

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

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Tender No. & Date : SDG9761P16/08 of 29.12.2015

Tender Fee : INR 4,500.00 OR USD 100.00

Bid Security : Applicable

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Bid Closing on : 09.03.2016 at 11:00 hrs (IST) Technical Bid Opening on : 09.03.2016 at 14:00 hrs (IST)

Bid Validity : Bid should be valid for 180 days from bid closing date.

Bid Bond Validity : Bid Bond should be valid up to to 09/03/2017.

(Bid bond format has been changed. Please submit bid bond

as per revised format)

Performance Guarantee : Applicable

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No. / Mat. Code	Material Description	QTY.	UOM
1.	Supply, Installation & Commissioning of Mud Pump as per the details mentioned in the following Annexures: a) Detailed specification- Annexure -A. b) Bid Rejection Criteria (BRC) and Bid Evaluation Criteria-Annexure-B.	01	No.

Special Notes:

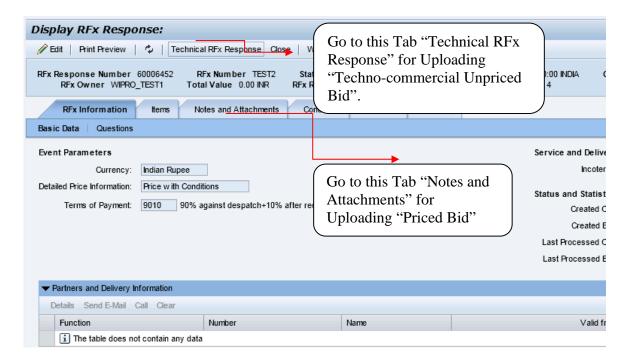
1.0 The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005-July'12 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e-Procurement.

2.0 Technical Check list and Commercial Check list are furnished. Please ensure that both the check lists are properly filled up and uploaded along with Technical bid.

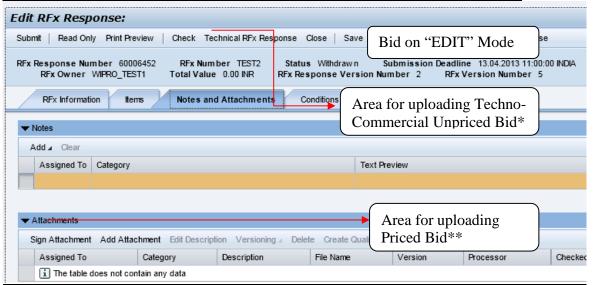
- 3.0 The item qualifies for Nil Customs Duty / Deemed Export benefits. For Deemed Export benefits, please refer Addendum to the General terms and conditions for Global tender.
- 4.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with tender no. and due date to The **Head- Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam** on or before 13:00 Hrs (IST) on the Bid Closing Date and Time mentioned in the Tender.
 - a) Original Bid Security.
 - b) Detailed Catalogue and any other document which have been specified to be submitted in original.
- 5.0 In case of SINGLE STAGE-TWO BID SYSTEM, bidders shall prepare the "Techno-commercial Unpriced Bid" and "Priced Bid" separately and shall upload 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".

A screen shot in this regard is given below.

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



On "EDIT" Mode- The following screen will appear. Bidders are advised to Upload "Techno-Commercial Unpriced Bid" and "Priced Bid" in the places as indicated above:



Note:

- * The "Techno-Commercial Unpriced Bid" shall contain all techno-commercial details except the prices.
- ** The "Price bid" must contain the price schedule and the bidder's commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Atachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and clock on OK to save the File.
- 6.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications.
- 7.0 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure VI of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or decline to submit Integrity Pact with the offer, their bid shall be rejected straightway".

OIL's Independent External Monitor at present is as under:

(I) SHRI RAJIV MATHUR, IPS (Retd) e-mail: rajivmathur23@gmail.com

ANNEXURE- A (Tender No. SDG9761P16/08)

Technical Specifications

1600 HP Triplex Single Acting, Horizontal Piston slush Pump package unitised with suitable Electric D.C.Motors, dual rear mounted, banded V-belt drive ,with other necessary accessories, skidded and master skidded.(Pump skid should be securely fastened on an oilfield type master skid)

- 1.0 SLUSH PUMP
- A) Type Of Pump:

Slush Pump, Triplex Single Acting, Horizontal Piston Pump with individual 2(two) piece "L" shaped(separate) interchangeable forged alloy steel Modules and replaceable cylinder Liners of various sizes in steps of 1/2"(15mm) from 7-1/2" to 5" diameter to obtain desired discharge and pressure at rated SPM, having double relieved harringbone crankshaft and a pinion shaft gear. The pump must be driven by dual end mounted electric D.C. Motor with banded V-belt drive, complete with standard accessories mounted on an oil-field type minimum 3(three) runner skid, skidded on a master skid for on shore Drilling Rig. (The pump skid should be securely fastened on oil field type master skid)

- B) Capacity Of The Pump:
- i) Input Horse Power 1600 (Min) at rated SPM.
- ii)Discharge at rated SPM with replaceable liners and pistons Min. 2700 litres/min(600 Imp GPM) at 210 kg/cm 2 (3000PSI)and min. 1575 liters/min. (350 Imp.GPM)at 351.5 kg/cm 2 (5000 PSI).

Note: Liners to be fitted on the pump at the time of supply should be such to obtain minimum 2700 litres/min (600 Imp. GPM) discharge at 210 kg/cm 2 (3000PSI) pressure.

- C) Various Features Of The Pump:
- i) Fully enclosed fabricated steel plate (ASTM A-36 or equivalent) power end.
- ii) Double relieved forged alloy steel Herringbone (double helix) type main gear.
- iii) One piece Forged steel double extended pinion shaft with double helix gear.
- iv)One piece forged steel crankshaft, with press fitted and keyed crank shaft

- Note: Bearings of the pump must be of make Torrington / SKF / FAG/NTN/ARB.
- v) Provision for manual rotation of the crankshaft externally for maintenance purpose.
- vi) Individual separate, forged alloy steel (AISI 8630 / 4130 /equivalent), autofrettage, and completely interchangeable fluid end modules having separate valve pots (API MOD.7) in each module (for both suction & discharge).
- vii) Fast change type screwed valve covers.
- viii) Two-piece design fast change piston rods with clamp.
- ix) Suction manifold with suction stabilizer assembly and Discharge manifold with discharge pulsation dampener.
- x) Piston-Liner Cooling / lubrication spray system that includes A.C. 3PH, 50 Hz. Flame proof (Ex-d type) with IP55 protection & insulation type B electric motor suitable for use in hazardous area classification zone-I, gas group IIA & IIB; suitable pump for liner spray; lubricant reservoir with suitable piping connection.
- xi)Pump fitted with liners (API 7) held rigidly in place with a two-bolt retention clamp, premium pistons, mission type 4(four) rib valve seats (API 7), centre guided valve with polyurethane insert.
- xii) Crankcase Lubrication system should be splash type or forced lubrication.
- xiii) Suction connection should be 10" (250mm), ASA-150#,
- xiv) Discharge modules should be interconnected so as to make a smooth discharge flow through strainer cross; 5" API 5000#, R.J.Flanged on one end and provide valve & bleed line connection on the other end.
- xv) Pump sheaves should be compatible for Gates 8-8VP-3150 power belt.
- xvi) The pump should be complete with all the components of fluid end and power end, mounted on a sufficiently strong skid (base skid)skidded on a another oil field type skid(mother skid)having standard design for self loading at both ends and base skid should be strongly anchored with the main pump skid (mother skid). The total length of skid should not be more than 7600mm. There should be proper lifting arrangement on the pump also.
- xvii) Detailed technical drawing of the base skid and mother skid are to be submitted along with the offer for our approval. Detailed GA drawing of the pump set along with dual rear mounted motors, pump drive and

their accessories are to be submitted along with the offer.

- xviii) The dimensions of the complete pump with mother skid should be within 7600 mm long x 2700 mm wide x 2000 mm height and the total package weight must not exceed 37,600kg. Justification is required if the above limiting dimensions cannot be met.
- xix) One complete valve seat puller assembly suitable for above mentioned valve seat and one set of special hand tools for fluid end maintenance (i.e valve pot tool, wrench for valve cover etc) must be included with pump set to be supplied.
- xx) One no tool for manual rotation of the pump for maintenance.
- xxi) 2 No additional belt for pump set to be supplied along with the pump. The belt make and size should be same as offered with the pump.
- xxii) Suitable analogue type belt tension meter with complete operation & maintenance manual, 1no. to be supplied along with the pump.
- xxiii) Suitable Stroke Counter Meter should be provided in each pump.
- D) Accessories
- The Slush Pump package should be assembled with the following accessories:
- i) A high pressure discharge strainer cross assembly complete with the following features:-
- a) Suitable Strainer, 5" (125mm).
- b) 5" (125mm) API 5000# RJ end connection with weld neck flange (4.063"/104mm bore) for discharge line, 1no. 1350, 5000 PSI (351.5 kg/cm²) WP forged steel elbow must be supplied welded, one end with the weld-neck flange & the other end with 1no. 4" (100mm) NB X 8" (200mm) long screwed APILP nipple.
- c) 4" (100mm), API 5000# RJ flanged connection at the top with studs & nuts for pulsation dampener.
- d) 5" (125mm), API 5000# RJ end connection with blind flange for strainer clean out.
- e) 5" (125mm), API 5000# RJ end connection with flange having 2" (50mm) APILP screwed connection for pressure gauge.
- ii) A discharge pulsation dampener assembly (Make: Hydril, Model: K-20-5000, Pt. No: 3111330-07011 or equivalent with interchange ability of spare parts with Hydril makes K-20-5000) with the following features:
 - a) Maximum service pressure: 351.5kg/cm 2 (5000PSI).
 - b) Surge capacity: 75 litres (20 gallons)
 - c) Bottom connection: 4" (100mm), API 5000# RTJ flanged.

- d) Diaphragm: Hydrogenated Nitrile.
- iii) Charging hose assy. with pressure gauge for Nitrogen gas charging to pulsation dampener.
- iv)Pressure gauge of Make: Oteco, Model: 7 having following features:
 - a) Pressure range: 0-351.5 kg/cm 2 (0-5000PSI)
 - b) Connection: screwed female 2" (50 mm) APILP threaded
- v) Manual Reset Relief Valve of Make: Oteco, Type-B or Retsco having following features:
 - a) Pressure range: 105-351.5 kg/cm 2 (1500-5000PSI)
 - b) Connection: screwed female 3" (80 mm) APILP threaded
- vi) Bleed line accessories should be included with the following items:
- a) 5" (125mm), API 5000# RJ flange with 3" (80 mm) APILP screwed connection. -2 Nos. of which 1 No. is directed to the mud tanks and the other directed towards the power end for bleeding other fluids.
- b) Flex seal type 3" (80 mm), 5000PSI (351.5kg/cm²) flanged mud Gate valve (Make:Oteco or Demco)QTY :-2Nos.
- c) Flex seal type 2" (50 mm), 5000PSI (351.5kg/cm 2) flanged mud gate valve (Make:Oteco or Demco)QTY :- 2No.
- d) Nipple, XXS, 3" (80 mm) NB x 6" (150 mm) long, screwed APILP thread both ends QTY :-6 No.
- e) Equal Tee, FCS, 3" (80 mm) NB, 5000PSI (351.5kg/cm 2), and screwed female APILP thread. QTY :-2 No.
- f) Reducer, FCS, 3" (80 mm) NB x 2" (50 mm) NB x 6" (150 mm) long, 5000PSI (351.5kg/cm 2), screwed male APILP thread. QTY: 2 No
 - g) 3" (80 mm), API 5000# RTJ screwed APILP flange. QTY:-2 Nos.
 - h) 2" (50 mm), API 5000# RTJ screwed APILP flange. QTY:-2 Nos.
- i) Elbow, FCS, 3" (80mm) NB, 5000PSI (351.5kg/cm²), screwed female APILP thread. QTY: -2 No.
- vii) Jib crane with trolley installed on each pump to handle fluid end parts.
- viii) Hand hoist, $\frac{1}{2}$ ton (500kg), LH, 2.5 m (8ft.) lift for use with Jib Crane
- ix) API monogrammed ring joint gaskets of required quantity should be provided.
- $2.0\ \mbox{Pump}$ Drive and Motor Skid
- Slush pump should be driven by dual rear mounted D.C electric motors with the help of banded power V-belts. Pump with skid (Pump Skid), 2 No D.C.motors with skid (Motor Skid), motor supports, tensioning screws, belt guards (two piece detachable type belt guards for easy opening of belts from motor sheaves) to be mounted on the master skid. Pump is to be fitted with suitable QD hub type 8V belt section sheaves (including hub) at both sides of the pump. Motors are to be fitted with suitable sheaves including hub, refer (enclosed drawing). Pump drive should be

complete with Gates make (preferably) banded 8-8VP-3150 power banded V-belt.

- 3.0 Specification of D.C.Motor along with blower QTY-2
- 3.1 Type and rating of motor:
- 3.1.1 DC MOTOR Qty 2 Nos

1000 HP drilling motor; single shaft extension, heavy duty, direct current, four pole, separately excited shunt field machine provided with interpoles and TIG welded, lap wound fully equalized armature coil connections. Motor should be rugged, field proven and suitable for oilfield duty, and be used to drive Draw Works / Rotary / Mud Pump.

- -Continuous Rating: 1000 HP @ 1050 RPM, 750VDC, 1050Amps, 45 Deg C ambient.
- One hour rating: 1040 HP @ 1100 RPM, 750VDC, 1100 Amps
- Max Values 830 VDC, 1300 Amps, 1300 RPM
- Torque 5000 lb-ft (nominal)
- Field Separately excited Shunt Field with interpoles
- Excitation Adjustable up to 60 Amps
- Insulation Level 1300 Volts
- Insulation Class Class "H" both on armature and field coils
- Cooling / Ventilation Type IC06 Forced Ventilation by blower unit mounted on motor frame. Air flow 2900 cfm (with static pressure of 210 mm WG) $\,$
- Rotation Bi-directional
- Air Flow Relay One air flow relay to monitor air flow from the blower unit, fitted with 1 NO + 1 NC auxiliary changeover contact. Contact rating 5A, 230 VAC. This relay should be located preferably in the Blower housing.
- Weight of motor with blower 3500 Kg (approx)
- Make and model Should be identical in all respects to BHEL DC motor Model 4903 CX, to ensure interchange ability with existing motor range.
- Motor Terminal Box Pressurised type
- Position of motor terminal box for one motor on LHS, and for other motor on RHS; looking from the drive end towards the NDE
- Cable entry glands Single compression cable glands, suitable for 300 mm2 EPR single core, un-armoured cables. Unused cable entry ports should be plugged.
- Connections
- -Power:

Plug and socket (lockable) terminals, suitable for 300mm2 size single core EPR/HOFR cable Make - Pyle National

- Control:

One number 20 pin control socket with male pins Make - Pyle National

- Connections should be plug-in type for both power and control cables. All control connections to be terminated on suitably rated and properly labeled TB inside the cable box.
- All cable entry should be from bottom of Terminal box

- Cut-out switch to be provided on frame or Terminal Box to electrically isolate the motor during servicing / repair.
- Space (Anti-condensation) Heater 225 Watts, 230 V single phase space heater.
- Mounting Horizontal foot mounted
- Indicative Make BHEL

Motors to be similar as per our existing Motor, the details of which are given below

DC Motor footprint and other details (Electrical and mechanical) should exactly match with M/S BHEL make DC motor, $1000 \mathrm{HP}$, model $4903 \mathrm{CX}$, for compatibility and replacement with existing motors.

3.1.2 Power Supply for DC Motor:

The DC motors will be run from AC-SCR panels inside PCRs of Drilling Rigs. DC power supply from these panels is controlled by Hill-Graham designed drives called "DC Modules". Field excitation supply for the motors is also from Hill-Graham design field excitation PCB modules. Bidders are advised to ensure that offered DC motors can be run from these sources.

3.1.3 Submission of Drawings:

Detailed dimensional/GA drawings of the DC motor including foot-print, shaft height (with accessories like blower unit, coupling hub etc.), wiring diagram of the DC motor terminal block (to control socket) and DC motor characteristics shall be submitted by the bidder along with the bid/quotation.

Drawings shall be approved by OIL before actual assembly.

3.1.4 Coupling Hub:

Motor should be fitted with a coupling hub to BHEL drawing D4775882,(copy enclosed in the attachment) and suitable sheaves (see section on pump for details of sheaves).

3.1.5 Mounting pads:

DC motor shall preferably be mounted on adjustable pads.

3.1.6 Constructional features of DC motor:

- Cast cum fabricated magnet frame design and box type rugged frame construction with mounting feet
- High quality electrical varnished sheet steel for armature punching
- Armature endplate with fan effect for providing better ventilation

- Commutator to be built up from silver bearing copper & mica segments and clamped by Commutator spider and V-ring with `V' ring insulations made from alkyd vinyl mica bonded material. Commutator to be of archbound construction.
- Tungsten inert gas (TIG) welding for commutator riser parts for high temperature withstand and better reliability
- Proven insulation system with VPI resin for armature & field coils
- Flexible cable connections for brush gear & compole coils to provide against vibration
- Split carbon brushes with rubber tops
- Arcing horns & arching rings for creating an arcing gap direct to earth and to protect the commutator in the event of flashover
- Bottom cable entry
- Splash guards on air outlet
- Standard drive hub, shrink fitted on tapered seating over shaft extension

3.2 BLOWER: Qty - 2Nos, mounted on DC motor

Centrifugal type Blower unit should be mounted on DC motor frame, and driven by one AC motor for pressurizing, cooling and purging the DC motor and cable box. Blower motor speed is constant, independent of DC motor speed.

- Fan speed 2880 RPM, capacity 2900 cfm; Static pressure 210 mm WG
- Direction of discharge counter clock-wise, down blast.
- Rating of motor 7.5 HP, 3 Phase, 415 Volts, 50 Hz, Continuous rated Squirrel cage Induction motor
- Insulation Class "B"
- Motor Speed 3000 RPM (synch)
- Motor frame size 132M
- Connections All connections to be through double compression FLP cable glands suitable for unarmoured EPR cables of OD 16 mm. Unused cable entry ports should be plugged.
- Air Flow Relay One air flow relay to monitor air flow to $\,$ the DC motor from the blower unit, fitted with 1 NO + 1 NC $\,$ auxiliary changeover contact. Contact rating 5A,230 VAC
- Direction of rotation should be marked prominently on the outer surface of the blower unit.
- Enclosure
- IP 55 and FLP (Confirming to IS 2148; IS / IEC 60079-1).
- Enclosure should be approved by DGMS India for use in Oilfields hazardous area Zones 1 and 2, Gas groups 2A and 2B. Copy of valid DGMS approval for the make and model of AC motor should be supplied.
- Std.: IS 325; IE/IEC 60079-1.
- Indicative Make Crompton Greaves / Kirloskar

3.3 AUXILIARY MOTORS (AC) Qty - As per design

All motors for auxiliary lubrication pump (if any) and liner flushing pump to be supplied along-with the slush pump, and rated as follows:

- Type Squirrel cage induction motor
- Voltage 415VAC, 3 phase 3 wire (no neutral), 50 Hz
- Insulation type "F" (155 degC) or "B" (130 DegC), for rotor / stator.
- Power to be decided by manufacturer / supplier of slush pump, but limited to 5 HP for each motor.
- Speed Preferred speed is 1500 RPM
- Enclosure FLP (Ex-d type), IP 55, weatherproof. Please refer to "DGMS Approval" Clause below for details of this requirement.
- Terminal box fitted with double compression gland (FLP type) suitable for cable OD of 14mm (Cable used shall be EPR insulated). Unused cable entry ports should be plugged.
- Standard used IS 2148 : 2004 /IEC 60079-1 : 2001 Electrical Apparatus for Explosive Gas Atmospheres Flameproof Enclosures "Ex-d" (IS/IEC 60079-1); and IS 325.
- Indicative Make Crompton Greaves / Kirloskar / BB
- 3.3.1 Certification & approval: All motors should have valid CIMFR certification or equivalent certification of enclosure (FLP) from competent authority of country of origin. However, in all cases, the motor must be approved by DGMS (India) to be used in Hazardous areas of oil mines, Zone 1, Gas Groups 2A and 2B. Copies of valid DGMS approval pertaining to the motors are to be provided to OIL either with the bid, or during pre-despatch inspection. Please refer to "DGMS Approval" Clause below for details of this requirement.
- Motors shall be mounted on adjustable pads, to allow mounting of motors with different footprint and frame size. However, in all cases, the terminal boxes should have adequate space in front of the terminal boxes.
- The detailed engineering drawing for mounting of DC motors (foundation pad) should be submitted along with the offer /bid.
- 3.4 The detailed drawing for the DC motor foundation pad on the skid to be provided along with the offer. Both DC motors must have adequate clearance from the pump body.
- 3.5 Accessories (to be supplied):
- a) Single compression cable glands, suitable for 300 mm2 single core EPR insulated cable 2 nos. for fitting on DC motor Terminal box.
- b) Double Compression cable glands- Qty and size to be matched with the AC motors.
- 3.6 Spares:

A list of spares, with prices, for all motors (AC & DC) should be supplied along with the bid. This will not be considered for evaluation. This list should cover spares requirement for all motors (AC and DC) forming part of the bid.

3.7 O&M Manuals & Test reports:

Operation and maintenance manuals for the pump and motors (for all the DC & AC motors) shall be submitted along with the supply of pump set (3 copies for pump and 3 copies for each of the motors). Total 4 (four) sets of soft copies (in flash drive / compact disc format) of the manuals shall also be submitted along with the motors. Reports of tests conducted on the motors (Type / Routine / Load tests) shall be provided to Oil India along with the supply of the motors.

3.8 Packing

All Electrical components (Motors etc.) shall be packed suitably to avoid ingress of moisture and to withstand the rigours of travel, as well as storage before final commissioning.

3.9 DGMS Approval

Potential bidders should take special note of the following essential requirement:

- 3.9.1 All AC motors supplied under this tender shall be weatherproof (IP55) and FLP (Ex-d type) enclosure; and should have valid test certificates for enclosure (FLP) from competent Testing laboratory / authority of country of origin.
- 3.9.2 All such AC motors shall be also approved by DGMS (India) for use in Oilfields hazardous areas, zone 1 and zone 2, Gas Groups 2A and 2B. The DGMS logo along with the approval number should be permanently and prominently displayed on the body of the motor. Valid copies of DGMS approvals are to be provided to OIL either with the bid, or before the final pre-despatch inspection.
- 3.9.3 In case DGMS approval for such equipment is not available, then the equipment requiring DGMS approval may be supplied with "DGMS field trial approval".
- 3.9.4 Payment for equipment supplied with DGMS approvals will be as per normal terms and conditions of this tender.

Payment for equipment supplied with DGMS field trial permission shall be to the extent of 50% of the cost of equipment against despatch / shipping documents. The balance 50% shall be made on submission of DGMS approval. The entire slush-pump system shall be considered as "successfully commissioned" only after obtaining valid DGMS approval for all constituent equipment / instruments of the system. Bidder is thus advised to quote the prices of each electrical / electronic equipment separately.

4.0 OTHERS:

Following details are to be submitted along with the offer.

- i) Quotations shall be accompanied by detailed technical specifications of the pump, D.C motor (capacity, design, size etc.), dual rear mounted V-belt drive including sheaves, DC motor skid, Pump skid & Master skid, V-belt guards, pump and electric motors for liner flushing, delivery & suction dampener, pressure relief valve, pressure gauge, flex seal mud valve etc. Quotation shall also be accompanied by manufacturer's printed specification sheets, literature, detailed dimensional drawings including foot-print, shaft height (with accessories) etc., layout drawings & catalogues. Complete technical details of the pump, D.C motor,
- ii) A schematic layout (plan and elevation) of the pump set offered showing outline of master skid, pump with skid, motor with skid, dual rear mounted motors, pump drive and their accessories.
- iii) The performance chart of the reciprocating pump indicating all technical calculations such as hydraulic horsepower, volumetric efficiency, rpm, gear ratio etc.
- iv) The offer must be supported with performance guarantee of the pump for a minimum period of 18 months from receipt or 12 months from the date of commissioning whichever is earlier.
- v) If the bidder is other than OEM, then the bidder has to provide certificate for the following from OEM:
- a) Bearings as per BRC Technical clause no: 4.0
- b) Pump offered with two piece design "L" shaped Module (Fluid cylinder).
- vi) Specific confirmation from the bidder for installation and commissioning of slush pump set at OIL's work site at a radial distance of 50 KM from Duliajan, Assam, India. Supplier shall arrange for tools, manpower, materials and any other requirement on their own. Supplier shall arrange boarding and lodging of their personnel for commissioning jobs
- vii) List of spare parts with part no., quantity and unit rate recommended for two years of operation should be provided along with the offer.
- viii) Specific confirmation ensuring uninterrupted supply of spares for all items including accessories for a minimum period of 15 years.
- ix) During the guarantee /warranty period, the supplier has to attend / rectify all defects of the pump at site in and around Duliajan, Assam and replace / repair (including supply of spares) all malfunctioning components free of cost to OIL. For any such breakdown, guarantee /warranty period will be extended to the equal no. of days of breakdown.

- x) The following spare parts and tools should be included in the scope of supply. These spare parts are to be quoted separately with individual part numbers and prices thereof. The cost of these spares (xi & xii) will be considered for evaluation of the offers. However M/s OIL INDIA LIMITED reserves the right to decide whether to purchase these spare parts along with the pump or not.
- xi) Mandatory spare parts for offered pump

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a)Liner 7" : 30 No
b)Liner 6" : 36 No
c)Piston Assembly 7" :48 No
d)Piston Assembly 6": 60 No.
e)Piston Rod complete: 6 No.
                    : 50 No.
f) Valve seat
g) Valve assy. with polyurethane insert: 100 No
h) Valve Insert (polyurethane)
i) Valve spring
                    : 24 No.
j) Valve cover gasket : 200 No
                      : 90 No
k) Liner gasket, 7"
l) Liner gasket, 6"
                      : 90 No
m) Wear plate gasket : 12 No
                   : 6 No
n) Wear plate
o) Module / Fluid Cylinder (Suction)
                                     : 3 No
p) Module / Fluid Cylinder (Discharge) : 3 No
q)Valve seat puller assembly : 1No (Type & Make to be specified)
r) Banded power belt : 2 No (Type & Make as offered with the pump)
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- xii). Insurance spare parts for offered pump
- a) Crankshaft with bull gear -1 No
- b) Rod Connecting -1 No
 c) Bearing Eccentric -3 No
 d) Bearing Main -2 NO
 e) Bearing Pinion -2 No
 f)Crosshead Bearing -3 No

s) Discharge manifold : 2 No

Any other maintenance spares that may be necessary during an initial period of two years should be quoted; however, the same will not be taken for evaluation.

- xiii) The bidder has to submit Technical checklist and datasheet for electrical parts which are attached alongwith their offer.
- xiv) Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.
- xv) Pump, Motors and other accessories must be new and in unused condition. Bidder has to ensure the same in their offer.

Note: Offer not complying with above points i.e.4.0 (i) through 4.0(xiii) shall be treated as non-responsive and offer will be rejected.

5.0 Terms & Conditions:

5.1 Inspection & Tests:

- i) Pump with motor and other accessories may be subjected to inspection during assembly or manufacture at the purchaser's discretion but such inspection shall not relieve the supplier of his responsibility to ensure that the equipment supplied is free from all manufacturing and other defects and conforms to correct specifications.
- ii) The complete pump with motor will be inspected and performance tested as required by a team of 2/3 engineers from OIL at the supplier's works. The supplier should give inspection call well in advance (at least 3 months). Non- compliance of this clause by the bidder will be rejected. The cost of pre despatch inspection if any should be mentioned separately in their offer. However, fares, boarding/lodging etc for our Engineers to carry out the inspection will be borne by OIL. If the country of origin of the pump and the motor is different, then the pump and the motor will be inspected in the respective manufacturer's works separately. However, pump manufacturer should make arrangements for inspection of the pump under load at their works.
- iii) The supplier shall carryout ultra-sonography /radiography testing for entire welding zone. The supplier shall also carryout physical & chemical testing of various material used.

The supplier shall submit records and certificates of such tests to the purchaser in quadruplicate during the time of pump inspection.

5.2 Operation and Maintenance Manuals :

Operation and Maintenance manuals for the pump and Motors (for both the DC & AC blower motors) shall be submitted along with the supply of pump set (3 copies for pump and 3 copies for each of the motors). Total 4 (four) sets of soft copies (in compact disc format)/ flash memory format of the manuals shall also be submitted along with the pump set.

6.0 Commissioning:

Successful bidders will be responsible for installation, commissioning of the complete pump package. The expected date of commissioning shall be informed by OIL after the pump is transported to site (estimated to be commissioned within 3 months from receipt at site Bidder must quote separately for installation/ unitization/ commissioning charges if any.

General Note:

1.0 Payment clause:

Payment shall be released as follows:

- i) 80 % value shall be released on supply against proof of despatch/shipment of the goods.
- ii) Remaining 20% along with installation & commissioning charges shall be paid after successful commissioning and acceptance by OIL at site.

OIL may consider making 100 % payment towards supply of the items against proof of dispatch/shipment provided bidders agree to pay interest @ 1% above prevailing Bank Rate (CC rate) of State Bank of India for 20 % of the items value and also submit Bank Guarantee for the equivalent amount plus interest valid till successful commissioning of at site. This is in addition to the 10 % of the order value towards Performance Security as per the tender requirement.

Payment towards Installation & Commissioning shall be released only after successful commissioning and acceptance by OIL at site.

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

BID REJECTION CRITERIA

The bids shall conform generally to the specifications and terms as well as conditions laid out in the tender. Bids will be rejected in case the items offered do not conform to the 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 met by the bids, without which, the same shall be considered as non-responsive and stand rejected.

(A) TECHNICAL:

- 1. Bidder should be an OEM or authorized Dealer or authorized supply house or authorized sole Selling Agent of OEM of pump continuously for last five years. Documentary evidence in respect of being authorized Dealer or authorized supply house or authorized sole Selling Agent continuously for last five years should be submitted in the form of certificate from OEM.
- 2. The bidder has to provide documentary evidence along with the offer for supplying minimum 2 No of 1600 or more HP Slush pump sets complete with DC/AC Motor and drive in last 5(Five) years for drilling rig application. Documentary evidence in respect of the above should be submitted in the form of copies of relevant purchase orders along with copies of any of the documents in respect of satisfactory execution of each of these purchase orders such as
 - a. Satisfactory inspection report OR
 - b. Satisfactory supply completion /Installation report OR
 - c. Consignee receipt delivery challan OR
- d. Central excise gate pass / tax invoice issued under relevant rules of central excise /VAT OR
- e. Any other documentary evidence that can substantiate the satisfactory execution of each of the purchase order cited above.
- 3. DC Motor footprint and other details (Electrical and mechanical) should exactly match with M/S BHEL make DC motor, 1000 HP, model: 4903CX for compatibility and replacement with existing motors. Bidder should confirm the same in their bid.

B. COMMERCIAL:

- 1.0 Bids are invited under Single Stage Two Bid System. Bidders shall quote accordingly under Single Stage Two Bid System. Bidder to note that no price details should be furnished in the Technical (i.e. Unpriced) bid. The "Unpriced Bid" shall contain all techno-commercial details except the prices which shall be kept blank. The "Priced Bid" must contain the price schedule and the bidder's commercial terms and conditions. Bidder not complying with above submission procedure will be rejected.
- 2.0 Bid security of US \$ 29,700.00 or Rs. 20,02,000.00 shall be furnished as a part of the TECHNICAL BID. Any bid not accompanied by a proper bid security in ORIGINAL will be rejected without any further consideration. For exemption for submission of Bid Security, please refer Clause No. 9.8 (Section A) of General Terms and Conditions for Global Tender. The Bid Security shall be valid up to 09/03/2017. Bid shall be rejected straightway if Original Bid Security is not received within the Bid Closing Date & time mentioned in the Tender and/or Bid Security validity is shorter than the validity indicated in Tender and/or Bid Security amount is lesser than the amount indicated in the Tender.
- 3.0 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 twelve months from the date of commissioning of the complete package at site 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.
- 4.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for one year from the date of successful commissioning of the complete package at site. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.
- 5.0 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.
- 6.0 Validity of the bid shall be minimum 180 days from the Bid Closing date. Bids with lesser validity will be rejected.
- 7.0 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.
- 8.0 Bidders shall quote directly and not through Agents in India. Offers made by Indian Agents on behalf of their foreign principals will be rejected. Similarly offers from unsolicited bidders will be rejected.

- 9.0 Bids containing incorrect statement will be rejected.
- 10.0 Offers should be submitted with Integrity Pact duly signed by the authorized signatory of the bidder. If any bidder refuses to sign Integrity Pact or declined to submit Integrity Pact with the offer, their bid shall be rejected straightway.
- 11.0 No offers should be sent by Telex, Cable, E-mail or Fax. Such offers will not be accepted.
- 12.0 Bidders are required to submit the summary of the prices in their commercial bids as per bid format (Summary), given below:

(i) Commercial Bid Format (Summary) for Foreign Bidders:

- (A) Total material cost of Pump
- (B) Cost of Mandatory Spares
- (C) Cost of Insurance Spares
- (D) Total Packing & FOB Charges for (A+B+C) above
- (E) Total FOB Port of Shipment value, (A+B+C+D) above
- (F) Ocean Freight Charges up to Kolkata, India
- (G) Insurance Charges for all the items above
- (H) Total CIF Kolkata value, (E+F+G)
- (I) Installation & Commissioning charges
- (J) Pre-shipment Inspection charges, if any, including Service Tax, if any
- (K) Total Value, (H+I+J) above
- (L) Total value in words:
- (M) Gross Weight:
- (N) Gross Volume:

(iii) Commercial Bid Format (SUMMARY) for Indigenous Bidders:

- (A) Total material cost of Pump
- (B) Cost of Mandatory Spares
- (C) Cost of Insurance Spares
- (D) Total Packing & FOB Charges for (A+B+C) above
- (E) Total Ex-works value, (A+B+C+D) above
- (F) Excise Duty, (Please indicate applicable rate of Duty)
- (G) Sales Tax, (Please indicate applicable rate of Tax)
- (H) Total FOR Despatching station price, (E+F+G) above
- (I) Road Transportation charges to Duliajan
- (J) Insurance Charges
- (K) Total FOR Duliajan value, (H+I+J) above
- (L) Installation & Commissioning charges including Service Tax
- (M) Pre-shipment Inspection charges, if any, including Service Tax, if any
- (N) Total Value, (K+L+M) above
- (O) Total value in words:
- (P) Gross Weight:

(Q) Gross Volume:

SPECIAL NOTES:

- 1. The items covered under this tender will be used by OIL in the PEL/ML areas issued/renewed after 01/04/99, applicable Customs Duty for import of goods shall be ZERO. Indigenous bidders shall be eligible for Deemed Export and should quote Deemed Export prices. Excise Duty under Deemed Export exempted. Necessary Project Authority Certificate (PAC) shall be issued by OIL towards this.
- 2. Successful bidder shall offer the items for Pre-despatch/shipment Inspection by OIL's executives. Pre-despatch/Shipment Inspection charges, if any, must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. The to and fro fares, boarding/lodging and other enroute expenses of OIL's personnel shall be borne by OIL. Pre-despatch Inspection charges shall include Service Tax, if any.
- 3. Installation/Commissioning charges must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. These charges should include amongst others to and fro fares, boarding/lodging, local transport at Duliajan and other expenses of supplier's commissioning personnel during their stay at Duliajan, Assam(India). All Income, Service, Corporate Taxes etc. towards the services provided under installation / commissioning shall be borne by the supplier and will be deducted at source at the time of releasing the payment. Bidder should also confirm about providing all these services in the Technical Bid.
- 4. Bidders must categorically indicate the Installation / Commissioning and Predespatch /Shipment Inspection charges in their offers and must confirm about providing the same in their Technical bids.
- 13.0 **LIQUIDATED DAMAGE**: Supplier's competent personnel must arrive at Duliajan within 15 days from the date of intimation by OIL and complete the installation & commissioning job thereafter within the time mentioned in the tender. OIL, on the other hand, shall inform the party immediately on receipt of the goods at Duliajan. Liquidated Damage will be levied for any failure on the part of the supplier in completing the installation and commissioning of the Units @ 0.5% per full week or part thereof to a maximum of 10% of the total installation/commissioning charges.

(II) Bid Evaluation Criteria:

The bids conforming to the specifications, terms and conditions stipulated in the enquiry and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below:

COMMERCIAL:

1.0 The evaluation of bids will be done as per the Commercial Bid Format (SUMMARY) detailed vide Para 12.0 of BRC.

- 2.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
- 3.0 For conversion of foreign currency into Indian currency, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of price bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceed 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.
- 4.0 Offers not complying with the payment terms indicated in the enquiry shall be loaded with one percent above the prevailing Bank rate (CC rate) of State Bank of India for duration of commissioning time indicated in the tender plus transit time (3 months) for evaluation purpose.
- 5.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made as under, subject to corrections / adjustments given herein.

5.1 When only foreign bidders are involved:

Comparison of bids will be done on the basis of "GRAND TOTAL VALUE" which is estimated as under:

- (A) Total material cost of Pump
- (B) Cost of Mandatory Spares
- (C) Cost of Insurance Spares
- (D) Total Packing & FOB Charges of (A+B+C) above
- (E) Total FOB Port of Shipment value, (A+B+C+D) above
- (F) Ocean Freight Charges upto Kolkata, India
- (G) Insurance Charges @ 1% of Total FOB Value vide (E) above
- (H) Banking Charges @ 0.5% of Total FOB Value vide (E) above in case of payment through Letter of Credit (If confirmed L/C at buyer's account is required, 1.5% of Total FOB Value will be loaded)
- (I) Total CIF Kolkata Value, (E+F+G+H) above
- (J) Installation & Commissioning charges
- (K) Pre-shipment Inspection charges, if any, including Service Tax, if any.
- (L) Grand Total Value, (I+J+K) above

Banking charge in the country of the foreign bidder shall be borne by the bidder.

5.2 When only domestic bidders are involved or when more than one domestic bidders are in contention in case of mixed response:

Comparison of bids will be done on the basis of "GRAND TOTAL VALUE" which is estimated as under:

(A) Total material cost of Pump

- (B) Cost of Mandatory Spares
- (C) Cost of Insurance Spares
- (D) Packing and Forwarding Charges
- (E) Total Ex-works value, (A+B+C+D) above
- (F) Excise Duty
- (G) Sales Tax
- (H) Total FOR Despatching station price, (E+F+G)
- (I) Road Transportation charges to Duliajan
- (J) Insurance Charges @0.5% of Total FOR Despatching Station Value (F) above
- (K) Total FOR Duliajan value, (H+I+J)
- (L) Assam Entry tax
- (M) Installation & Commissioning charges including Service Tax
- (N) Pre-shipment Inspection charges, if any, including Service Tax, if any.
- (O) Grand Total Value, (K+L+M+N) above

Excise Duty in case of the indigenous bidder is EXEMPTED.

5.3 When both foreign and domestic bidders are involved:

The Grand Total Value of domestic bidder (inclusive of customs duty on imported raw material and components etc, and applicable terminal excise duty on the finished products and Sales Tax) excluding inland transportation to destination, Assam Entry Tax and Insurance charges worked out as per Para 5.2 above and Grand Total Value of the foreign bidder worked out as per Para 5.1 above will be compared. No price preference will be allowed to indigenous bidders except that for capital goods, the domestic manufacturers would be accorded a price preference to offset CST to the extent of 4% or actuals, whichever is less subject to 30% local content norms as stipulated for World Bank Funded project to the satisfaction of OIL. When more than one domestic bidders fall within price preference range, interse-ranking will be done on Total value basis.

Note: If the Government of India revises these evaluation criteria the same as applicable on the bid closing date will be adopted for evaluation of the offers.

- 6.0 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global Tender. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.
- 7.0 "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 and Small Enterprises(MSE) 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."

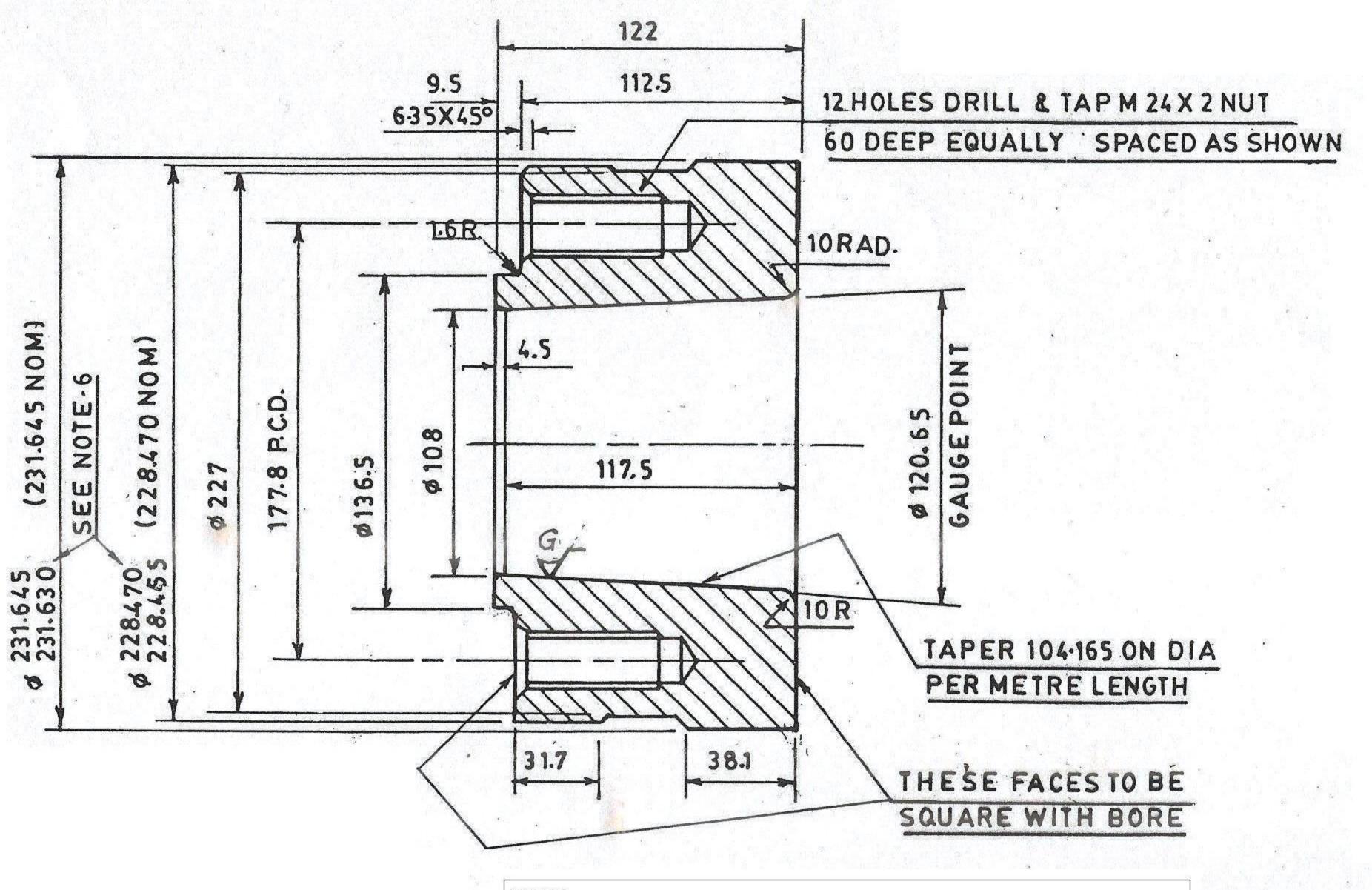
COMMERCIAL CHECK LIST

THE CHECK LIST MUST BE COMPLETED AND SUBMITED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT "Yes" OR "No" TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

<u>SI</u> No.	DECHIDEMENT	COMPLIANCE
1 1	REQUIREMENT Whether bid submitted under Single Stage Two Bid System?	Yes / No
2		Yes / No
3	Whether quoted as manufacturer? Whether ORIGINAL Bid Bond (not copy of Bid Bond) Sent separately? If Yes, provide details	
	(a) Amount:	
	(b) Name of issuing Bank:	
4	(c) Validity of Bid Bond :	Yes / No
4	Whether offered firm prices?	
5	Whether quoted offer validity of 180 days from the date of closing of tender?	Yes / No
6	Whether quoted a firm delivery period?	Yes / No
7	Whether agreed to the NIT Warranty clause?	Yes / No
8	Whether confirmed acceptance of tender Payment Terms?	Yes / No
9	Whether confirmed to submit PBG as asked for in NIT?	Yes / No
10	Whether agreed to submit PBG within 30 days of placement of order?	Yes / No
11	Whether Price submitted as per Price Schedule (refer Para 12.0 of BRC)?	Yes / No
12	Whether quoted as per tender (without any deviations)?	Yes / No
13	Whether quoted any deviation?	Yes / No
14	Whether deviation separately highlighted?	Yes / No
15	Whether indicated the country of origin for the items quoted?	Yes / No
16	Whether technical literature / catalogue enclosed?	Yes / No
17	Whether weight & volume of items offered indicated?	Yes / No
18	For Foreign Bidders - Whether offered FOB / FCA port of despatch including sea / air worthy packing & forwarding?	Yes / No
19	For Foreign Bidders – Whether port of shipment indicated. To specify:	Yes / No
20	For Foreign Bidders only - Whether indicated ocean freight up to Kolkata port (Excluding marine insurance)?	Yes / No
21	Whether Indian Agent applicable?	Yes / No
22	If YES, whether following details of Indian Agent provided?	
23	(a) Name & address of the agent in India – To indicate	Yes / No
	(b) Amount of agency commission – To indicate	Yes / No
	(c) Whether agency commission included in quoted material value?	Yes / No
24	For Indian Bidders – Whether indicated the place from where the items will be dispatched. To specify:	Yes / No
25	For Indian Bidders – Whether road transportation charges up to Duliajan quoted?	Yes / No
26	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges?	Yes / No
27	For Indian Bidders only - Whether indicated import content in the offer?	Yes / No

28	For Indian Bidders only - Whether offered Deemed Export prices?	Yes / No
29	For Indian Bidders only – Whether all applicable Taxes & Duties have been quoted?	Yes / No
30	Whether all BRC/BEC clauses accepted?	Yes / No
31	Whether confirmed to offer the items for Pre-despatch/shipment Inspection?	Yes / No
32	Whether Pre-despatch/shipment inspection charges applicable?	Yes / No
33	If Pre-despatch/shipment inspection charges applicable, whether quoted separately on lumpsum basis?	Yes / No
34	Whether confirmed to carry out Installation & Commissioning of the equipment at Duliajan (Assam)?	Yes / No
35	Whether Installation & Commissioning charge applicable?	Yes / No
36	If Installation/ Commissioning charges applicable, whether separately quoted on lumpsum basis?	Yes / No
37	Whether to & fro air fares, boarding/lodging of the commissioning personnel at Duliajan, Assam (India) included in the quoted charges?	Yes / No
38	Whether confirmed that all Service, Income, Corporate tax etc. applicable under Installation/ Commissioning are included in the prices quoted?	Yes / No
39	Whether Integrity Pact with digital signature uploaded?	Yes / No
40	Whether confirmed to carry out Training to OIL personnel as per NIT?	Yes / No
41	Whether Training charge applicable?	Yes / No
42	If Training charges applicable, whether separately quoted on lumpsum basis?	Yes / No
43	Whether to & fro air fares, boarding/lodging of the Training personnel for providing training at Duliajan, Assam (India) included in the quoted charges?	Yes / No
44	Whether confirmed that all Service, Income, Corporate tax etc. applicable towards services to be provided under Training are included in the prices quoted?	Yes/No
45	Whether confirmed acceptance of tender Payment Terms of 80% against shipment/dispatch documents and balance 20% after successful Installation & Commissioning.	Yes/No

Offer reference	
Name of the Bidder	



NOTES:

- 1. Machine all over
- 2. < Deleted>
- 3. < Deleted>
- 4. Stamp Serial Number and WO Number
- 5. Remove sharp corners
- 6. Dims 231.775 / 231.725 & 228.600 / 228.550 mentioned in outline drawings are expected after hub mounting due to swell

COUPLING HUB H & T - FORGED CARBON STEEL

4903 CX

OIL RIG MOTORS