signaller as per Note - 2 and Datasheet-3.	1 (one) set
20	Supply of 22" X 16" O.D. Scraper Receiver as per Note-1, Datasheet-2 & drawing-2 along with pig handling plus fitted with pig signaller as per Note-2 and Datasheet-3	1 (one) set

SPECIAL TERMS AND CONDITION:

1.0 Following commissioning spares to be supplied along with the items.

- Gasket for QOC, 22", 300# = 3 Nos.
- Gasket for QOC, 20", 300# = 3 Nos.
- Seal for Pig Signaller = 3 Nos.
- Extraction tool for Pig Signaller = 2 Nos.

2.0 The QOC, intended to be in the Scraper barrels are to be designed as per ASME-VIII, Div-1, 35-a and these shall have credential of supplying to International Oil and Gas Companies.

3.0 Bidder shall provide test plan for all items as per International standards.

4.0 All materials are to be guaranteed for 12 months from the date of commissioning or 18 months from the supply whichever is earlier.

THIRD PARTY INSPECTION:

1. Independent third party inspection of the items shall be carried out by OIL enlisted Third Party Inspection Agency only. OIL's approved TPI agencies are M/s Lloyds, M/s Bureau Veritas, M/s IRS, M/s Rites, M/s DNV or M/s Tuboscope Vetco. Scope for Third Party Inspection shall be as under.

- a) TPIA shall review (if necessary witness) and certify all the inspections and tests carried out as per Note 1 para 5.0 and Note2 para 4.0 of the tender.
- b) TPIA may carry out additional tests or inspection he may feel deemed necessary within the scope of the referred codes and standards.

NOTE-1: STANDARD SPECIFICATION FOR SCRAPER TRAPS (ONSHORE)

CONTENTS

1.0 SCOPE

2.0 REFERENCE DOCUMENTS

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4.0 DESIGN AND CONSTRUCTION
5.0 INSPECTION AND TESTS
6.0 TEST CERTIFICATES
7.0 PAINTING, MARKING AND SHIPMENT
8.0 SPARES AND ACCESSORIES
9.0 DOCUMENTATION

1.0 SCOPE:

This specification covers the basic requirements for design, manufacture and testing of scraper launching and receiving traps to be installed in pipeline system transporting non-sour hydrocarbons in liquid or gaseous phase including Liquefied Petroleum Gas (LPG).

2.0 REFERENCE DOCUMENTS:

2.1 Reference has been made in this specification to the latest edition of the following codes, standards and specifications:

- a) ASME B 31.4 - Pipeline Transportation System for liquid hydrocarbons and other Liquids.
- b) ASME B 31.8 - Gas Transmission and Distribution Piping Systems.
- c) ASME B 16.5 - Steel Pipe Flanges and Flanged Fittings
- d) ASME B 16.9 - Factory made Wrought Steel Butt Welding Fittings.
- e) ASME B 16.11 - Forged Steel Fittings, Socket # Welding and Threaded.
- f) ASME B 16.25 - Butt-welding Ends.
- g) ASME B 16.47 - Large Diameter Steel Flanges
- h) MSS-SP-53 - Quality Standard for steel Castings and Forgings for Valves, Flanges and Fittings and other Piping Components # Magnetic Particle Examination Method.
- i) MSS-SP-75 - Specification for High Test Wrought Welding Fittings.
- j) MSS-SP-97 - Integrally Reinforced forged Branch outlet Fittings Socket Welding Threaded Butt Welding Ends.
- k) SSPC-VIS-I - Steel Structures Painting Council-Visual Standard.
- l) ASME SEC.VIII and IX - Boiler and Pressure Vessels Code.

m) API 1104 - Specification for Welding Pipeline and Related Facilities.

n) ASTM A 23 A - Specification for Piping Fittings of Wrought Steel and Alloy Steel for Moderate and Elevated Temperature.

o) ASTM A 370 - Mechanical testing of steel products

2.2 In case of conflict between the requirements of this specification and the Codes, Standards and Specifications referred to in this specification, the requirements of this specification shall govern.

3.0 MATERIALS

3.1 Materials and thicknesses of main components used in manufacture of traps shall be indicated by Manufacturer and shall be suitable for the service conditions indicated in the data sheets. These shall be subject to approval by OIL. [The steel used shall have specified Minimum Yield Strength (SMYS) of 35,000 psi (Minimum).]

3.2 Fully killed carbon steel shall be used.

3.3 Materials of the ends to be field welded by OIL shall have carbon equivalent less than or equal to 0.45, based on check analysis for each heat of steel, calculated according to the following formula :

$$CE = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15$$

3.4 For Scraper Traps, specified to be used for Gas service or High Vapour Pressure (HVP) liquid service, Charpy V-notch test shall be conducted on each heat of steel used in the manufacture of pressure containing parts of Scraper Traps. The test procedure shall conform to ASTM A 370. Unless specified otherwise, the Charpy V-notch test shall be conducted at 0o C. The Charpy V-notch test specimens shall be taken in the direction of principal grain flow and notched perpendicular to the original surface of the plate or forging.

The minimum average absorbed impact energy values of three full-sized specimens of base metal, weld metal and HAZ shall be 27 joules, unless otherwise indicated in the Data Sheet. The minimum impact energy value of any one specimen of the three specimens analyzed as above shall not be less than 80% of the above mentioned average value.

For Scraper Traps, specified to be used for other hydrocarbon service, the Charpy V-notch test requirements as stated above are not applicable.

3.5 For Scraper Traps, specified to be used for Gas service or High Vapour Pressure (HVP) liquid service, hardness test shall be carried out as per ASTM A 370 for each heat of steel used.

A full thickness cross section shall be taken for this purpose and the maximum hardness of base metal, weld metal and HAZ of all the pressure containing parts shall not exceed 248 HV10.

The maximum difference in hardness of Base Metal, Weld Metal and Heat Affected Zone (HAZ) of pressure containing parts of the traps shall less than 80 points Vicker's HV10.

For Scraper Traps, specified to be used for other hydrocarbon services, the hardness requirements stated above are not applicable.

4.0 DESIGN AND CONSTRUCTION

4.1 The cylindrical portion of the trap shall be designed as per design code and design factor indicated in the data sheets. Quick end closure shall be designed as per ASME Sec. VIII Div. I for design conditions indicated in data sheets. A corrosion allowance, as provided for the pipeline (refer data sheets) shall be considered in design of the traps also. Quality of welding shall be such that weld efficiency factor of 1.0 is achieved.

4.2 The trap shall be suitable for handling instrumented pigs and shall conform to the dimensions given in scraper trap data sheets. Dimensions not shown specifically shall however be as per manufacture's standard. Circumferential weld on scraper trap body and neck shall not be permitted.

4.3 Concentric or eccentric reducer, as indicated in data sheets, used in the manufacture of traps shall conform to MSS-SP-75.

4.4 Vents and drains shall be provided on each trap. The traps shall be provided with a suitable slope and the drain location shall be such that complete drainage of the trap is possible. Location and sizes for vents and drains shall be as indicated in data sheets.

4.5 All branch connections shall be made by weldolet / nippolet or by extrusion as indicated in Scraper Trap Data Sheet. All weldolets shall conform to MSS-SP-97 and all nippolets shall be as per Manufacturer's Standard. The extruded openings shall be adequately heat-treated and stress relieved.

4.6 End connections of traps shall be flanged or butt-welded as indicated in data sheets.

c) Flanged ends, if specified, shall have dimensions as per ASME B 16.5 for sizes upto 24 and above. Flange facing shall be as indicated in data sheets.

d) Butt weld ends, if specified, shall have ends prepared as per ASME B 16.25. However, end preparation for butt-welding ends having unequal thicknesses with respect to connecting pipe shall be as per ASME B 31.8, as applicable.

4.7 The quick opening end closure shall be of clamp ring / band-lock type or equivalent design and shall consists of a safety system allowing the opening only when there is no pressure in the trap. End closure shall be hand operated and operable by one operator. End closures of size 24

NB and above shall be fitted with work gear operator for the opening of the closure. Hinge of the closure shall be so designed that the weight of the end closure is fully supported without sagging. Screwed type or plug-in type of end closures is not permitted.

4.8 Launching and Receiving traps shall be provided with a pig indicator at a location indicated in the Scraper Trap Data Sheet. Pig indicator shall be suitable for bi-directional operation and shall have visual flag and manual reset. The same shall also have provision for remote indication as indicated in Pig Signaler Data Sheet. The pig indicator shall conform to the relevant pig indicator specification and data sheet.

4.9 When specified in the data sheet, handling system for retracting the scraper and instrumented pigs from the trap shall be provide with each trap. The system shall be of self contained complete with handling devices.

4.10 Fabricated steel supports, minimum two numbers at suitable spacing shall be provided with traps for mounting on concrete blocks. These supports will not be subjected to pipeline anchorage forces. The material of support shall be compatible with trap material for welding purposes. All welds shall be examined by magnetic particle method.

4.11 Completed assembly shall be stress relieved as per the provisions of the design codes.

4.12 All welds shall be made by welders and welding procedures qualified in accordance with the provisions of ASME Sec. IX. The procedure qualification shall also include impact test and hardness test when required as per Clause 3.4 and 3.5 of this specification and shall meet the requirements as specified therein.

4.13 Repair by welding on parent metal is not allowed. Repair of welds shall be carried out only after specific approval by OIL's Inspector for each repair. The repair welding shall be carried out by the welders and welding procedures duly qualified as per ASME Sec. IX and records for each repair shall be maintained. The repair welding procedure qualification shall also include impact test and hardness test when required as per Clause 3.4 and 3.5 of this specification and shall meet the requirements as specification.

4.14 The traps shall be equipped with a half internal removable filtering basket consisting of a punched plate with at least five rows of drain holes.

4.15 The tolerance on internal diameter and out of roundness at the ends for the welding end of the neck (at the end where connecting pipeline will be welded) shall be as per applicable connected pipe specification as indicated in the Data Sheet.

5.0 INSPECTION AND TESTS

5.1 The manufacturer shall perform all inspection and tests as per the requirements of this specification and the relevant codes, prior to shipment at his works. Such inspections and tests shall be, but not limited to, the following.

5.1.1 All traps shall be visually inspected.

5.1.2 Dimensional check shall be carried out as per the approved drawings.

5.1.3 Chemical composition and mechanical properties shall be checked as per relevant material standards and this specification, for each heat of steel used.

5.1.4 Hydrostatic test shall be conducted for all scraper traps complete in all respects including mounting of pig indicators at a pressure as indicated in the data sheets. The test pressure shall be maintained and held for a minimum period of the hour.

5.1.5 All butt welds shall be 100% radio graphically inspected. Procedure and acceptance criteria shall be as per API 1104.

5.1.6 Ultrasonic or magnetic particle inspection shall be carried out on all welds, which in OIL Inspector's opinion cannot be radio graphically inspected. Procedure and acceptance criteria shall be as per ASME Sec. VIII, Appendix U and Appendix VI respectively.

5.1.7 All finished wrought weld ends shall be 100% ultrasonically inspected for lamination type defects for a distance of 50 mm from the end. Any laminations larger than (1/4") 6.35 mm shall not be acceptable.

5.1.8 All forgings shall be wet magnetic particle examined on 100% of the forged surfaces. Method and acceptance shall comply with MSS-SP-53.

5.1.9 A minimum of two closing and opening cycles shall be performed and correct operation of both quick opening closure and safety system shall be ascertained.

5.2 OIL's Inspector reserves the right to perform stage wise inspection and witness tests, including hydrostatic test, as indicated in specification at Manufacturer's Works prior to shipment. Manufacturer shall give reasonable notice of time and shall provide without charge reasonable access and facilities required for inspection, to the OIL's Inspector.

Inspection and tests performed / witnessed by OIL's Inspector shall in no way relieve the Manufacturer's obligation of specific integrity of the scraper traps.

6.0 TEST CERTIFICATES:

Manufacturer shall furnish the following certificates:

a) Test certificates relevant to the chemical and mechanical properties of the materials used for manufacture of trap as per relevant standards and this specification.

b) Hydrostatic test certificates.

c) Test Reports on radiography, ultrasonic inspection and magnetic particle examination.

d) Test Reports on heat treatment carried out, if any.

The certificates shall be considered valid only when signed by OIL's Inspector.

7.0 PAINTING, MARKING AND SHIPMENT

7.1 After all inspection and tests required have been carried out; all external surfaces shall be thoroughly cleaned to remove grease, dust and rust. Surface preparation shall be carried out by shot blasting to SP-6 in accordance with #Steel Structures Painting Council Visual Standard-SSPC-VIS-1#. Machined parts shall be coated with anti-rust removable paint and non-machined parts shall be applied with two coats of protective paint. Manufacturer shall indicate the type of paint used in the drawings submitted for approval.

7.2 Marking shall be done on a stainless steel plate and affixed to the trap body by means of corrosion resistant fasteners. Marking shall include the following:

- a) Manufacturer's Name
- b) Trap / Neck diameter, thickness
- c) ASME Class Rating
- d) Tag Number
- e) Hydrostatic Test pressure
- f) Design Pressure & Design Temperature
- g) Year of manufacture
- h) Empty weight of the trap assembly.

7.3 Before shipment, traps shall be properly packed against damage during transportation. All machined surfaces subject to corrosion during transit shall be well protected by coat of grease or other suitable material. All traps shall be provided with suitable protectors, for flange faces, securely attached to the traps. Bevel ends shall be protected with metallic or high impact plastic bevel protectors.

7.4 Only those traps, which have been inspected and certified by the OIL's Inspector, shall be shipped.

8.0 SPARES

8.1 Manufacturer shall furnish list of recommended spares and accessories for Scraper Traps required during start up and commissioning. As a minimum, the commissioning spares shall

include 200% extra consumable spares viz. gaskets / o-rings / seals etc. for each trap. Cost of such spares shall be loaded by the Manufacturer in the item rates quoted by them.

8.2 Manufacturer shall furnish separately a list of recommended spares and accessories required for two years of normal operation and maintenance of Scraper Traps.

9.0 DOCUMENTATION

9.1 Manufacturer shall furnish at the time of bidding, the following documents:

- a) General arrangement drawing of scraper trap, quick opening end closure and pig signalers with overall dimensions.
- b) Clause wise list of deviations from these specifications, if any, listed at one place in the document, with specific declaration if none.
- c) Reference list of similar supplies for the past five years including project, client, and years of supply and contract person.
- d) Quality assurance plan.
- e) List of recommended spares and accessories for scraper traps required during start up and commissioning.
- f) List of recommended spares and accessories required for two years of normal operation and maintenance of scraper traps.

9.2 Within three weeks of placement of order, the Manufacturer shall submit four copies of but not limited to, the following drawings, documents and specifications for approval:

- a) Calculations according to the relevant codes for the body and neck including branch connections and quick end closure.
- b) Trap assembly and sectional drawings showing all parts and accessories with materials and dimensions.
- c) Support Assembly drawing.
- d) Arrangement & details of foundation bots for pig handling and lifting system, where applicable.
- e) Welding procedure and method of manufacture.
- f) Record of successful proof test in accordance with provisions of ASME B 16.9, MSS-SP 75, MSS-SP 97 as applicable.

Manufacturing of traps shall commence only after approval of above mentioned documents. Once the above mentioned documents have been approved by the OIL, any changes in design, material and method of manufacture shall be notified to the OIL, whose approval in writing of all changes shall be obtained before the traps are manufactured.

9.3 Within four weeks from the approval date Manufacturer shall submit one reproducible and six copies of all approved drawings, documents and specifications as listed in clause 9.2 above.

9.4 Prior to shipment, the Manufacturer shall submit one reproducible and six copies of the following:

- a) Test certificate as listed in clause 6.0 of this specification.
- b) Manual for installation, erection instructions, maintenance and operations instructions.

9.5 All documents shall be in English Language.

NOTE-2: STANDARD SPECIFICATION FOR PIG SIGNALLERS

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1.0 SCOPE
2.0 MATERIALS
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4.0 INSPECTION AND TESTS
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7.0 SPARES AND ACCESSORIES
8.0 DOCUMENTATION

1.0 SCOPE

This specification covers the minimum requirements for the design, manufacture, testing and supply of Pig Signalers, used for the detection of passage of scraper and instrumented gauging pigs, to be installed in pipeline systems handling hydrocarbons in liquid or gaseous phase including Liquefied Petroleum Gas (LPG).

This specification does not cover pig signalers for sour hydrocarbons (liquid / gas) service as defined in NACE Standard MR 0175-98.

2.0 MATERIALS

2.1 The material used in manufacture of the main components of the Pig Signaler shall be as under :

- a. All metallic parts except scar fed welding base: SS316
- b. Scar fed welding base : CS, ASTM A 105
- c. Soft Seats : PTFE / VITON

Other components shall be as per Manufacturer's Standard, suitable for the service conditions indicated in Data Sheet, which will be subject to approval by OIL.

2.2 Scar fed welding base shall have Carbon Equivalent (CE) not greater than 0.45 on check analysis, calculated as per the following formula:

$$CE = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15$$

2.3 Carbon steel used in the manufacture of pig signaler shall be fully killed.

3.0 DESIGN AND CONSTRUCTION REQUIREMENTS

3.1 Pig Signalers shall be designed to meet the requirements of pipeline material, diameter, wall thickness and service conditions indicated in the Data Sheet.

3.2 Pig Signaler shall be bi-directional type, having pivot-less tumbler mechanism and laminated trigger blades.

3.3 Design of Pig Signalers shall be such that any possibility of Signaler being operated by line pressure is eliminated. Also design of Pig Signalers shall be such that repair and installation of internal / accessories are possible under pressure, without removing the unit from the line.

3.4 Pig Signaler shall be provided with a visual indicator to indicate the passage of pigs, by means of spring loaded metal shaft. The arm shall lock in down position when manually reset.

3.5 All welds shall be made by welders and welding procedures qualified in accordance with the provision of ASME Section IX.

4.0 INSPECTION AND TESTS

4.1 Manufacturer shall perform all inspection and tests required to supply the Pig Signaler as per requirements of this specification.

4.2 Hydrostatic tests shall be conducted at a pressure as indicated in the data sheets.

4.3 All welds shall be non-destructively examined.

4.4 The welding end shall be inspected ultrasonically over the entire circumference for lamination type defects. Any lamination larger than 6.35 mm shall not be acceptable.

4.5 Manufacturers shall perform functional tests to establish satisfactory performance of both manual.

4.6 All Pig Signalers shall be visually inspected.

4.7 Chemical composition and mechanical properties shall be checked as per relevant materials standards and this specification, for each heat of steel used.

4.8 All forgings shall be wet magnetic particle examined on 100% of the forged surfaces. Method and acceptance shall comply with MSS-SP-53.

5.0 TEST CERTIFICATES

Manufacturer shall submit the following test certificates:

5.1 Test certificates for material compliance as per the relevant material standards.

5.2 Certificate for hydrostatic test and functional tests.

5.3 Test reports of ultrasonic / magnetic particle inspection.

6.0 PAINTING, MARKING AND SHIPMENT

6.1 Exterior surface of the Pig Signaler shall be thoroughly cleaned, freed from rust and grease and applied with sufficient coats of corrosion resistant paint. In case of Pig Signalers with extension, the buried portion shall be coated with three coats of coal tar epoxy resin. The minimum dry film thickness shall be 300 microns.

6.2 A corrosion resistant metal tag shall be permanently attached with each unit, with the following marking :

- i) Manufacturer's name.
- ii) Suitable for installation in _____ dia. pipeline
- iii) ANSI Rating
- iv) Tag No.

6.3 Each unit shall be suitably protection to avoid any damage during transit Care shall be exercised during packing to prevent any damage to the welding ends. All machined surfaces subject to corrosion shall be well protected by a coat of grease or other suitable materials.

7.0 SPARES AND ACCESSORIES

7.1 Manufacturer shall furnish list of recommended spares and accessories for Pig Signalers required during start up and commissioning. Cost of such spares shall be loaded by the Manufacturer in the item rates indicated in quotation.

7.2 Manufacturer shall furnish separately a list of recommended spares and accessories required for two years of normal operation and maintenance of Pig Signalers.

8.0 DOCUMENTATION

8.1 At the time of bidding, Manufacturer shall submit the following documents:

- a. General arrangement drawings with overall dimensions and cross sectional drawings.
- b. Reference list of similar supplies of Pig Signaler shall be furnished including project, Year of supply, Client, Size, Rating and service for the last five years.
- c. Clause wise list of deviations from this specification, if any.

8.2 Within three weeks of placement of order, the Manufacturer shall submit four copies, but not limited to, the following drawings, documents and specifications for approval.

- a. Fabrication drawing / sectional arrangement drawings showing all parts with reference numbers and material specification.
- b. Assembly drawing with overall dimension.
- c. Welding and testing procedure.
- d. Quality Assurance Plan.

Once, the approval has been given by OIL, any change in design, material, etc. shall be notified to OIL whose approval in writing of all such changes shall be obtained before Pig Signalers are manufactured.

8.3 Within four weeks from approval date, Manufacturer shall submit one reproducible and six copies of the drawings, documents and specifications as listed in clause 8.2 of this specification.

8.4 Prior to shipment, Manufacturer shall submit one reproducible and six copies of the following :

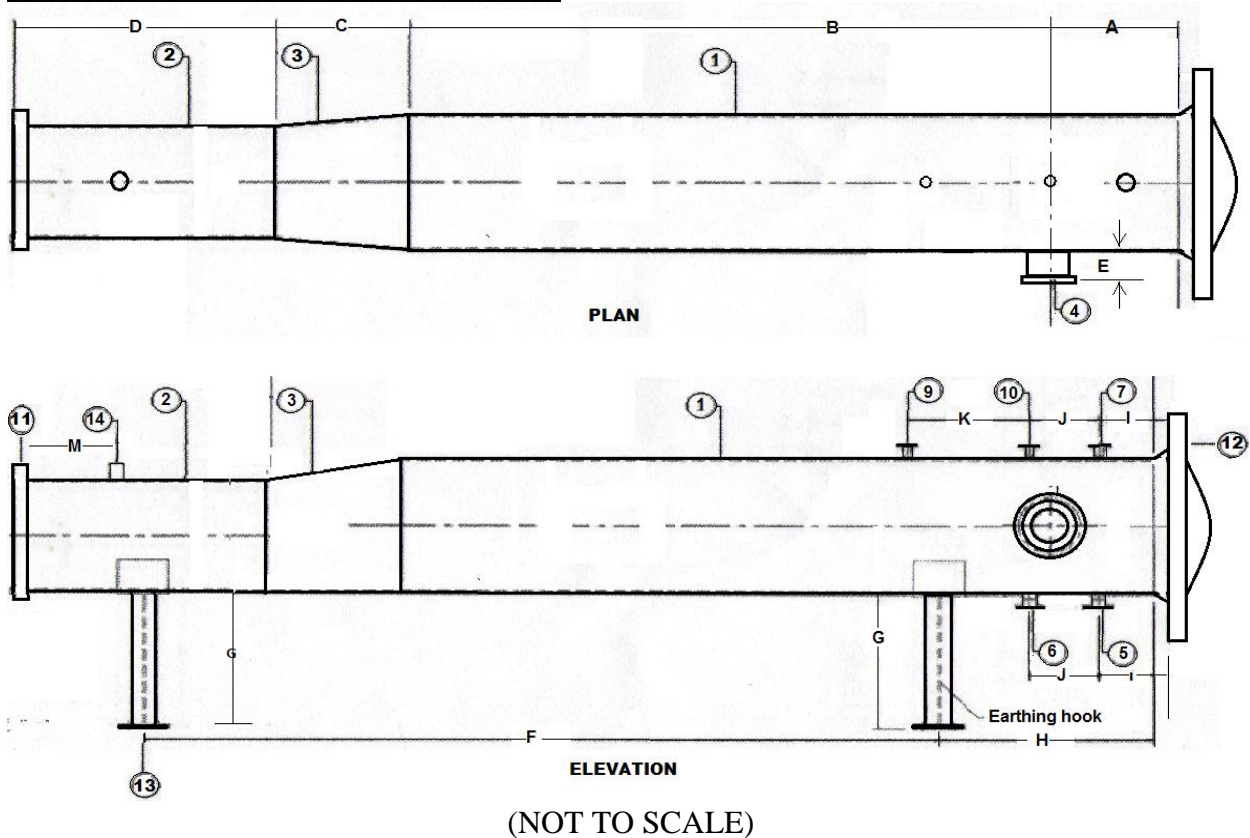
- a. Test Certificate as per clause 5.0 of this specification.
- b. Manual for installation, erection instructions, maintenance and operation instructions.

8.5 All documents shall be in English language.

DATA SHEET-1							
PIPELINE DETAILS							
Nominal Diameter, MM(inch)		400 (16'')NB		Wall Thickness, MM		6.4	
Material		API 5L Gr.X-60, PSL-2, ERW/LSAW/HSAW					
Design Temperature (deg C)		Max	65	Service	Sweet Natural Gas		
		Min	-28	Design code	ASME B 31.8	ANSI rating	300 class
SCRAPER DETAILS							
Type of Scraper Trap		Scraper Launcher					
Corrosion Allowance		3.0 MM					
Design Factor		0.72					
Joint Efficiency		1					
Operating Pressure		30 Kg/cm ² g					
Hydro Static Test pressure		60 Kg/cm ² g					
Hydro Static Test (Duration)		4 Hours					
Part No.	Description	Item	End/Type	Material (Eqv./ Superior)	Nom. Dia. MM(inch) / Thk. , MM(inch) or Schedule	Classes	
1	Body(Major)	Pipe	BE	API 5L Gr.X-60	500 (20'')	--	
2	Neck(Minor)	Pipe	BE	API 5L Gr.X-60	400 (16'')	--	
3	Eccentric Reducer	Fitting	BW	MSS-SP-75 Gr. WPHY 60	400 (16'') X 500 (20'')	300	
4	Kicker Conn.	Flange + Weldolet	WN RF	ASTM A 105	300 (12'')	300	
5	Drain Conn.	Flange + Weldolet	WN RF + BW	ASTM A 105	100 (4'')	300	
6	Utility Conn.	Flange + Weldolet	WN RF + BW	ASTM A 105	100 (4'')	300	
7	Vent	Flange + Weldolet	WN RF + BW	ASTM A 105	50 (2'')	300	
8	Pr. Balancing Not Required						
9	Pr. Gauge conn.	Nippolet Forged	PE	ASTM A 105	20 (3/4'')	3000	
10	TSV conn.	Nippolet Forged	PE	ASTM A 105	20 (3/4'')	3000	
11	End Flange	Flange	WN RF	ASTM A 105	400 (16'')	300	
12	End Closure Quick Opening	Forged	BW	ASTM A 105	500 (20'')	300	
13	Support Plate	Welded part	BW	ASTM A 36	As per design		
14	Pig Signaler As per note 2 and data sheet-3						

BE: BEVELLED END, PE: PLAIN END, BW: BUTT WELDED, RF: RAISED FACE
Companion blind flange of same class (rating) to be provided against part nos. 5, 6 & 7.

DRAWING NO.-1 (LAUNCHING TRAP)



DIMENSION DETAILS			
Marking	Dimension (mm)	Marking	Dimension (mm)
A	500	G	450
B	3630	H	1500
C	508	I	300
D	800	J	300
E	As per Std.	K	800
F	3440	M	300

NOTE :

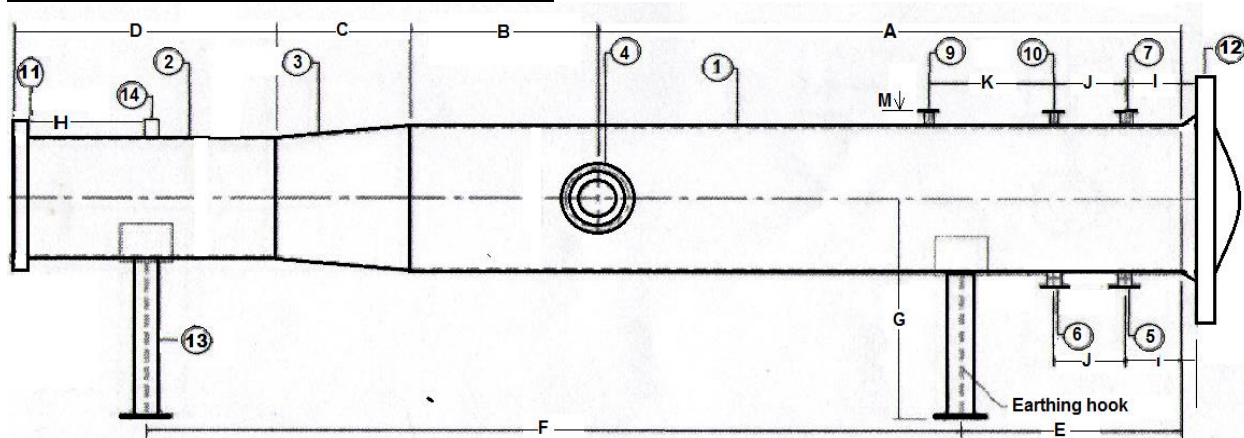
1. Orientation of all the nozzles is indicative and shall be confirmed during drawing approval stage.
2. Thickness for body & neck indicated are minimum. Manufacturer shall check same based on pipeline design conditions and manufacturing requirements, and submit necessary calculations to Company for approval.
3. All Flanges welded on Scraper Launcher shall have face finish to 125-250 AARH.
4. All carbon steel fittings / flanges made from ASTM A 105 material shall be heat treated by normalizing in accordance with ASTM A 961. All carbon steel fittings and flanges made from ASTM A 105 material shall be finish forged i.e. forged to be the required shape. Machined fittings and flanges are not acceptable.

5. For the welding end, the out of roundness (i.e. difference between maximum and minimum ID at pipe end) shall be 3.0 mm and tolerance on internal diameter at pipe ends shall be same as diameter tolerance for the pipe ends indicated in API 5L Table 8.

DATA SHEET-2							
PIPELINE DETAILS							
Nominal Diameter, MM(inch)		400 (16'')NB		Wall Thickness, MM		6.4	
Material		API 5L Gr.X-60, PSL-2, ERW/LSAW/HSAW					
Design Temperature (deg C)		Max	65	Service	Sweet Natural Gas		
		Min	-28	Design code	ASME B 31.8	ANSI rating	300 class
SCRAPER DETAILS							
Type of Scraper Trap		Scraper Receiver					
Corrosion Allowance		3.0 MM					
Design Factor		0.72					
Joint Efficiency		1					
Operating Pressure		30 Kg/cm ² g					
Hydro Static Test pressure		60 Kg/cm ² g					
Hydro Static Test (Duration)		4 Hours					
Part No.	Description	Item	End/Type	Material (Eqv./ Superior)	Nom. Dia. MM(inch) / Thk. , MM(inch) or Schedule	Classes	
1	Body(Major)	Pipe	BE	API 5L Gr.X-60	550 (22'')	--	
2	Neck(Minor)	Pipe	BE	API 5L Gr.X-60	400 (16'')	--	
3	Eccentric Reducer	Fitting	BW	MSS-SP-75 Gr. WPHY 60	400 (16'') X 550 (22'')	300	
4	Kicker Conn.	Flange + Weldolet	WN RF	ASTM A 105	300 (12'')	300	
5	Drain Conn.	Flange + Weldolet	WN RF + BW	ASTM A 105	100 (4'')	300	
6	Utility Conn.	Flange + Weldolet	WN RF + BW	ASTM A 105	100 (4'')	300	
7	Vent	Flange + Weldolet	WN RF + BW	ASTM A 105	50 (2'')	300	
8	Pr. Balancing Not Required						
9	Pr. Gauge conn.	Nippolet Forged	PE	ASTM A 105	20 (3/4'')	3000	
10	TSV conn.	Nippolet Forged	PE	ASTM A 105	20 (3/4'')	3000	
11	End Flange	Flange	WN RF	ASTM A 105	400 (16'')	300	
12	End Closure Quick Opening	Forged	BW	ASTM A 105	500 (20'')	300	
13	Support Plate	Welded part	BW	ASTM A 36	As per design		
14	Pig Signaler As per note 2 and data sheet-3						

BE: BEVELLED END, PE: PLAIN END, BW: BUTT WELDED, RF: RAISED FACE

Companion blind flange of same class (rating) to be provided against part nos. 5, 6 & 7.
DRAWING NO. -2 (RECEIVING TRAP)



ELEVATION

(NOT TO SCALE)

DIMENSION DETAILS			
Marking	Dimension (mm)	Marking	Dimension (mm)
A	2500	G	700
B	500	H	1500
C	508	I	300
D	3620	J	300
E	As per Std.	K	800
F	4100	M	200

NOTE:

1. Orientation of all the nozzles is indicative and shall be confirmed during drawing approval stage.
2. Thickness for body & neck indicated are minimum. Manufacturer shall check same based on pipeline design conditions and manufacturing requirements, and submit necessary calculations to Company for approval.
3. All Flanges welded on Scraper Launcher shall have face finish to 125-250 AARH.
4. Scraper Receiver shall be provided with suitable handling system for retraction of pigs (such as basket / tray inserting / retracting rod / mechanism). However, lifting devices (davit etc.) are not required.
5. All carbon steel fittings / flanges made from ASTM A 105 material shall be heat treated by normalizing in accordance with ASTM A 961. All carbon steel fittings and flanges made from ASTM A 105 material shall be finish forged i.e. forged to be the required shape. Machined fittings and flanges are not acceptable. Machining is permitted for weld end preparation and flange face finish preparation.
6. For the welding end, the out of roundness (i.e. difference between maximum and minimum ID at pipe end) shall be 3.0 mm and tolerance on internal diameter at pipe ends shall be same as diameter tolerance for the pipe ends indicated in API 5L Table 8.

DATA SHEET-3						
PIPELINE DETAILS						
Nominal Diameter, MM(inch)	400 (16”)NB		Wall Thickness, MM		6.4	
Material	API 5L Gr.X-60, PSL-2, ERW/LSAW/HSAW					
Design Temperature (deg C)	Max	65	Service	Sweet Natural Gas		
	Min	-28	Design code	ASME B 31.8	ANSI rating	300 class
PIG SIGNALER SPECIFICATION						
Part	Specified Material					
Body	ASTM A 105 or Equivalent.					
Internals	SS-316 or Equivalent.					
Type	Mechanical / Visual, Manual reset flag					
General	Signalers are to be mounted vertically to indicate passage of pigs through pipeline and are required to be welded on the pipes specified above. When the pig passage through then the flag is flipped from a position perpendicular to the axis of the signaler. The flag is received manually.					

NOTE:

1. Pig Signaler shall be without an isolation valve and shall be directly mounted on the scraper Receiver/launcher.

FOR ITEM NO 30

SCOPE OF SUPPLY FOR ITEM NO. 30 :

1.0 The scope covers the design, construction and supply of pipe line Monolithic insulating joint as per ASME VIII DIV.1 for natural gas transportation line. The purpose of insulating joints installation on gas and oil pipelines, it is to ensure electrical isolation among sections of pipelines preventing detrimental electrochemical interaction among the sections themselves. Insulating joints are also used to ensure effective current spreading on cathodic protection systems.

Item No.	Material Description	Quantity
30	Supply of pipe line Monolithic insulating joint as per ASME VIII DIV.1 for 400 MM NB (16”), API 5L Gr.X-60, PSL-2, ERW/LSAW/HSAW, Natural gas transportation pipeline as per Datasheet-4.	2 Nos.

2.0 REFERENCE DOCUMENTS:

2.1 Reference has been made in this specification to the latest edition of the following codes, standards and specifications:

- a) ASME B 31.4 - Pipeline Transportation System for liquid hydrocarbons and other Liquids.
- b) ASME B 31.8 - Gas Transmission and Distribution Piping Systems.
- c) ASME B 16.5 - Steel Pipe Flanges and Flanged Fittings
- d) ASME B 16.9 - Factory mad Wrought Steel Butt Welding Fittings.
- e) ASME B 16.11 - Forged Steel Fittings, Socket # Welding and Threaded.
- f) ASME B 16.25 - Butt-welding Ends.
- g) ASME B 16.47 - Large Diameter Steel Flanges
- h) MSS-SP-53 - Quality Standard for steel Castings and Forgings for Valves, Flanges and Fittings and other Piping Components # Magnetic Particle Examination Method.
- i) MSS-SP-75 - Specification for High Test Wrought Welding Fittings.

j) MSS-SP-97 - Integrally Reinforced forged Branch outlet Fittings Socket Welding Threaded Butt Welding Ends.

k) SSPC-VIS-I - Steel Structures Painting Council-Visual Standard.

l) ASME SEC.VIII and IX - Boiler and Pressure Vessels Code.

m) NACE RP 0286 - The electrical isolation of Cathodically protected pipelines

3.0 MATERIALS:

3.1 Materials for the pressure containing parts of the insulating joints shall be as indicated in the data sheets specifications for Insulating joints. Material for pups shall be equivalent or superior to the material of connecting pipeline which is indicated in the data sheets. Other part shall be as per manufacturer's standard suitable for the service condition indicated in the data sheets specifications for Insulating joints, which shall be subject to approval by OIL.

3.2 Insulating joints which are subjected to field welding by OIL shall have carbon equivalent (CE) not exceeding 0.45 based on check analysis for each heat of steel calculated according to the following formula:

$$CE = C + Mn/6 + (Cr+Mo+V)/5 + (Ni +Cu)/15$$

3.3 Charpy V-notch test shall be conducted on each heat of base material, weld metal and heat affected zone of all pressure containing parts such as body, welding ends in accordance with the impact test provisions of ASTM A 370 at a temperature of -20 °C/-4 °F. The charpy impact test specimens shall be taken in the direction of principal grain flow and notched perpendicular to the original surface of the plate of forging. Average impact energy value of three full sized specimens shall be 35 joules. Minimum impact energy value of individual specimen shall be 27 joules. No specimen shall exhibit less than 80% shear area. When Low Temperature carbon steel (LTCS) materials are specified in data sheet or offered by manufacturer, the charpy V-notch test requirements of applicable material standard shall be complied with.

3.4 Hardness test shall be carried out as per ASTM A370 for each heat of steel used. The maximum hardness of base metal, weld metal and heat affected zone of all pressure parts shall be 248 HV₁₀, unless specified otherwise.

3.5 Insulation material shall be minimum 20mm thick and shall comply section 5 of NACE RP 0286.

4.0 DESIGN AND CONSTRUCTION:

4.1 All Joints shall be of Monolithic type construction by welding pipe-pups on either side of it. The Insulating joints shall be designed and prepared for welding to fit the pipe size and grade specified by the client.

4.2 Construction shall not incorporate any flanges, bolts, nuts and threaded unions and structure shall be stiff, strong and suitable for maintenance free field installation, no matter if installed on buried or surface laid pipeline.

- 4.3 All materials used for the manufacture of the insulating joint shall be in accordance with clause 3.0 of this Specification.
- 4.4 The number of welds must be as restricted as possible.
- 4.5 Insulating joints shall allow free passage of scrapper instrumented pigs. The internal bore shall be same as that of connecting pipe including its tolerances.
- 4.6 All welds shall be made by welders and welding procedures qualified in accordance with the provisions ASME Section IX.
- 4.7 Insulating joint design and materials shall be capable of being vacuum tested to 1 millibar.
- 4.8 All design parameters shall be as per Insulating Joint Data Shee-4t. Detailed calculations shall be submitted for OIL's approval.
- 4.9 Two cleats shall be provided on the pups on either side of the insulating joint for connecting cables for measurement/ shorting purposes. Cleats shall be attached to the insulating joint by welding.
- 4.10 The average dielectric strength of the insulating joint shall be minimum 15 kilo Volts.

5.0 INSPECTION AND TESTS:

The Manufacturer shall perform all inspection and tests as per the requirements of this specification and the relevant codes, prior to shipment at his Works. Such inspection and tests shall be, but not limited to, the following:

- 5.1 All insulating joints shall be visually inspected.
- 5.2 Dimensional checks shall be carried out as per the OIL approved drawings.
- 5.3 Chemical composition and mechanical properties including hardness shall be checked as per relevant material standards and this specification, for each heat of steel used.
- 5.4 Non-destructive inspection of insulating joints shall be carried out as given below:
- a) All the NDT inspection including radiography shall be carried out preferably by level-3 NDT technicians, but not below level-2 and certified by TPIA. 100% radiography shall be carried out on all butt & repair welds of pressure containing parts. Acceptance limits shall be as per API 1104. Welds, which in OIL's Representative opinion cannot be inspected by radiographic methods, shall be checked by ultrasonic or magnetic particle methods. Acceptance criteria shall be as per ASME Section VIII Appendix-12 and Appendix-6 respectively.
 - b) All finished weld ends shall be 100% ultrasonically tested for lamination type defects for a distance of 50mm from the ends. Any lamination larger than 6.35 mm shall not be acceptable.
 - c) All forgings shall be wet magnetic particle inspected on 100% of forged surfaces. Method and acceptance shall comply MSS-SP-53.
 - d) All fillet weld of thickness < 6mm shall be examined 100% by magnetic particle inspection and ≥ 6 mm shall be examined 100% by UT. Acceptance criteria for MPI & UT shall be as per ASME Sec.VIII Appendix-6 & Appendix- 12 respectively.
- 5.5 Insulating joint shall be hydrostatically tested to a pressure as indicated in data sheet. The test duration shall be of 1(one) hour.
- 5.6 After the hydrostatic test insulating joints shall be tested with air at 5 kg/cm² for 10 minutes. The tightness shall be checked by immersion or with a frothing agent. No leakage shall be acceptable.
- 5.7 Dielectric Test:

- a) Insulation resistance of each insulating joint shall be at least 25 mega-ohms when checked with 500-1000 V DC.
- b) Insulating joint before and after the hydrostatic test, shall be tested for dielectric integrity for one minute at 5000 V A.C., 50 cycles and the leakage current before and after hydrostatic test shall be equal. Testing time voltage and leakage shall be recorded and certified.

No repair shall be permitted to the insulating joints failed in the above mentioned tests.

5.8 OIL reserves the right to perform stage wise inspection and witness test as indicated in Para 6.1 at Manufacturer's works prior to shipment. Manufacturer shall give reasonable notice of time and shall provide without charge reasonable access and facilities required for inspection to the OIL's Representative.

OIL's approved Third Party Inspection Agency (TPIA) shall be deputed by the MANUFACTURER for inspection at manufacturer premises to witness / review material Tests certification at manufacturer's cost. Inspection and tests performed/witnessed by the Purchaser's Representative shall in no way relieve the Manufacturer's obligation to perform the required inspection and test. OIL's approved TPI agencies are M/s Lloyds, M/s Bureau Veritas, M/s IRS, M/s Rites, M/s DNV or M/s Tuboscope Vetco.

6.0 TEST CERTIFICATES:

6.1 Manufacturer shall submit following certificates to Purchaser's Representative.

- a). Test certificates relevant to the chemical analysis and mechanical properties including hardness of the materials used for construction of insulating joint as per this specification and relevant standards.
- b). Test reports on non-destructive testing.
- c). Test certificates for hydrostatic and air tests.
- d). Test certificate for electrical resistance test.
- e). Test report for dielectric strength test.

7.0 PAINTING, MARKING AND SHIPMENT:

7.1 Insulating joint 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." External surfaces of buried insulating joints shall be painted with three coats of suitable coal tar epoxy resin with a minimum dry film thickness of 300 microns. Manufacturer shall indicate the type of corrosion resistant paint used, in the drawings submitted for approval.

7.2 Insulating joints shall be marked with indelible paint with the following data:-

- a). Manufacturer's name
- b). Suitable for- inch nominal diameter pipeline
- c). End thickness in MM
- d). Material
- e). Design Pressure/ Hydrostatic Test Pressure
- f). ANSI Class Rating
- g). Tag No.

- h). Year of Manufacture
- i). PO No.

7.3 Insulating joints shall be suitably protected to avoid any damage during transit. Metallic bevel protectors shall be provided to weld ends.

7.4 Only those insulating joints, which have been inspected and certified by Purchaser, shall be shipped.

8.0 DOCUMENTATION:

8.1 All documents shall be in English Language.

8.2 At the time of bidding, Bidder shall submit the following documents:-

- a) General arrangement drawing along with cross sectional view, overall dimensions and details of insulating materials recommended.
- b) Reference lists of previous supplies of insulating joint of similar specification.
- c) Clause wise list of deviation from this specification, if any.

8.3 Within three weeks of placement of order, the Manufacturer shall submit four copies of but not limited to the following drawings, documents and specifications for approval.

- a) Fabrication drawings and relevant calculations for pressure containing parts.
- b) Welding procedure and method of manufacture for all phases of manufacture.
- c) Quality Assurance Plan (QAP).

Once the approval has been given by purchaser any changes in design, material and method of manufacture shall be notified to the Purchaser whose approval in writing of all changes shall be obtained before the insulating joint are manufactured.

8.4 Within four weeks from the approval date Manufacturer shall submit one reproducible and six copies of the approved drawings, documents and specifications as listed in 8.3 above.

8.5 Prior to shipment, the manufacturer shall submit one reproducible and six copies of the test certificates as listed in Clause 6.0 of this specification.

DATA SHEET-4						
PIPELINE DETAILS						
Nominal Diameter, MM(inch)	400 (16")NB		Wall Thickness, MM		6.4	
Material	API 5L Gr.X-60, PSL-2, ERW/LSAW/HSAW					
Design Temperature (deg C)	Max	65	Service	Sweet Natural Gas		
	Min	-28	Design code	ASME B 31.8	ANSI rating	300 class
INSULATION JOINT SPECIFICATION						
Corrosion Allowance	3.0 MM					
Design Factor	0.72					
Joint Efficiency	1					
Operating Pressure	30 Kg/cm ² g					
Hydro Static Test pressure	60 Kg/cm ² g					
Hydro Static Test (Duration)	4 Hours					
Ends	Welding end as per ASME B 16.25 (Butt Weld)					
Length of the insulating joint	1200 MM					
Internals	SS-316 or Equivalent.					
Electrical insulation properties of the joints should be as follows :						
Di-Electrical strength	5000V 50Hz AC FOR 1 MIN					
Test voltages	Upto 5000 volts AC 12000 volts DC					
Leakage current	Less that 3 mA.					
Insulation Resistance	25 MΩ when induced with 1KV DC for 1 MIN					

SPECIAL TERMS AND CONDITION:

1.0 Bidder shall provide test plan for all items as per International standards.

2.0 All materials are to be guaranteed for 12 months from the date of commissioning or 18 months from the supply whichever is earlier.

THIRD PARTY INSPECTION:

1. Independent third party inspection of the items shall be carried out by OIL enlisted Third Party Inspection Agency only. OIL's approved TPI agencies are M/s Lloyds, M/s Bureau Veritas, M/s IRS, M/s Rites, M/s DNV or M/s Tuboscope Vetco. Scope for Third Party Inspection shall be as under.

- TPIA shall review (if necessary witness) and certify all the inspections and tests carried out as per para 5.0 against item no. 30 of the tender.
- TPIA may carry our additional tests or inspection he may feel deemed necessary within the scope of the referred codes and standards.

(C) General Notes for Bidders :

1. 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 of the item at site whichever is earlier. In case of breakdown during the warranty period, a competent service engineer of the supplier shall make as many visits as shall be necessary to rectify the system. The supplier shall provide all spares required for making the system operational. Bidders must confirm the same while quoting.
2. **Validity of the offers should be 90 days from the date of bid opening. Bids with lesser validity shall be summarily rejected.**
3. 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. Indigenous bidder shall be eligible for Deemed Export Benefit against this purchase. Details of Deemed Export are furnished vide Addendum to MM/GLOBAL/01/2005 enclosed. However no Recommendatory letters will be issued to Indian Bidders
4. **In the event of an order on indigenous bidder under deemed export scheme, OIL will issue Project Authority Certificate (PAC) and arrange for DGH Certificate as may be appropriate/applicable. Supplier shall effect dispatch only on receipt of these certificates from OIL, failing which all related liabilities shall be to Supplier's account.**
5. **Commercial Check-List vide Annexure- B & Evaluation matrix vide Annexure-C & D shall** be filled-up and submitted along with the offer.
6. To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in to must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.
7. 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, Departments 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 offers accordingly.

8. 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.

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ANNEXURE- A

BID REJECTION CRITERIA (BRC)/BID EVALUATION CRITERIA (BEC)

I. BID EVALUATION CRITERIA –TECHNICAL

A) TECHNICAL:

The bids shall broadly conform to the specifications and terms and conditions given in this bid document. Bids shall be rejected in case the items offered do not conform to required parameters stipulated in the technical specifications and to the respective international/ national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected.

1.0 Experience

1.1 In case the bidder is an Original Equipment Manufacturer (OEM) of the tendered item(s),

1.1.1 The bidder shall have experience of successful execution of past supply for minimum 50% quantity (to be rounded off to next higher integer) of each tender item of same or higher size as indicated in the tender, against valid purchase order / contract awarded in last 5 years preceding the original bid closing date of the tender to upstream, midstream and downstream Oil & Gas Industry or Service Provider to an E&P company, either by themselves or through their Dealer / Distributor / Agent for their own (OEM) products.

1.2 In case the bidder is an authorized Dealer / Distributor / Agent

1.2.1 The OEM shall fulfill the experience criteria mentioned in clause 1.1.1 mentioned above.

1.2.2 Additionally, the bidder himself shall have experience of successful execution of past supply for minimum 50% quantity (to be rounded off to next higher integer) of each tender item of same or higher size as indicated in the tender, against valid purchase order / contract awarded in last 5 years preceding the original bid closing date of the tender, to upstream, midstream and downstream Oil & Gas Industry or service provider to an E&P company, provided either from the same OEM or from any other OEM.

1.2.3 The bidder shall obtain authorization certificate from the OEM (in original on manufacturer's letter head) and submit along with the technical bid. This certificate should be valid at the time of bidding and should remain valid during the entire execution period of the order.

1.2.4 The bidder shall furnish undertaking from the manufacturer (in original on manufacturer's letterhead) guaranteeing supply of items to the bidder in the event of an order on the bidder. This certificate should be valid at the time of bidding and should remain valid during the entire execution period of the order.

1.2.3 The bid shall be rejected in case of any change of the proposed Original Equipment Manufacturer after submission of the bid.

1.3 Submission of documents

1.3.1 The bidder shall submit documents in support of successful execution of past supply experience and of the OEM, as applicable under clause 1.1.1, 1.2.1 & 1.2.2, as below:

(i) Copy(ies) of detail Purchase Order(s)/Contract document(s) containing Technical specification, etc. and,

(ii) Performance Bank Guarantee Release Document / Performance Report / Successful completion of order certificate from Client of the corresponding executed supply and,

(iii) Any one or combination of the following documents,

a) Commercial invoice or

- b) Bill of lading or
- c) Final inspection release note from Third Party Inspection Agency.

1.3.2 If the bidder is a manufacturer and has supplied the tendered items (of same or higher capacity and same or higher sizes) to OIL during last 5 (five) years as on original bid closing date of the tender either by themselves or through their sole selling agent/ distributor/ dealer/ supply house and whose past performance has been satisfactory, the bidder need not submit documents as per Clause 1.3.1. In this situation the bidder shall have to indicate the Purchase Order (P.O.) Nos. of OIL in their technical bid against each item of the Tender.

1.3.3 If the bidder is sole selling agent / distributor / dealer / supply house of any manufacturer and has submitted bid of the manufacturer who has supplied the tendered items (of same or higher capacity and same or higher sizes) to OIL during last 5 (five) years as on original bid closing date of the tender either by themselves or through their sole selling agent/ distributor/ dealer/ supply house and whose past performance has been satisfactory, the manufacturer need not submit documents as per Clause 1.3.1. In this situation the bidder shall have to indicate the Purchase Order (P.O.) Nos. of OIL in their technical bid against each item of the Tender, executed by that manufacturer.

2.0 The bidder should categorically confirm in the technical bid that the tendered items will be supplied within 04 months after placement of Purchase Order or else bid will be rejected.

3.0 Bidder must accept and comply with the following clauses as given in the Bid Document, failing which bid shall be liable for rejection:

- i) Liquidated Damages
- ii) Guarantee of material
- iii) Arbitration / Resolution of Dispute
- iv) Force Majeure
- v) Applicable Laws

4.0 It is the bidder's responsibility to submit all the relevant valid documents along with the bid, which categorically complies the requisite criteria mentioned above from Clause 1.0 thru 3.0.

5.0 In a tender, authorized Dealer / Distributor / Agent on behalf of the OEM or OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

6.0 If authorized Dealer / Distributor / Agent submits bid on behalf of the OEM, the same Dealer / Distributor / Agent shall not submit a bid on behalf of another OEM in the same tender for the same item/product.

7.0 Financial Criteria:

7.1 Annual Turnover :The bidder shall have an annual financial turnover of minimum **Rs. 11,58,859.00 or USD 17,813.00** during any of the preceding 03 (three) financial years reckoned from the original bid closing date of the tender.

7.2 "Net Worth" of the bidder should be positive for the preceding financial/accounting year.

7.3 Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year..... (As the case may be) has actually not been audited so far'.

Note: For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-

i) A certificate issued by a practicing Chartered Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE.

OR

ii) Audited Balance Sheet along with Profit & Loss account.

7.4 In case the Audited Balance Sheet and Profit & Loss Account submitted along with the bid are in currencies other than INR or US\$, the bidder shall have to convert the figures in equivalent INR or US\$

considering the prevailing conversion rate on the date of Balance Sheet and Profit & Loss Account. A CA certificate is to be submitted by the bidder regarding converted figures in equivalent INR or US\$.

B. COMMERCIAL:

1. Bids are invited under **Single Stage Composite Bid System**. Bidders shall quote accordingly under Single Stage Composite Bid System.
- 2.0 **Bid security of US \$ 720.00 or Rs. 46,400.00.00** shall be furnished as a part of the TECHNICAL BID (refer Clause Nos.9.0 & 12.0 (Section A) of “General Terms & Conditions” for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders)).A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.
- 2.1 For exemption for submission of Bid Security, please refer Clause No. 9.8 (Section A) of “General Terms & Conditions” for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders).
- 2.2 The Bank Guarantee towards Bid Security shall be valid **upto 20.01.2018**.
3. Validity of the bid shall be minimum 120 days from the date of Bid Closing Date. Bids with lesser validity will be straightway rejected.
4. Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of 18 months from the date of shipment/dispatch or twelve (12) months from the date of receipt of the items at site, whichever is earlier against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier’s expenses at no extra cost to OIL.
5. Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for a period of 18 months from the date of shipment/dispatch or twelve (12) months from the date of receipt of the

items at site, whichever is earlier. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.

6. Bidders are required to submit the summary of the prices in their price bids as per bid format (Summary), given below :

I) Price Bid Format (SUMMARY) for Foreign Bidders :

- (A) Total Material Value :**
- (B) Packing & FOB Charges :**
- (C) Total FOB Port of Shipment value, (C + D) above :**
- (D) Overseas Freight Charges upto Kolkata, India :**
- (E) Insurance Charges :**
- (F) Total CIF Kolkata value, (E+F+G) :**
- (G) Total Value in words :**
- (H) Gross Weight :**
- (I) Gross Volume :**

II) Price Bid Format (SUMMARY) for Indigenous Bidders:

- (A) Total Material Value:**
- (B) Packing and Forwarding Charges:**
- (C) Total Ex-works value, (C + D) above :**
- (D) Sales Tax, (Please indicate applicable rate of Tax)**
- (E) Total FOR Despatching station price, (E + F) above**
- (F) Road Transportation charges to Duliajan**
- (G) Insurance Charges**
- (H) Assam Entry Tax**
- (I) Total FOR Duliajan value, (G + H + I +J) above**
- (J) Total Value in words :**
- (K) Gross Weight :**
- (L) Gross Volume :**

7. The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
8. Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
9. Bids containing incorrect statement will be rejected.

(II) BID EVALUATION CRITERIA (BEC) :

Both the items mentioned in the tender shall be evaluated separately. Bidders to quote accordingly. Bids conforming to the specifications, terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria mentioned in Section D of “General Terms & Conditions” for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005.

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ANNEXURE-B**(A) COMMERCIAL CHECK-LIST**

Sl. No.	PARAMETERS/REQUIREMENTS	BIDDER RESPONSE	REMARKS IF ANY
1.	Whether Original Signed quotation submitted?	YES/NO	
2.	Whether quoted as manufacturer?	YES/NO	
3.	Whether quoted as authorized dealer? [To Specify]	YES/NO	
4.	If quoted as authorized dealer,		
5.	(a)Whether submitted valid and proper authorization letter from manufacturer IN ORIGINAL confirming that bidder is their authorized dealer for the product offered?	YES/NO	
6.	(b)Whether manufacturer's back-up Warranty/Guarantee certificate submitted?	YES/NO	
7.	Whether ORIGINAL Bid Bond (not copy of Bid Bond) enclosed with the offer? If YES, provide details	YES/NO	
	(a) Amount :		
	(b) Name of issuing Bank :		
	(c) Validity of Bid Bond :		
8.	Whether offered firm prices?	YES/NO	
9.	Whether quoted offer validity of 90 days from the date of closing of tender?	YES/NO	
10.	Whether quoted a firm delivery period?	YES/NO	
11.	Whether quoted as per NIT (without any deviations)?	YES/NO	
12.	Whether any deviation is there in the offer?	YES/NO	
13.	Whether deviation separately highlighted?	YES/NO	
14.	Whether agreed to the NIT Warranty clause?	YES/NO	
15.	Whether Price Bid submitted as per Price Schedule?	YES/NO	
16.	Whether indicated the country of origin for the items quoted?	YES/NO	
17.	Whether all the items of tender quoted?	YES/NO	
18.	Whether technical literature/catalogue/drawings enclosed?	YES/NO	
19.	For Foreign Bidders - Whether offered FOB/FCA port of dispatch including sea/air worthy packing & forwarding?	YES/NO	
20.	For Foreign Bidders – Whether port of shipment indicated? [To specify]	YES/NO	
21.	For Foreign Bidders only - Whether indicated	YES/NO	

	ocean freight up to C&F Kolkata port (Excluding marine insurance)?	
22.	Whether Indian Agent applicable?	YES/NO
	If YES, whether following details of Indian Agent provided?	
	(a) Name & address of the agent in India – To indicate	
	(b) Amount of agency commission – To indicate	
	(c) Whether agency commission included in quoted material value?	YES/NO
23.	Whether weight & volume of items offered indicated?	YES/NO
24.	Whether confirmed to submit PBG as asked for in NIT?	YES/NO
25.	Whether agreed to submit PBG within 30 days of placement of order?	YES/NO
26.	For Indian bidders – Whether place of dispatch indicated in the offer? [To specify]	YES/NO
27.	For Indian bidders – Whether road transportation charges up to Duliajan quoted?	YES/NO
28.	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges?	YES/NO
29.	For Indian Bidders only - Whether offered Deemed Export prices?	YES/NO
30.	Whether quoted prices are exclusive of Excise duty?	YES/NO
31.	For Indian bidders only – whether import content indicated in the offer?	YES/NO
32.	For Indian Bidders only - whether all Taxes have been indicated categorically?	YES/NO
33.	Whether all BRC/BEC clauses accepted?	YES/NO

Technical Evaluation sheet

Sl No.	Clause No	Description	Bidders Remarks Complied /Not Complied /Deviation	Relevant Location of the document in their Bid to support the remarks/compliance
1		TECHNICAL EVALUATION SHEET		
2	10	Supply of 20" X 16" O.D. Scraper Launcher as per Note-1, Datasheet-1 & drawing-1 along with pig signaller as per Note - 2 and Datasheet-3.		
3	20	Supply of 22" X 16" O.D. Scraper Receiver as per Note-1, Datasheet-2 & drawing-2 along with pig handling plus fitted with pig signaller as per Note-2 and Datasheet-3		
4	30	Supply of pipe line Monolithic insulating joint as per ASME VIII DIV.1 for 400 MM NB (16"), API 5L Gr.X-60, PSL-2, ERW/LSAW/HSAW, Natural gas transportation pipeline as per Datasheet-4.		

ANNEXURE-D**TECHNICAL EVALUATION MATRIX
(TO BE FILLED IN BY BIDDER DULY SIGNED)****BID EVALUATION CRITERIA**

Clause Number	DESCRIPTION	BIDDER'S RESPONSE (Complied / Not Complied / Deviation / Not Applicable)	TO BE FILLED BY THE BIDDER Relevant Location of their Bid to support the remarks / compliance (Reference of Document name / Serial number / Page number of bid for documentary evidence)
1.	<u>A) TECHNICAL:</u> The bids shall broadly conform to the specifications and terms and conditions given in this bid document. Bids shall be rejected in case the items offered do not conform to required parameters stipulated in the technical specifications and to the respective international/ national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected.		
2.	1.0 Experience		

	<p>1.1 In case the bidder is an Original Equipment Manufacturer (OEM) of the tendered item(s),</p> <p>1.1.1 The bidder shall have experience of successful execution of past supply for minimum 50% quantity (to be rounded off to next higher integer) of each tender item of same or higher size as indicated in the tender, against valid purchase order / contract awarded in last 5 years preceding the original bid closing date of the tender to upstream, midstream and downstream Oil & Gas Industry or Service Provider to an E&P company, either by themselves or through their Dealer / Distributor / Agent for their own (OEM) products.</p>		
3	<p>1.2 In case the bidder is an authorized Dealer / Distributor / Agent</p> <p>1.2.1 The OEM shall fulfill the experience criteria mentioned in clause 1.1.1 mentioned above.</p>		
4	<p>1.2.2 Additionally, the bidder himself shall have experience of successful execution of past supply for minimum 50% quantity (to be rounded off to next higher integer) of each tender item of same or higher size as indicated in the tender, against valid purchase order / contract awarded in last 5 years preceding the original bid closing date of the tender, to upstream, midstream and</p>		

	downstream Oil & Gas Industry or service provider to an E&P company, provided either from the same OEM or from any other OEM.		
5	1.2.3The bidder shall obtain authorization certificate from the OEM (in original on manufacturer's letter head) and submit along with the technical bid. This certificate should be valid at the time of bidding and should remain valid during the entire execution period of the order.		
6	1.2.4The bidder shall furnish undertaking from the manufacturer (in original on manufacturer's letterhead) guaranteeing supply of items to the bidder in the event of an order on the bidder. This certificate should be valid at the time of bidding and should remain valid during the entire execution period of the order.		
7	1.2.5 The bid shall be rejected in case of any change of the proposed Original Equipment Manufacturer after submission of the bid.		
8	1.3 Submission of documents 1.3.1 The bidder shall submit documents in support of successful execution of past supply experience and of the OEM, as applicable under clause 1.1.1, 1.2.1 & 1.2.2, as		

	below:		
9	<p>(i) Copy(ies) of detail Purchase Order(s)/Contract document(s) containing Technical specification, etc. and,</p> <p>(ii) Performance Bank Guarantee Release Document / Performance Report / Successful completion of order certificate from Client of the corresponding executed supply and,</p> <p>(iii) Any one or combination of the following documents,</p> <p>a) Commercial invoice or</p> <p>b) Bill of lading or</p> <p>c) Final inspection release note from Third Party Inspection Agency</p>		
10	<p>1.3.2If the bidder is a manufacturer and has supplied the tendered items (of same or higher capacity and same or higher sizes) to OIL during last 5 (five) years as on original bid closing date of the tender either by themselves or through their sole selling agent/ distributor/ dealer/ supply house and whose past performance has been satisfactory, the bidder need not submit documents as per Clause 1.3.1.In this situation the bidder shall have to indicate the Purchase Order (P.O.) Nos. of OIL in their technical bid against each item of the Tender.</p>		

11	<p>1.3.3 If the bidder is sole selling agent / distributor / dealer / supply house of any manufacturer and has submitted bid of the manufacturer who has supplied the tendered items (of same or higher capacity and same or higher sizes) to OIL during last 5 (five) years as on original bid closing date of the tender either by themselves or through their sole selling agent/ distributor/ dealer/ supply house and whose past performance has been satisfactory, the manufacturer need not submit documents as per Clause 1.3.1. In this situation the bidder shall have to indicate the Purchase Order (P.O.) Nos. of OIL in their technical bid against each item of the Tender, executed by that manufacturer.</p>		
12	<p>2.0 The bidder should categorically confirm in the technical bid that the tendered items will be supplied within 04 months after placement of Purchase Order or else bid will be rejected.</p>		
13	<p>3.0 Bidder must accept and comply with the following clauses as given in the Bid Document, failing which bid shall be liable for rejection:</p> <ul style="list-style-type: none"> i) Liquidated Damages ii) Guarantee of material iii) Arbitration / Resolution of Dispute iv) Force Majeure 		

	v) Applicable Laws		
14.	4.0 It is the bidder's responsibility to submit all the relevant valid documents along with the bid, which categorically complies the requisite criteria mentioned above from Clause 1.0 thru 3.0.		
15.	5.0 In a tender, authorized Dealer / Distributor / Agent on behalf of the OEM or OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.		
16	6.0 If authorized Dealer / Distributor / Agent submits bid on behalf of the OEM, the same Dealer / Distributor / Agent shall not submit a bid on behalf of another OEM in the same tender for the same item/product.		
17.	Financial Criteria		
18	Annual Turnover : The bidder shall have an annual financial turnover of minimum Rs. 11,58,859.00 or USD 17,813.00 during any of the preceding 03 (three) financial years reckoned from the original bid closing date of the tender.		
19	"Net Worth" of the bidder should be positive for the preceding financial/accounting year		
20	Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the		

	<p>Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year..... (As the case may be) has actually not been audited so far'.</p> <p>Note: For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-</p> <p>i) A certificate issued by a practicing Chartered Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE.</p> <p style="text-align: center;">OR</p> <p>ii) Audited Balance Sheet along with Profit & Loss account.</p>		
21	<p>In case the Audited Balance Sheet and Profit & Loss Account submitted along with the bid are in currencies other than INR or US\$, the bidder shall have to convert the figures in equivalent INR or US\$ considering the prevailing conversion rate on the date of Balance Sheet and Profit & Loss Account. A CA certificate is to be</p>		

	submitted by the bidder regarding converted figures in equivalent INR or US\$.		
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