

Bid Number: GEM/2022/B/2305449

Dated: 29-06-2022

Bid Document

Bid Details		
Bid End Date/Time	21-07-2022 14:00:00	
Bid Opening Date/Time	21-07-2022 14:30:00	
Bid Offer Validity (From End Date)	65 (Days)	
Ministry/State Name	Ministry Of Petroleum And Natural Gas	
Department Name	Oil India Limited	
Organisation Name	Oil India Limited	
Office Name	Oil India Limited	
Total Quantity	5	
Item Category	Rotary Lobe Type Pump having Rubber/Elastomer Lobes with Metal Housing. (Q3)	
MSE Exemption for Years of Experience and Turnover	No	
Startup Exemption for Years of Experience and Turnover	No	
Document required from seller	Experience Criteria, Bidder Turnover, Certificate (Requested in ATC), OEM Authorization Certificate, Additional Doc 1 (Requested in ATC), Additional Doc 2 (Requested in ATC), Additional Doc 3 (Requested in ATC), Additional Doc 4 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer	
Bid to RA enabled	No	
Time allowed for Technical Clarifications during technical evaluation	5 Days	
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	Yes	
Inspection to be carried out by Buyers own empanelled agency	Yes	
Type Of Inspection	Stage-wise Inspection	
Name of the Empanelled Inspection Agency/ Authority	Board of Officers	
Payment Timelines	Payments shall be made to the Seller within 30 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)	
Evaluation Method	Total value wise evaluation	

EMD Detail

	Required	No	
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ePBG Detail

Advisory Bank	HDFC Bank
ePBG Percentage(%)	3.00
Duration of ePBG required (Months).	24

(a). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

Beneficiary:

OIL INDIA LIMITED

Oil India Limited, Materials Department, Duliajan, Assam -786602 (Amrit Loushon Bora, Sr. Manager Materials)

Splitting

Bid splitting not applied.

MII Purchase Preference

MII Purchase Preference	No
Mili Purchase Preference	INO

Details of the Competent Authority for MII

Name of Competent Authority	S DHAR
Designation of Competent Authority	US TO GOI
Office / Department / Division of Competent Authority	
CA Approval Number	
Competent Authority Approval Date	26-04-2022
Brief Description of the Approval Granted by Competent Authority	Limit for exemption of small purchase under para 4 of the PPP-MTI Order, 2017 shall be Rs. 1 crore.

Competent Authority Approval for not opting Make In India Preference : <u>View Document</u>

MSE Purchase Preference

	MSE Purchase Preference	Yes
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1. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered

product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer)of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 100%(selected by Buyer) percentage of total QUANTITY.

${\bf 2.\ Inspection\ of\ Stores\ by\ Nominated\ Inspection\ Authority\ /\ Agency\ of\ buyer\ or\ their\ authorized\ representatives}$

An independent third party Professional Inspection Body can help buyer in mitigating buyer's risk with predispatch/post-dispatch inspection in order to ensure that equipment, components, solutions and documentation conform to contractual requirements. The buyer has a right to inspect goods in reasonable manner and within reasonable time at any reasonable place as indicated in contract. Inspection Fee/ Charges (as pre-greed between buyer and Inspection Agency) would be borne by the buyer as per their internal arrangement but may be recovered from the seller if the consignment failed to conform to contractual specification and got rejected by the Inspection Officer .If so requested and accepted by the seller , initially seller may pay for inspection charges as applicable and get the same reimbursed from buyer if consignment accepted by the Inspecting Officer . For reimbursement seller has to submit proof of payment to Inspection Agency.

Seller/OEM shall send a notice in writing / e-mail to the Inspecting officer / inspection agency specifying the place of inspection as per contract and the Inspecting officer shall on receipt of such notice notify to the seller the date and time when the stores would be inspected. The seller shall, at his own expenses, afford to the Inspecting officer, all reasonable facilities as may be necessary for satisfying himself that the stores are being and or have been manufactured in accordance with the technical particulars governing the supply. The decision of the purchaser representative /inspection authority regarding acceptance / rejection of consignment shall be final and binding on the seller.

The Seller shall provide, without any extra charge, all materials, tools, labour and assistance of every kind which the Inspecting officer may demand of him for any test, and examination, other than special or independent test, which he shall require to be made on the seller's premises and the seller shall bear and pay all costs attendant thereon.

The seller shall also provide and deliver store / sample from consignment under inspection free of charge at any such place other than his premises as the Inspecting officer may specify for acceptance tests for which seller/OEM does not have the facilities or for special/ independent tests.

In the event of rejection of stores or any part thereof by the Inspecting officer basis testing outside owing to lack of test facility at sellers premises, the seller shall, on demand, pay to the buyer the costs incurred in the inspection and/or test. Cost of test shall be assessed at the rate charged by the Laboratory to private persons for similar work.

Inspector shall have the right to put all the stores or materials forming part of the same or any part thereof to such tests as he may like fit and proper as per QAP/governing specification. The seller shall not be entitled to object on any ground whatsoever to the method of testing adopted by the Inspecting officer.

Unless otherwise provided for in the contract, the quantity of the stores or materials expended in test will be borne by seller.

Inspecting officer is the Final Authority to Certify Performance / accept the consignment. The Inspecting officer's decision as regards the rejection shall be final and binding on the seller.

The seller shall if so required at his own expense shall mark or permit the Inspecting officer to mark all the approved stores with a recognised Government or purchaser's mark.

Rotary Lobe Type Pump Having Rubber/Elastomer Lobes With Metal Housing. (5 pieces)

Brand Type	Unbranded

Technical Specifications

Buyer Specification Document	<u>Download</u>

Installation Commissioning and Testing (ICT) details for the above item:

% of Product Cost Payable on Product Delivery	80%
Min Cost Allocation for ICT as a % of product cost	5%
Number of days allowed for ICT after site readiness communication to seller	90 Days

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporti ng Officer	Address	Quantity	Delivery Days
1	Chandana Phukan	786602,Oil India Limited, Duliajan, Assam	5	180

Buyer Added Bid Specific Terms and Conditions

1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

2. Generic

Bidder financial standing: The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.

3. Generic

Buyer Organization specific Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact as per Buyer organizations policy along with bid. Click here to view the file

4. Generic

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- a. Copy of PAN Card.
- b. Copy of GSTIN.
- c. Copy of Cancelled Cheque.

d. Copy of EFT Mandate duly certified by Bank.

5. Generic

Installation, Commissioning, Testing, Configuration, Training (if any - which ever is applicable as per scope of supply) is to be carried out by OEM / OEM Certified resource or OEM authorised Reseller.

6. Generic

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

7. Generic

While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

8. Generic

Whereever Essentiality Certificate is applicable (PEL/ML), successful bidder should provide Proforma Invoice for processeing for EC application and material should be dispatche after receiving of EC rom DGH. In view of the same, an ATC may be incorporated in GeM, viz, "BIDDER/OEM must provide Proforma Invoice for processeing for EC application within 135 days from date of issue of GeM Contract and material should be dispatche after receiving of EC rom DGH."

9. Generic

Upload Manufacturer authorization: Wherever Authorised Distributors are submitting the bid, Manufacturers Authorisation Form (MAF)/Certificate with OEM details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid.

10. Generic

Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:

- i) The Seller fails to comply with any material term of the Contract.
- ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
- iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
- iv) The Seller becomes bankrupt or goes into liquidation.
- v) The Seller makes a general assignment for the benefit of creditors.
- vi) A receiver is appointed for any substantial property owned by the Seller.
- vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

11. Generic

The buyer organization is an institution eligible for concessional rates of GST as notified by the Government of India. The goods for which bids have been invited fall under classification of GST concession and the conditions for eligibility of concession are met by the institution. A certificate to this effect will be issued by Buyer to the Seller after award of the Contract. Sellers are requested to submit their bids after accounting for the Concessional rate of GST.

Applicable Concessional rate of GST: 5%

Notification No.and date: 3/2017 dated 28/06/2017

12. Scope of Supply

Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods

13. Purchase Preference (Centre)

Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 100% of total value.

14. Warranty

Warranty period of the supplied products shall be 1 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

Disclaimer

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization. Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity/restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and/or terms and conditions governing the bid. Any clause incorporated by the Buyer such as demanding Tender Sample, incorporating any clause against the MSME policy and Preference to make in India Policy, mandating any Brand names or Foreign Certification, changing the default time period for Acceptance of material or payment timeline governed by OM of Department of Expenditure shall be null and void and would not be considered part of bid. Further any reference of conditions published on any external site or reference to external documents/clauses shall also be null and void. If any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations. Also, GeM does not permit collection of Tender fee / Auction fee in case of Bids / Forward Auction as the case may be. Any stipulation by the Buyer seeking payment of Tender Fee / Auction fee through ATC clauses would be treated as null and void.

This Bid is also governed by the General Terms and Conditions

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---Thank You---

SPECIFICATIONS & SCOPE OF WORK

ELECTRIC MOTOR DRIVEN CRUDE OIL SLUDGE PIT DEWATERING PUMP SET

A. PUMP:

1. Type

Rotary Lobe Type Pump having Rubber/Elastomer Lobes with Metal Housing.

2. Capacity & Pressure

Flow requirement is 10 m³/hr. at Discharge Pressure of 4 bar. Suction Pressure of -0.4 bar (Minimum Negative Suction: 4Meter). Differential Pressure of 4.4 Bar.

3. Pump Speed

The max. speed limit of the offered pump shall be within the range of 300-450 RPM

- 4. Features & Material of Construction
 - i Pump should have Gear Box with physical gap between Pumping Chamber and Gear Box. Any Leakage should be visible and open to environment.
 - ii Pump should be driven by Foot Mounted Geared Motor. (Reputed make only).
 - iii Suitable Non Sparking Coupling with Guard should be provided.
 - iv Pump & Drive Housing: Cast Iron
 - v Rotor/O Ring: Suitable for application.
 - vi Shaft Seal: Suitable Mechanical Seal
 - vii Base Plate: MS or equivalent.
 - viii Suitable Suction and Discharge Flange should be provided to operate in Negative Suction.

5. Accessories

i. Full flow, suitably sized and rated, spring loaded, Reset Relief Valve, mounted on the discharge piping. (Make: OTECO/BAIRD / CAMERON or equivalent)

N.B: The relief valve is to be set at 110% of our maximum pressure requirement at the time of delivery.

ii. Pump should be driven by Induction Motor.

Flame Proof, IE2, 415V+/-10%, 3 Phase, 50HZ +/-5%, 4 Pole, IP 55, Insulation Class F.

Motor Mounting: B5 - Flange Mounted

Gear Box Mounting: B3 - Foot Mounted

(Gear Box Make: Shanti, Premium or equivalent)

- iii. Complete set of Suction fittings to be provided with Pump Set
 - a) 4 m Suction Hose with both side Flange end suitable to Pump Suction Flange 1 no. for Each Pump
 - b) 90 deg. Smooth Bend with both side Flange end at Pump suction connected between Pump Suction Flange and Suction
 - c) Hose 1 no. for Each Pump
 - d) Non Return valve 1 no. for Each Pump
 - e) Foot valve to match with suction hose 1 no. for Each Pump

6. Duty / Service

The pump should be designed for continuous duty application. Necessary credentials in this regard, in the form of product catalogues / brochures from OEM should be furnished.

NOTE: #Continuous duty# means pump having service operation on full load for a period of 8 hours to 24 hours per day as per Hydraulic Institute Standard application.

7. Liquid to be handled:

The pumping unit should be suitable for pumping crude oil and Crude Oil mixed with Water.

API Gravity at 60 Deg F : 30

PH : 7.2

Pumping Temp : 10 to 40 Deg. C

Viscosity : 100 – 200 cp @ 26 Deg. C.

Sp. Gravity : 0.850 - 0.950 kg/dm3

Solid Size : Max. 5 mm

8. Suction condition:

Negative: - 4 m

9. Name plate and rotation arrows

A nameplate shall be securely attached at a readily visible location wherein the manufacturers name, machine serial number, maximum and minimum design limits and rating data, maximum allowable working pressure and temperatures, hydrostatic test pressure etc. should be clearly indicated.

Rotation arrows indicating direction of rotation of major items should be cast in or attached.

- 10. Certificates and Documents to be forwarded
- I. The following documents should be forwarded along with the quotations:
 - i. Product line catalogue, specifying materials of construction and constructional features of the Rotary Lobe pump and technical literatures of all ancillary equipment.
 - ii. Performance chart of the Rotary Lobe pump including all technical calculations such as hydraulic horse power, volumetric efficiency, mechanical efficiency, RPM, gear ratio, NPSH requirement, etc.
- iii. Detail of Motors and motor glands as per tender.
- II. The following documents shall have to be forwarded within a month of issue of LOI or placement of firm order
 - i. Foundation diagrams for the complete pump set indicating the static and dynamic loads of the package.
- III. The following documents must be forwarded along with the supply of equipment
 - i. certified test results
 - ii. Certificate of hydrostatic testing
 - iii. Manufacturers certificate of authenticity
 - iv. Certificate of test / conformance of pump, motors and associated ancillaries like relief valves etc.
 - v. Operation and maintenance manuals, parts list of pump, electric motor, gear box and all other accessory equipment.
 - vi. Standard Operating Procedure (SOP) with special emphasis on safety of the equipment and operating personnel.

B. SPEED REDUCTION GEAR BOX:

The speed reduction from the Prime Mover (Electric Motor) rated rpm to the desired rpm of pump shall be effected by means of a separate external foot mounted gear box installed between the prime mover and the pump.

(Gear Box Make: Shanti, Premium or equivalent).

C. PRIME MOVER: Electrical Motor specification is as follows:

The Prime mover for the Pump shall be Three phase, squirrel cage rotor Induction Motor, FLAMEPROOF type (Ex-d), suitable for installation in Zone-1, Zone-2 Hazardous Area, Gas Group IIA and IIB, of Oil Mine.

Details of Motor with starter is attached as separate document in **Annexure -A1**.

D. SPECIAL NOTES TO BIDDERS:

- 1. The offered pump should be a Horizontal Rotary Lobe Type pump with Rubber / Elastomer Lobes & Metal Housing/Body. Also Pump should have Gear Box having Physical Gap between Pumping Chamber and Gear Box chamber. Any deviation in this regard is not acceptable and such offer will be rejected straightaway.
- 2. The bidder must submit detailed technical specifications with all relevant technical catalogues, statutory certificates etc. for Instrumentation items of their offered model no along with the bid for technical evaluation.
- 3. Bidder shall submit necessary documents along with the offer for all electronic/electrical instruments and equipment used in zone "1" or zone "2" hazardous area as per the Regulation 107(2) of OMR 2017.
- 4. Test and calibration certificates for instruments have to be provided along with the supply.
- 5. The materials shall be packed in robust cartoons so as to avoid damage in transit
- 6. OIL reserves the right to inspect, test and if necessary reject any part/parts after delivery at site (including incomplete manuals, catalogues, etc.) in case of any fault on the part of the supplier he has to replaced/repair at his own cost.
- 7. The bidders must submit a written undertaking (along with the bid) that they would be able to supply all the requisite spares and consumables (including bought out items) for a minimum period of 10 (ten) years from the Certified date of completion / successful field commissioning of the unit.
- 8. Supply of all necessary accessories & fittings like Foundation Bolt, Counter Flange etc. required to complete the installation and commission is under the scope of bidders.

E. STAGE-INSPECTION AND TESTING

OIL as purchaser shall have right to carry out Stage-Inspection and shop visit to inspect the manufacturing progress but such inspection shall not relieve the bidder of his responsibility to ensure that the equipment supplied is free from all manufacturing and other defects and conform to correct specifications.

For such inspection, no separate cost will be payable by OIL to the successful bidder. However, cost of travel, accommodation and other expenses of OIL's PDI team will be borne by OIL.

F. PRE-DISPATCH INSPECTION

- i) The bidder shall ensure that the material to be supplied against this order shall be individually inspected, tested and analyzed in terms of the specifications attached to the order and the relevant codes and practices specified therein by expression or implication.
- ii) The pump set shall be inspected by OIL's deputed engineer(s) or any other individual/agency authorized by OIL for the purpose of inspection at manufacturers / assembler's works / factory prior to dispatch. However, such inspection will not relieve the supplier of his responsibility to ensure that the equipment supplied conforms to the correct specifications and is free from manufacturing and all other defects.
 - The supplier shall carry out full load performance test on the pump set, at duty conditions, in the presence of OIL's deputed representative(s).
 - The supplier shall make available to OIL or any other individual/agency authorised by OIL for the purpose of inspection, all its records and results in respect of inspection.
- iii) For false calls for inspection and for the cases where material is rejected on inspection, the successful bidder will bear the actual cost of inspection incurred/suffered by OIL.
- iv) Supplier shall notify OIL for at least 15 (fifteen) days in advance of each inspection. For such inspection, no separate cost will be payable by OIL to the successful bidder. However, cost of travel, accommodation and other expenses of OIL's PDI team will be borne by OIL.
- v) The inspection by OIL or by OIL's representative in any manner does not absolve the successful bidder of any liability and/or responsibility under the purchase order.
- **N.B.:** Charges for carrying out the above tests at the Manufacturer's facility should be included in the purview of the offer.

G. FACTORY ACCEPTANCE TEST (FAT)

The bidder will have to submit final GA drawing including all the technical details, factory acceptance test procedure (or Quality Assurance Plan) and inspection plan to OIL for approval. OIL will depute engineer(s) to witness the complete functions and operation of the all the items of the system at one workplace. The acceptance of the system will be signed by OIL representatives at that work place after final successful functional test and demonstration.

Unless otherwise specifically authorized by OIL in writing, the successful bidder shall not ship or dispatch for any material under the purchase order before Inspection.

H. TRAINING

- a) The bidder shall provide comprehensive training to a group of OIL's engineers at their manufacturing plant/works for a period of 3 days (approx.) on Operation & Maintenance, Troubleshooting of the system. The training is to be supplemented by manual in hard bound copy. Training schedule is to be informed to OIL atleast 15 days in advance. The training schedule is to be preferably immediately after completion of pre-despatch inspection.
- b) After successful installation and commissioning, the bidder needs to provide detailed on-site operation and maintenance training to OIL personnel for minimum two days' duration.
- c) No separate cost will be paid by OIL to the successful bidder on account of trainings. Cost of training, if any shall be included in the cost for installation & commissioning. All cost related to bidder's personnel during training shall be to bidder's account. However, cost of travel, accommodation and other expenses of OIL's team will be borne by OIL.
- d) Installation & commissioning shall be construed to be completed only after completion of trainings mentioned above.

I. INSTALLATION & COMMISSIONING:

- a) Supervision of Installation & Commissioning of the Pump set shall be carried out by the bidder in the presence of OIL's representatives at its fields in and around Duliajan, Assam (India). Services of qualified and competent personnel from equipment manufacturer are must during installation & commissioning of the pump sets. Only competent service personnel shall be engaged for installation, testing and commissioning of pump sets. OIL will provide necessary statutory permits in classified areas as and when required.
- b) Supervision of Installation and Commissioning charges must be quoted separately (should not be clubbed together with main equipment) on lump sum basis which shall be considered for evaluation of the offers. These charges should include to and fro fares, boarding/ lodging, local transportation and other expenses of the commissioning engineers during their stay at Duliajan, Assam (India). All Taxes towards the services provided by the supplier shall be borne by the supplier and will be deducted at source. Bidders should also confirm about installation/ commissioning in the Technical Bid.

J. WARRANTY:

The equipment/materials will be guaranteed for a period of 12(twelve) months from the date of commissioning. The supplier shall repair or replace any item or equipment found defective in materials or workmanship or performance within the above period free of charge. The warranty is applicable to bought out items and system software also. Any system/ software fault during warranty period, supplier has to attend within 48-hours after receiving of calls from OIL free of charges.

K. SPARE PARTS AND SPECIAL TOOLS:

1. COMMISSIONING SPARES & TOOLS

The Supplier has to supply all the spare parts for initial commissioning of the unit.

The following special tools must be included [one set against each pump set] in the scope of supply, as commissioning spares. The prices of these spares are to be included in cost of supply which shall be considered during commercial evaluation of the offer.

- i. A set of tools (Box and open spanner wrenches) for fitting and tightening all bolts installed in the pump set.
- ii. Any special tools required for repairing/ fitting of the pump's component to be provided by the supplier.

NOTE: All the above mentioned tools shall have to be packed separately for handing over the same to Head- Field Engineering and the package to be labeled with following:

OIL's Purchase order No:
To,
Head- Field Engineering
OIL INDIA LIMITED
DULIAJAN- 786602
ASSAM, INDIA

2. CRITICAL SPARES

Supplier shall supply the critical spares for pumps, motors, other electrical and instrumentation items along with the supply of the Unit considering 2 years' consumption.

Bidder has to provide the list of spares required along with quantity and part numbers of the spares that shall be required for maintenance of the pump set for at least two years.

Note:

- i The prices of these spares are to be included in cost of supply which shall be considered during commercial evaluation of the offer.
- ii All the above mentioned critical spares shall have to be packed separately for handing over the same to Head-Field Engineering and the package to be labeled with following:

OIL's Purchase order No:______To,
Head- Field Engineering
OIL INDIA LIMITED
DULIAJAN- 786602
ASSAM, INDIA

3. RECOMMENDED SPARES

- a) The bidder shall furnish a list of spares & components that will be required for regular operation and maintenance, overhauling etc. throughout the life of the equipment complete with price. Annual consumption of each spare should be furnished in a tabular format.
 - Cost of recommended spares shall not be considered for price bid evaluation. Price to be quoted by the bidder against supply should not include prices for recommended spares.
- b) The bidders must submit a written **undertaking** (along with the bid) that they would be able to supply all the requisite spares and consumables (including bought out items) for a minimum period of 10 (ten) years from the Certified date of completion/ successful field commissioning of the unit.

L. AFTER SALES SERVICE:

The nature of after sales service, which can be offered by the bidder during initial commissioning and also subsequently should be clearly stated.

M. SAFETY PRACTICES: -

- (i) The successful bidder shall abide by all safety and security rules and regulations existing in the OIL's Installations. The successful bidder shall observe the safety measures required to be undertaken for safety of persons, labour, public and properties at work site/plant premises/ residential premises/ public places etc. The successful bidder shall be required to take work permit from respective shift in charges for each day and each shift for all kind of jobs. There can be instances of not getting permits, withdrawing of permits already issued at any stage of work due some operational safety and security reasons. For any stoppage of work for such reasons no claim whatsoever will not be considered.
- (ii) Stand by firefighting equipment will be deployed at the work site by OIL. However, at least two of the successful bidder's personnel deployed for the work must be capable of handling the firefighting equipment at the time of emergency and the persons will have to be present at the work site throughout the working time. If required the successful bidder's nominated persons will be imparted training on handling such equipment by OIL's Fire Service department.
- (iii) Any compensation arising out of the job carried out by the successful bidder whether related to pollution, Safety or Health will be paid by the successful bidder only.
- (iv) Any compensation arising due to accident of the successful bidder's personnel while carrying out the job, will be payable by the successful bidder.
- (v) The successful bidder shall have to report all incidents including near miss to Installation Manager/ departmental representative of the concerned department of OIL.
- (vi) In case the successful bidder is found non-compliant of HSE laws as required, the company will have the right for directing the successful bidder to take action to comply with the requirements, and for further non-compliance, the successful bidder will be penalized as per prevailing relevant Acts/ Rules/ Regulations.
- (vii) When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE measures, Company will have the right to direct the successful bidder to cease work until the non-compliance is corrected.
- (viii) All safety gears like safety boots, helmets, safety belts, hand gloves, safety goggles, gas masks etc. required for carrying the job in a safe manner shall be arranged by the successful bidder. In case the successful bidder fails to provide the safety gears, the same will be provided by OIL and the cost of such safety items will be deducted from the successful bidder's bills.

- (ix) CLEARANCE OF SITE: As a part of the job, the successful bidder shall completely remove all the temporary/ disposable materials if needed while execution of work or after completion of work at his own cost and dispose off the same as directed by Engineer-in-Charge.
- (x) The successful bidder shall maintain first aid facilities for its employees. All critical industrial injuries shall be reported promptly to EMPLOYER, and a copy of the successful bidder's report covering each personal injury requiring the attention of a physician shall be furnished to the EMPLOYER.
- (xi) The successful bidder shall observe and abide by all fire and safety regulations of the EMPLOYER. Before starting construction work, the successful bidder shall consult with Employer's safety Engineers and must make good to the satisfaction of the EMPLOYER any loss or damage due to fire to any portion of the work done or to be done under this job or to any of the Employer's existing property.

N) Alongwith the technical bid, the bidder should submit following technical check list and data sheets with their response:

TECHNICAL CHECK LIST

- 1. Whether quoted as OEM of Pump and whether documentary evidences submitted? YES/NO
- 2. Whether quoted as authorised dealer of Pump and whether documentary evidences submitted? YES/NO
- 3. Whether quoted as OEM recommended assembler of Pump sets and whether documentary evidences submitted? YES/NO
- 4. Whether the offered Pump is a horizontal, Rotary Lobe Pump with Rubber/Elastomer Lobes & Metal Housing? YES/NO
- 5. Whether Pump is having Gear Box Security System i.e. Physical Gap between Pumping Chamber and Gear Box chamber ? YES/NO
- 5. Whether the Pump is designed for continuous service duty? YES/NO
- 6. Whether the offered Electric Motor meets the specification mentioned in the tender ? YES/NO
- 7. Whether the Calculation behind selection of Motor Rating (HP or KW) furnished with the offer as per NIT? YES/NO
- 8. Whether the Motor is rated for continuous power? YES/NO
- 9. Whether Test Certificates or Declaration against FLP Items furnished with the offer? YES/NO
- 10. Whether the speed reduction gear box is external foot-mounted ? YES/NO
- 11. Whether guards shall be provided over couplings? YES/NO
- 12. Whether the two years spares for the packages indicated have been quoted? YES/NO
- 13. Whether special tools and commissioning spares have been included in the scope of supply ? YES/NO
- 14. Whether spares shall be available for 10 years after supply of equipment? YES/NO
- 15. Whether separately highlighted any deviation from the technical specifications? YES/NO
- 16. Whether the Pre-despatch inspection of the Pump packages shall include Full Load Performance test of the Pump Sets? YES/NO

DATA SHEET

Data sheet (Motor /Gear Box)

Make

Model

Type

Voltage

Frequency

No of phases

No of poles

Enclosure

Cooling system

Direction of rotation

Insulation class

Rated rpm

Duty

Mounting

Starting

Switching

Terminal box

Gland

Type of drive

Bearing

Gross HP at rated rpm

Net HP available at 1500 rpm

Data sheet (pump)

Make

Model

Rated Flow

Discharge Pressure

Suction Pressure

Differential Pressure

Rated Speed

NPSHr

Shaft Power / Power Required

Operating Torque

Frequency

Pump Housing

Wear Plates

Rotor/Lobe Material

Shaft Seal

Suction Flange (Size / Rating)

Discharge Flange (Size / Rating)

Base Plate

HP requirement as per NIT parameters

Data sheet (Gear Box)

Make and model of external gear box

Gear ratio of external foot mounted gear box

Type and size of coupling between motor shaft and gear box input shaft

Bearing type/ Number

Description	Detailed Specification	Bidder's Compliance
1.0 Motor:	The Prime mover for the Pump shall be an Electric Motor suitable for use in Gas group IIA & IIB, Zone 1 Hazardous areas of oil mines/process installations and with following Specifications:	
	I. Type: Three phase Squirrel cage induction motor	
	II. Ratings:	
	a. Operating Voltage: 3 phase, 415 V +/- 5% AC	
	b. <u>Frequency:</u> 50 Hz +/-5%	
	c. Output (HP/KW): Min. 10% higher than the pump/ load requirement (Calculations for selection of the Motor wrt Pump Load shall have to be submitted along with the offer).	
	d. RPM: To match pump requirement	
	e. <u>Duty:</u> Continuously rated, S1 duty	
	f. Insulation Class: Class F, temperature rise limited to class B	
	g. Protection: IP 55 Minimum	
	III. Enclosure: Flameproof enclosure 'Ex-d' suitable for use in Zone -1 and presence of Gas Group IIA and IIB Hazardous Area as per IS/IEC 60079-1(2007).	
	IV. Applicable Standard: The motor shall conform to latest version of IS/IEC 15999-1, IS 12615, IS/IEC 60079-0, IS/IEC 60079-1	
	V. Painting: Epoxy DA grey	
	VI. Mounting: As per equipment design.	
	VII. Cooling: Bidirectional fan at NDE.	
	VIII. Terminal box: Motor terminal box (Flameproof) with six nos. of terminal studs of adequate current	
	carrying capacity, suitable for use in oil and gas mines, fitted with 01 (one) no. [in case the motor HP	
	is equal or less than 12.5HP] or 02 (two) nos. [in case of the motor HP is more than 12.5HP] double	
	compression FLP cable glands. The glands shall be suitable for entry of suitably sized (as per motor rating) 4 core PVC insulated, PVC sheathed, multi-stranded aluminium cable armoured with GI	

	strip/wire. However, actual no. of cable entries to the terminal box, and hole size would be decided after placement of the order depending on motor rating, starter type and cable size. IX. Earthing: 1 (one) no. inside terminal box and 2 (two) nos. on the body of the Motor. Earthing system for the motor shall be as per the IS: 3043-2018. X. Make: Bharat Bijlee/ Crompton Greaves/ Kirloskar/ Siemens / ABB / Marathon / Laxmi Hydraulics/ NGEF.	
2.0 Motor Starter	A. General notes:	
Specification	I. The starter shall be placed inside safe area and hence is not required with FLP enclosure.	
	II. For motor HP less than or equal to 12.5HP the Starter shall be DOL type and for motor HP greater than 12.5HP the starter shall be fully automatic Star-Delta type.	
	III. It shall be Type II coordination.	
	IV. <u>Incomer:</u> Incomer of the starter shall be a 3P, 415V AC, min 25kA breaking capacity MCCB with electronic trip unit (adjustable long time and short time with instantaneous trip, with individual time settings), and with direct rotary handle operable from outside the enclosure. It shall be rated min. 200% of motor full load current.	
	V. Neutral shall not be used in the control circuit, [as the source (generator/transformer) neutral shall be grounded with high resistance as per CEA (Measures relating to Safety and Electric Supply) Regulations, 2010, clauses 100.(1)]., A control transformer (415V/230V, 100VA) to be used in the starter panel for control supply.	
	VI. Double pole MCB shall be incorporated in the motor control circuit for isolation & protection of the control circuit.	
	VII. Main Contactor, Star Contactor (in case of star-delta starter) and Delta Contactor(in case of star-delta starter) shall be 3 pole and AC3 rated.	
	• Main and Delta contactor (in case of star-delta starter) shall be rated min 150% of the motor full load current and	

- Star contactor (in case of star-delta starter) shall be rated min 80% of the motor full load current
- VIII. In case of star-delta starter, appropriate interlock shall be incorporated between the star and delta contactor. The transition from star to delta contactor shall be automatic with the help of an electronic timer.
- **IX.** The starter control shall have remote start/stop capability (with push button station near the motor).
- **X.** One local/remote selector switch shall be provided in the starter so that the pump-motor can be started **either in** local mode or in remote mode as required, however the scheme shall be such that the motor can be 'STOPPED' from both local or remote at any time.
- XI. The control voltage of remote push button stations for motors is to be limited to maximum 30 V as per CEA Regulations, 2010, Clause 102(iv) & Clause 110(4)(i). Therefore, an intrinsically safe barrier (ISB) shall be placed between the remote pushbutton station and motor starter panel, so that no dangerous voltage is transmitted to hazardous area for operation of the remote pushbutton station. The Intrinsically Safe Barrier is to be placed in the motor starter cubicle. Make & Model of ISB PEPPERL+FUCHS (Model: KFA6-SR2-EX2.W)
- **XII.** Starter shall have minimum of 2 nos. potential free NO and NC spare contacts each for interlocking SCADA or other instrumentation system.
- XIII. All interconnections shall be done by solid electrolytic grade tinned copper links, suitably rated
- **XIV.** All cables of control circuit shall be suitably sized 660/1100 V graded PVC insulated multistranded copper cables. Wires shall be properly marked with colored and numbered ferrules for proper identification.
- **XV.** Brought out terminals with suitably rated Aluminium Bars shall be provided for incoming and outgoing cable connection.
- **XVI.** Makes of Components:
 - i) MCCB, Contractor, RCBO, Electronic OLR: Schneider / Legrand / Siemens/ ABB/ L&T

ii)	Electronic Time Delay Relay: Siemens / GE / Schneider /ABB/ GIC / Minilec	
iii)	Ammeter: Automatic Electric/ Schneider / L&T / Rishab	
iv)	CTs: Kappa/ AE / Rishab	
v)	Earth Leakage Relay: Schneider / Legrand / Siemens/ ABB/ Havells / GIC	
vi)	Intrinsically Safe Barrier: Pepper Fuchs	
vii)	Control Transformer – AE / Kappa / Gujarat Plug-In Devices Pvt. Ltd	
B. Protec	tions:	
I.	Short Circuit (in-built in the MCCB)	
II.	Earth fault (in-built in the MCCB)	
III.	Overload through electronic overload relay with adjustable range (depending on Motor rating), Selectable trip class 10E & 20E, having inbuilt protection against phase failure, automatic or manual reset selectable, stop and test function and trip indication, with trip contact (NC) and signal contact (NO). The electronic overload relay to be connected directly to the contactor with mounting kit as necessary.	
IV.	Earth-leakage: EL protection shall be provided through separate CBCT & ELR. Earth Leakage current Range shall be 30mA-3A, and time setting shall be 0 secs to 10 secs display.	
C. Meter	ing & indication	
The panel shall of circuitry):	ll have meters and indication for the following information (MCBs shall be used for protection	
· ·	se to phase Voltages with 0-500V range analog voltmeter with voltage selector switch for ph-voltage selection/measurement.	
II) Thr	ee phase Motor currents with properly rated CTs with analog ammeter & ammeter selector tch.	
III) "Sı	apply ON" indication connected between any two phases.	
IV) "Mo	otor On" with 'Green' LED indicating lamp.	
V) "Mo	otor Trip on Fault" with 'Amber' LED indicating lamp.	

D. Panel Body Construction

- I. Panel shall be self-supporting and self-mounting and made with sheet steel clad of 2mm thick MS CRCA sheets and built upon suitably sized MS frame work.
- II. The MS frame shall be mounted on a sturdy bottom structure made from suitably sized MS channel (L type / C type) with provision for grouting. The height of the bottom frame shall be 650 mm.
- III. The panel shall be front operable with access by double doors. Cable entries shall be from the bottom. Terminations shall be at the front side behind the 2nd door.
- **IV.** Panel shall be dust /vermin proof and weatherproof (IP 54 min). Ventilation louvers shall be provided on both sides; however, louvers shall be shielded with fine wire mesh (inside the panel).
- V. Special non-deteriorating Neoprene rubber gaskets shall be provided between all joints / door covers. Panel door shall be provided with single turn latches for opening / closing and locking arrangement.
- **VI.** All cable entry and exit shall be from bottom. Suitable cable entry arrangement with detachable gland plates and adequate nos. of single compression, heavy duty nickel plated brass glands shall be provided for termination of 1 no. incoming cable, 2 nos. outgoing cables and cables for remote push buttons [sizes to be decided based on rating of the motor].
- **VII.** Detachable gland plates for cable entry/exit shall be 3 mm thick MS CRCA sheets.
- **VIII.** Sufficient space shall be provided in the starter for cable termination, dressing and connecting cable leads to the brought-out terminals
 - **IX.** The entire metal work shall be treated with minimum seven tank anti-rust/anti-corrosion treatment as per IS and then powder coated in DA Grey color. Painting thickness shall be minimum 50 micron.
 - **X.** Internal earthing shall be provided for all equipment having earthing terminal and panel doors. Earthing terminals of the components shall be suitably connected to an earth bus inside the panel.
 - **XI.** Two external earthing studs shall be provided on both side of the panel. The external earthing stud shall be connected with the internal earthing bus with suitable GI hardware. The earth bus shall be connected to the panel at two distinctly different locations.

	XII.	Panel shall be suitably designed to facilitate easy loading & unloading. Lifting hooks to be provided suitably. Legend plates for the indication lamps, meters, control switches / buttons and labels for the	
	3/13 /	terminals shall be provided.	
	XIV.	Danger plate shall be placed on the front and back side.	
3.0 Flame &		ne proof and weather proof START/STOP push Button Station as per the following specifications	
Weather-Proof Push-Button		l also be supplied.	
Station:		Materials of construction-Die-cast Aluminium Alloy LM6	
Station.	II.	Enclosure - Flame proof Exd as per IS/IEC 60079-1(2007).	
	III.	Protection - IP-55 as per IS-2147	
	IV.	Hazardous Area classification - Zone - 1 & Zone - 2.	
	V.	Gas Group: IIA & IIB as per IS-2148.	
	VI.	Cable entry: 2 Nos. at bottom with 3/4" ET thread. One entry should be provided with FLP double compression gland suitable for 19 mm. O.D. Cable and the other entry should be provided with suitable size FLP stop plug.	
	VII.	Rain hood/canopy: Suitable size canopy to be provided with the PBS for rain water protection.	
	VIII.	Mounting: On stand with 650mm height.	
	IX.	Finish: Anti-corrosive Epoxy light Grey shade 631 including canopy.	
	X.	Identification Mark: A plate bearing the Test certificate reference number shall be embossed on the body	
	XI.	Earthing: Provision should be made for one no. earthing stud inside and two nos. earthing studs outside of the PBS unit.	
	XII.	Make: FCG / Baliga / FEPL/ Flexpro / Sudhir / SEPL / Prateek / R Sthall / Sai Ex	

4.0 Testing and	The latest version of standards shall prevail over the standards given in clause: 1.0(IV) and 3.0(II)	
Certification (For Motor, FLP Cable Gland and Push Button Station):	The test reports shall either be from an Indian Government Laboratory or NABL accredited laboratory or IECEx accredited laboratory or ATEX notified body, which is not a part of manufacturer's facilities. Test certificate no. shall also be embossed on the name plate of the motor and Push Button Station.	
5.0 Earthing	 Supply of Earthing materials for the Motor, Starter Panel and the push button station shall be in the scope of the party. I. 2" dia., 2-metre-Long G.I. Pipe earth electrodes with 4 nos. L-shaped links welded on the body of the electrodes at top end with holes for connecting GI straps. Earth electrode shall be hot dip galvanised after completion of all welding works. Qty. – 2 nos. for each motor and 2 nos for each Starter panel. 	
	II. Min 25 mm X 5 mm G.I. strips for earth connection (from earthing studs of motor, starter panel and push button station to earth electrodes).	
6.0 Scope of installation and commissioning	 I. The Motor, Starter Panel and the push button station shall be installed, tested and commissioned at site by the successful bidder. II. Glanding and termination of each cables to and from the starter panels, motor and push buttons shall be in the scope of the party. Suitably sized Glands, tubular terminals etc. shall be supplied by the party. However, supply and laying of cables will be facilitated by OIL. 	
7.0 Documents:	I. Bidder shall furnish details of the electrical items in their offer as per the above specifications IN THE SAME ORDER. All of the above shall form part of the offer acceptability. Specific type and make of components should be mentioned clearly.	
	 II. The following documents shall be submitted with the offer: a. Motor technical Datasheet b. Test certificate of the offered Motor, FLP Push Button Station and FLP Gland for suitability for use in Zone -1 and Gas Group IIA and IIB hazardous area as per clause 4.0. In case above mentioned type test certificates for the Flameproof (FLP) items are not readily available with the bidder at the time of bidding, bidder must furnish a declaration stating that 	

"within 15 days of placement of order, all the essential test certificates as per clause no. 13.1 (xi) & (xii) shall be furnished to OIL for review & approval. Fabrication / supply shall commence only after approval of test certificates by OIL."

- c. Calculation Sheet in support of offered Motor with respect to Pump Load.
- **d.** Schematic drawing of the starter panel.
- e. BOM including make and model no. of each offered component of the starter panel.
- **III.** The successful bidder shall obtain OIL's approval for the following drawings
 - **a.** GA and dimensional drawing of all electrical equipment
 - **b.** Power and control circuit diagrams of the starter panel.
 - **c.** Bill of Materials.
 - **d.** Test Certificate of the FLP Motor, PBS.

Manufacturing of the unit is to be started only after written approval of the drawings/documents by OIL.

- **IV.** Four bound sets of the following documents shall be submitted with the supply:
 - a. Approved GA and dimensional drawing of all equipment
 - **b.** Approved Power and Control circuit diagrams
 - c.Bill of materials with technical details of various components of the Starter Control Panel
 - **d.** List of recommended spares
 - e. All test certificates
 - f. Guarantee Certificates
- V. One laminated copy of the approved power & control circuit drawing shall be pasted inside of the front door of the Starter Control Panel.

8.0	Inspection and warranty:	 I. The motor/starter/PBS shall be inspected & tested at the manufacturers' premises by OIL reprehensive before dispatch. II. The Motor and starter panel shall be guaranteed for 1 (one) year from the date of supply. Guarantee certificates shall be duly signed and stamped by the supplier and shall be provided along with the supply. 	
9.0	Transportati on:	During transportation all electrical equipment are to be suitably packed to avoid water ingress or transit damage.	

ANNEXURE-B

GENERAL NOTES TO BIDDERS:

Bid Requirement	Bidder's Response (Complied/Not Complied. Reference to any document attached along with the bid)
Bidders shall submit their offer mentioning pointwise compliance / non-compliance to all the terms & conditions, BEC/BRC, Specifications etc. Any deviation(s) from the tender terms & conditions, BEC/BRC, Specifications etc. should be clearly highlighted specifying justification in support of deviation.	
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.	
The items covered in this Tender shall be used by Oil India Limited in the PEL/ML areas and hence concessional GST @5% (for indigenous bidder) will be applicable as per Govt. Policy in vogue. Successful bidder shall arrange to provide all necessary documents (invoice etc.) to OIL for applying Essentiality Certificate atleast 45 days prior to stipulated Delivery date. Further, Successful bidder shall affect dispatch only on receipt of relevant certificates/ shipment clearance from OIL, failing which all related liabilities shall be to Supplier's account.	
Categorization and various Criteria applicable to MSE bidders shall be guided by the Gazette Notification No. CG-DL-E-26062020-220191 dated 26.06.2020 and Amendment vide Gazette Notification no. CG-DLE-16062021-227649 dated 16th June, 2021 issued by Ministry of MICRO, SMALL AND MEDIUM ENTERPRISES. The existing enterprises registered under EM- Part-II or UAM till 30th June, 2020 shall continue to be valid only for a period up to the 30 th June, 2022.	
The bidder claiming as MSE status (MSE-General, MSE-SCIST, MSE -Woman) against this tender has to submit the following documents for availing the benefits applicable to MSEs:	
Udyam Registration Number with Udyam Registration Certificate.	
OR	
Proof of registration with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or Udyog Aadhar registration or registration with any other body specified by Ministry of MSME.	
Note: In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur or Woman Entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur/ Woman Entrepreneurs should also be enclosed.	
	Bidders shall submit their offer mentioning pointwise compliance / non-compliance to all the terms & conditions, BEC/BRC, Specifications etc. Any deviation(s) from the tender terms & conditions, BEC/BRC, Specifications etc. should be clearly highlighted specifying justification in support of deviation. 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. The items covered in this Tender shall be used by Oil India Limited in the PEL/ML areas and hence concessional GST @5% (for indigenous bidder) will be applicable as per Govt. Policy in vogue. Successful bidder shall arrange to provide all necessary documents (invoice etc.) to Oil. for applying Essentiality Certificate atleast 45 days prior to stipulated Delivery date. Further, Successful bidder shall affect dispatch only on receipt of relevant certificates/ shipment clearance from Oil., failing which all related liabilities shall be to Supplier's account. Categorization and various Criteria applicable to MSE bidders shall be guided by the Gazette Notification no. CG-DLE-26062020-220191 dated 26.06.2020 and Amendment vide Gazette Notification no. CG-DLE-16062021-227649 dated 16th June, 2021 issued by Ministry of MICRO, SMALL AND MEDIUM ENTERPRISES. The existing enterprises registered under EMP- Part-II or UAM till 30th June, 2020 shall continue to be valid only for a period up to the 30th June, 2022. The bidder claiming as MSE status (MSE-General, MSE-SCIST, MSE-Woman) against this tender has to submit the following documents for availing the benefits applicable to MSEs: Udyam Registration Number with Udyam Registration Certificate. OR Proof of registration with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or

- Ministry of Finance of Govt. of India, Department of Expenditure, Public procurement Division vide office memorandum F. No. 6/18/2019-PPD dated 23rd July, 2020(order-Public Procurement no.1) has proclaimed the insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017 w.e.f. 23rd July, 2020 regarding restrictions on procurement from a bidder of a country which shares a land border with India on the grounds of defence of India on matters directly or indirectly related thereto including national security. Bidders are requested to take note of the office memorandum and submit their offers accordingly, wherever applicable.
- Bidders to note that Ministry of Petroleum & Natural Gas, Government of India implemented PPLC Policy to provide Purchase Preference (linked with local content) by notification no. Ref. FP-20013/2/2017-FP-PNG dated 17.11.2020 and FP-20013/2/2017-FP-PNG-Part(4)(E-41432) dated 26.04.2022 and amendments issued from time to time. Bidders are requested to go through the policy and take note of the following while submitting their offer.

Not applicable against this tender

As per the policy, the bidder must be incorporated in India and must minimum 20% local content (LC) for the offered items to be eligible to bid against this tender.

1. <u>Certification and Verification</u>

Class I/Class II Local suppliers are eligible to bid only if they meet the localcontent norms, therefore whether or not they want to avail PP-LC benefit, it will still be mandatory for them to give adequate documentation as follows to establish their status as class-I or class-II local supplier:

(i) At bidding stage:

- a) Price Break-up:
- The bidder shall provide the percentage of local content in the bid.

b)

- The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
- In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practising chartered accountant (in respect of other than companies) giving the percentage of local content.
- However, in case of foreign bidder, certificate from the statutory auditor or
 cost auditor of their own office or subsidiary in India giving the percentage of
 local content is also acceptable. In case office or subsidiary in India does not
 exist or Indian office/ subsidiary is not required to appoint statutory auditor
 or cost auditor, certificate from practising cost accountant or practising
 chartered accountant giving the percentage of local content is also
 acceptable.

(ii) After Contract Award

- The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
- In cases of procurement for a value in excess of Rs 10 crores, the

7.0	TAX COLLECTIBLE AT SOURCE (TCS): Tax Collectible at Source (TCS) applicable under the Income-tax Law and charged by the SUPPLIER shall also be payable by OIL along with consideration for procurement of goods/materials/ equipment. If TCS is collected by the SUPPLIER, a TCS certificate in prescribed Form shall be issued by the SUPPLIER to OIL within the statutory time limit.	
	Payment towards applicable TCS u/s 206C (IH) of Income Tax Act, 1961 will be made to the supplier provided they are claiming it in their invoice and on submission of following undertaking along with the invoice stating that:	
	a) TCS is applicable on supply of goods invoiced to OIL as turnover of the supplier in previous year was more than Rs. 10 Cr. and b) Total supply of goods to OIL in FY (As applicable) exceeds Rs. 50 Lakh and c) TCS as charged in the invoice has already been deposited (duly indicating the details such as challan No. and date) or would be deposited with Exchequer on or before the due date and d) TCS certificate as provided in the Income Tax Act will be issued to OIL in time.	
	However, Performance Security deposit will be released only after the TCS certificate for the amount of tax collected is provided to OIL. Supplier will extend the performance bank guarantee (PBG), wherever required, till the receipt of TCS certificate or else the same will be forfeited to the extent of amount of TCS, if all other conditions of Purchase order are fulfilled. The above payment condition is applicable only for release of TCS amount charged by	
	supplier u/s 206C (I H) of Income tax Act, 1961.	
8.0	APPLICABILITY OF BANNING POLICY OF OIL INDIA LIMITED: Banning Policy dated 6th January, 2017 as uploaded in OIL's website and revised guidelines of banning/debarment vide OM no. F.1/20/2018-PPD dated 02.11.2021 issued by Department of Expenditure, Ministry of Finance, Govt of India will be applicable against the tender (and order in case of award) to deal with any agency (bidder/contractor/supplier/ vendor/service provider) who commits deception, default, fraud or indulged in other misconduct of whatsoever nature in the tendering process and/or order execution processes.	
	The bidders who are on Holiday/Banning/Suspension list of OIL on due date of submission of bid/ during the process of evaluation of the bids, the offers of such bidders shall not be considered for bid opening/evaluation/award. If the bidding documents were issued inadvertently/downloaded from website, the offers submitted by such bidders shall also not be considered for bid opening/evaluation/ Award of Work.	
9.0	The tender has been floated in GeM portal under Single Stage Two Bid System. Therefore, bidder must not disclose their prices in their technical offer. The technical bid shall contain all techno-commercial details except the prices/costs. Bidder must note that disclosure of price in technical bids shall lead to rejection of the offer.	

10.0 At any time prior to the deadline for submission of bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the tender Documents through issuance of Corrigendum(s)/Addendum(s). Bidders are expected to take the Corrigendum(s)/ Addendum(s) into account in preparation and submission of their bid. No separate intimation for Corrigendum(s)/Addendum(s) published by OIL shall be sent to the Bidders. 10.0 The tender document includes the following: Annexure - A & A1: Specification & Scope of Work, Annexure - B: General Notes to Bidders, Annexure – C: Bid Rejection Criteria / Bid Evaluation Criteria Annexure – D : Bidder Response Sheet (technical) Bidder(s) must submit their offer in compliance to this GeM Tender including GeM General Terms & Conditions and all above mentioned Annexures. Bidder(s) must fill up the "Bidder's response/compliance" column in Annexures-A1, B, C & D and submit the same for evaluation of buyer. 11.0 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide PROFORMA-IP 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 declines to submit Integrity Pact with the offer, their bid shall be rejected straightway. OIL's Independent External Monitors at present are as under: SHRI RUDHRA GANGADHARAN, IAS (Retd.), Ex-Secretary, Ministry of Agriculture E-Mail ID: rudhra.gangadharan@gmail.com SHRI SUTANU BEHURIA, IAS (Retd.), E-mail ID: sutanu2911@gmail.com SHRI OM PRAKASH SINGH, IPS (Retd.),, Former DGP, Uttar Pradesh E-mail: Ops2020@rediffmail.com In case of a joint venture, all the partners of the joint venture should sign the Integrity Pact. In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organizations may adopt any mediation rules for this purpose. In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms and conditions of the contract.

12.0	Submission of Performance Security:	
	The successful bidder will submit the performance security (if applicable) in the form	
	of Bank Guarantee within 15 days of award of contract on GeM. The Bank Guarantee	
	issued by the Bank must be routed through SFMS platform as per following details:	
	(i) MT760/MT760COV for issuance of Bank Guarantee (ii) MT 760/MT767COV for amendment of Bank Guarantee	
	The above message / intimation shall be sent through SFMS by the BG issuing Bank branch to HDFC Bank, Duliajan Branch, IFS Code-HDFC0002118; SWIFT Code-HDFCINBBCAL. Branch Address: HDFC Bank Limited, Duliajan Branch, Utopia Complex, BOC Gate, Jayanagar, Duliajan, Dibrugarh, PIN-786602.	
	The vendor shall submit to OIL the copy of the SFMS message as sent by the issuing bank branch alongwith the original bank guarantee.	
13.0	All the Goods or Services in the GeM shall be offered on Free Delivery at Site basis including freight, insurance, loading and unloading.	
14.0	Bid validity: As per tender	
	PBG: Will be submitted as per tender within 15 days from placement of order in case of award.	
	Delivery period: As per tender	
	Payment terms: As per tender	
	Exception / Deviation : Nil	
	Warranty: As per tender	
	Packing, forwarding: Included as required in the tender.	
	Transportation & transit insurance upto destination: Included as required in the tender.	
	Loading & unloading at site: Included as required in the tender.	
	GST: @5% against Essentiality Certificate (for supply of goods only)	
	GeM General Terms & Conditions: Acceptable	
	Bidder must confirm compliance as mentioned above in toto. Exception/Deviation to above terms & conditions are not acceptable.	

ANNEXURE-C

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

The bids shall conform to the specifications and terms & conditions given in the Tender. Bids shall be rejected in case the items offered do not conform to the required parameters stipulated in the technical specifications and to the relevant international/national standards wherever stipulated.

The following BRC/BEC will govern the evaluation of the bids received against this tender. Notwithstanding the general conformity of the bids to the stipulated specifications and terms & conditions, the following requirements must be particularly met by the bidders, without which the offer shall be considered as non-responsive and rejected. Bid evaluation will be done only for those bids that qualify through the "Bid Rejection Criteria" as stipulated in this document. All the documents related to BEC BRC shall be submitted along with the technical bid.

SI. No.	Bid Requirement	Bidder's Response (Complied/Not Complied. Reference to any document attached along with the bid)
A.1: TEC	HNICAL:	
A.1.1	BIDDER'S ELIGIBILITY:	
	The bidder must be Original Equipment Manufacturer (OEM) of the offered Rotary Lobe Type Pump set or dealer/distributor/ supply house authorized by the Original Equipment Manufacturer (OEM) of Rotary Lobe Type Pump. Accordingly, the bidder shall mention their status in the technical bid	
	whether they are the:	
	i) Original Equipment Manufacturer (OEM) of the offered Horizontal Rotary Lobe Type pump set Or	
	ii) Bidding as dealer / distributor / supply house authorized by the Original Equipment Manufacturer (OEM) of the offered Horizontal Rotary Lobe Type pump.	

A.1.2 In case the bidder is the Original Equipment Manufacturer (OEM) of the offered Rotary Lobe Type Pump set, the bidder must meet the following:

The Original Equipment Manufacturer (OEM) of the offered Rotary Lobe Type pump set (with prime over) shall have the experience of successful execution of at least one similar order for Supply, Installation & Commissioning of Horizontal Rotary Lobe Type pump set (with prime over) of 3 (Three) nos. quantity during the last 05 (five) years from the original bid closing date of this tender either by the Bidder or through their dealer/distributor / supply house etc. which was used for oil field applications (Hydrocarbon/E&P sector/Petroleum Industry) in PSUs, State/Central Govt. Undertaking or Public Limited Companies.

Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along with copies of any or combination of the documents in respect of satisfactory execution of each of those Purchase Orders, such as -

- (i) Copies of sealed & signed supply/commissioning certificate from end users on their letterhead (OR)
- (ii) Consignee delivery receipt / challan (OR)
- (iii) Central Excise Gate Pass/Tax Invoice issued under relevant rules of Central Excise/Vat/GST (OR)
- (iv) Commercial Invoice/ Payment Invoice (OR)
- (v) Any other documentary evidence to the satisfaction of OIL that can substantiate the satisfactory execution of each of the purchase orders cited above.

Note:

- a) The Contract(s) / Purchase Order(s) date need not be within 5 (five) years preceding the original bid closing date of this tender. However, the execution of supply should be within 5 (five) years preceding original bid closing date of this tender.
- b) Original Bid Closing Date shall be considered by OIL for evaluation of BRC Criteria in case of any extension of the bid closing date.
- c) Originals of documentary evidence are to be produced for verification on demand of OIL.
- d) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.
- e) The bidder shall submit documentary evidence/details of the previous supply in a tabular format (ref. Table-I) along with the bid

A.1.3 In case the bidder is a dealer / distributor / supply house authorized by the Original Equipment Manufacturer (OEM) of the offered Rotary Lobe Type pump set, the bidder must meet/submit the following:

- a) Authorization certificate with warranty backup from the OEM (on OEM's letter head with signature & stamp) should be submitted 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.
- b) The bidder of the offered Rotary Lobe Type pump set (with prime over) shall have the experience of successful execution of at least one similar order for Supply, Installation & Commissioning of Horizontal Rotary Lobe Type pump set (with prime over) of 3 (Three) nos. quantity during the last 05 (five) years from the original bid closing date of this tender which was used for oil field applications (Hydrocarbon/E&P sector/Petroleum Industry) in PSUs, State/Central Govt. Undertaking, Public Limited Companies.

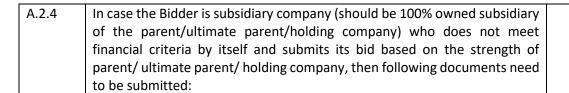
Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along with copies of any or combination of the documents in respect of satisfactory execution of each of those Purchase Orders, such as -

- (i) Copies of sealed & signed supply/commissioning certificate from end users on their letterhead (OR)
- (ii) Consignee delivery receipt / challan (OR)
- (iii) Central Excise Gate Pass/Tax Invoice issued under relevant rules of Central Excise/Vat/GST (OR)
- (iv) Commercial Invoice/ Payment Invoice (OR)
- (v) Any other documentary evidence to the satisfaction of OIL that can substantiate the satisfactory execution of each of the purchase orders cited above.

Note:

- a) The Contract(s) / Purchase Order(s) date need not be within 5 (five) years preceding the original bid closing date of this tender. However, the execution of supply should be within 5 (five) years preceding original bid closing date of this tender.
- b) Original Bid Closing Date shall be considered by OIL for evaluation of BRC Criteria in case of any extension of the bid closing date.
- c) Originals of documentary evidence are to be produced for verification on demand of OIL.
- d) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.
- e) The bidder shall submit documentary evidence/details of the previous supply in a tabular format (ref. Table-I) along with the bid
- A.1.4 Delivery should be within <u>180 days</u> from the date of placement of purchase order. The bidder should categorically confirm in their technical bid that the tendered items will be supplied within the delivery period, without which the bid will be rejected.

	A.2: FINANCIAL					
A.2.1	The bidder shall have an annual financial turnover of minimum Rs 46.05 Lakhs during any of the preceding 3 (Three) financial/accounting years reckoned from the original bid closing date of the tender.					
A.2.2	"Net Worth" of the bidder should be positive for the financial / accounting year just preceding to the original bid closing date of the tender (i.e. FY 2021-2022).					
A.2.3	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 (refer PROFORMA- 1) certifying that 'the balance sheet/Financial Statements for the financial year 2021-2022 has actually not been audited so far'.					
	Note:					
	a) 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/Cost Accountant (with membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in PROFORMA – 2.					
	OR					
	ii) Audited Balance Sheet along with Profit & Loss account.					
	b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.					



- i) Turnover of the parent/ ultimate parent/ holding company should be inline with requirement.
- ii) Net Worth of the parent/ultimate parent/ holding company should be positive in line with the requirement.
- iii) Corporate Guarantee (as per **PROFORMA-3**) on parent / ultimate parent / holding company's company letter head signed by an authorised official undertaking that they would financially support their wholly owned subsidiary company for executing the project/ job in case the same is awarded to them.
- iv) Document of subsidiary company being 100% owned subsidiary of the parent/ ultimate parent/ holding company.

TABLE – I

<u>Documentary evidence / Supply Details for Rotary Lobe Pump Sets:</u>

(to add / deleted rows, as required)

SL	Client / customer Name	Order No /	Date of order	Pump specification:	Completion date	Supporting
NO	and Address with contact	Contract No.		Make, Model, Capacity		document enclosed
	e-mail id			(Discharge in CUM /HR &		
				Pressure in KSC of pump)		
				& Quantity supplied		
1						
2						
3						
4						
5						
6						
7						
8						
9						

PROFORMA-1

FORMAT FOR CERTIFICATE OF COMPLIANCE OF FINANCIAL CRITERIA

Ref: <u>Financial Criteria of the BEC</u>
Tender No.:
I(Company or firm name with
address) do hereby solemnly affirm and declare as under:-
The balance sheet/Financial Statements for the financial year <u>2021-2022</u> has actually not been audited as on the Original Bid closing Date.
Place :
Date : Signature of the authorized signatory
Note: This certificate is to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date.

PROFORMA-2

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING **CHARTARD ACCOUNTANTS' FIRM** ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

	10 WHOM II MILL CONCL	<u>KKII</u>			
statements of M/s	following financial positions extr (N. Junting years upto	ame of the bidder) for the last			
YEAR	YEAR TURN OVER NET WORTH				
	In INR (Rs.) Crores	In INR (Rs.) Crores			
	1				
Place: Date:					
Seal					
Membership No: Registration Code: UDIN:					

NOTE: As per the guidelines of ICAI, every practicing CA is required to mention Unique Document Identification Number (UDIN) against each certification work done by them. Documents certified by CA without UDIN shall not be acceptable.

Signature

PROFORMA-3

PARENT/ULTIMATE PARENT/ HOLDING COMPANY'S CORPORATE GUARANTEE TOWARDS FINANCIAL STANDING

(TO BE EXECUTED ON COMPANY'S LETTER HEAD).

DEED OF GUARANTEE (Delete whichever is not applicable)

name) a company duly organized and existing under the its Registered Office athereina	day of by M/s(mention complete e laws of (insert jurisdiction/country), having after called "the Guarantor" which expression shall, unless reof, be deemed to include its successors and permitted
and desires to have Financial support of M/s Company(Delete whichever not applicable)] and whereanot applicable) represents that they have gone through	d to as OIL) has invited offers vide their Tender No. (Bidder) intends to bid against the saidtender [Parent/Ultimate Parent/Holding Company(Delete whichever and understood the requirements of subject tender and are as required by the bidder for qualifying and successful execution
Now, it is hereby agreed by the Guarantor to give this Guaranter to give the give this Guaranter to give the gideal give the give the give the give the give the give the give t	arantee and undertakes as follows:
financial/accounting years reckoned from the original bid 3. The Guarantor have an annual financial turnover of r during any of the preceding 03(three) financial/ accountin 4. Net worth of the Guarantor is positive for preceding fin	udited Annual Reports of any of the preceding 03(three) I closing date. minimum INRCr or USD ng years reckoned from the original bid closing date.
the work (including discharge of the warranty obligations (b) the liability of the Guarantor, under the Guarantee, is OIL. This will, however, be in addition to the forfeiture of (c) this Guarantee has been issued after due observance (d) this Guarantee shall be governed and construed in exclusive jurisdiction of the courts of New Delhi, India. (e) this Guarantee has been given without any undue infl the implications of the same.	Ilimited to the 100% of the order value between the Bidder and the Performance Guarantee furnished by the Bidder. of the appropriate laws in force in India. accordance with the laws in force in India and subject to the luence or coercion, and that the Guarantor has fully understood nority to issue this Guarantee and that giving of this Guarantee
Witness: 1. 2.	Witness: 1. 2.

		BIDDER'S RESPONSE SHEET (TECHNICAL)	
Description		OIL's Specification	Bidder's Response
BRIEF DESCRIPTION	ELECTRIC MOTOR DRIVEN CRUDE OIL SLUDGE PIT DEWATERING PUMP SET.		
QUANTITY	Five (05) Nos.		
NOTE TO BIDDERS	 1. Bidders are to submit their offer(Technical) by duly filling up the "Bidder's Offer" column of the attached Bidder's Response Sheemay be used as and where necessary and the same to clearly marked as: "Annexure No:, for Point No 2. Offers submitted in other form than filling up of the "Bidder's Offer" column of the attached Bidder's Response Sheet shall nevaluation. 3. All the Annexures / Attachments are to be suitably marked and a list of the same to be submitted along with the offer. 		
A. PUMP	1. Pump Type	Rotary Lobe Type Pump having Rubber/Elastomer Lobes with Metal Housing.	
	2. Capacity& Pressure	Flow requirement is 10 m3/hr. at Discharge Pressure of 4 bar. Suction Pressure of -0.4 bar (Minimum Negative Suction: 4Meter). Differential Pressure of 4.4 Bar.	
	3. Pump Speed	The max. speed limit of the offered pump shall be within the range of 300-450 RPM	
	4. Features & Material of Construction	 i) Pump should have Gear Box with physical gap between Pumping Chamber and Gear Box. Any Leakage should be visible and open to environment. 	
		ii) Pump should be driven by Foot Mounted Geared Motor. (Reputed make only).	
		iii) Suitable Non-Sparking Coupling with Guard should be provided.	
		iv) Pump & Drive Housing: Cast Iron	
		v) Rotor/O Ring: Suitable for application.	
		vi) Shaft Seal: Suitable Mechanical Seal	
		vii) Base Plate: MS or equivalent.	
		viii) Suitable Suction and Discharge Flange should be	
		provided to operate in Negative Suction	
	5. Accessories	Following Accessories are required to be supplied along with	
		each pump set:	

	BIDDER'S RESPONSE SHEET (TECHNICAL)				
Description		OIL's Specification	Bidder's Response		
Description		 i. Full flow, suitably sized and rated, spring loaded, Reset Relief Valve, mounted on the discharge piping. (Make: OTECO/ BAIRD / CAMERON or equivalent) N.B: The relief valve is to be set at 110% of our maximum pressure requirement at the time of delivery. ii. Pump should be driven by Induction Motor. Flame Proof, IE2, 415V+/-10%, 3 Phase, 50HZ +/-5%, 4 Pole, IP 55, Insulation Class F. Motor Mounting: B5 – Flange Mounted Gear Box Make: Shanti, Premium or equivalent) iii. Complete set of Suction fittings to be provided with Pump Set a) 4 m Suction Hose with both side Flange end suitable to Pump Suction Flange – 1 no. for Each Pump b) 90 deg. Smooth Bend with both side Flange end at Pump suction connected between Pump Suction Flange and Suction c) Hose – 1 no. for Each Pump d) Non-Return valve – 1 no. for Each Pump e) Foot valve to match with suction hose - 1 no. for Each 	Bidder's Response		
	6. Duty / Service	Pump The pump should be designed for continuous duty application. Necessary credentials in this regard, in the form of product catalogues / brochures from OEM should be furnished.			
	7. Liquid to be Handled	NOTE: #Continuous duty# means pump having service operation on full load for a period of 8 hours to 24 hours per day as per Hydraulic Institute Standard application. The pumping unit should be suitable for pumping crude oil and Crude Oil mixed with Water. API Gravity at 60 Deg F : 30 PH : 7.2			

BIDDER'S RESPONSE SHEET (TECHNICAL)				
Description		OIL's Specification	Bidder's Response	
		Pumping Temp : 10 to 40 Deg. C		
		Viscosity : 100 – 200 cp @ 26 Deg. C.		
		Sp. Gravity : 0.850 – 0.950 kg/dm3		
		Solid Size : Max. 5 mm		
	8. Suction condition:	Negative: – 4 m		
	9. Name plate and	A nameplate shall be securely attached at a readily visible		
	rotation arrows	location wherein the manufacturers name, machine serial		
		number, maximum and minimum design limits and rating		
		data, maximum allowable working pressure and		
		temperatures, hydrostatic test pressure etc. should be		
		clearly indicated.		
		Rotation arrows indicating direction of rotation of major		
		items should be cast in or attached.		
	10. Certificates and	•		
	Documents to be	with the quotations:		
	forwarded	i Product line catalogue, specifying materials of		
		construction and constructional features of the Rotary Lobe pump and technical literatures of all ancillary		
		equipment.		
		ii Performance chart of the Rotary Lobe pump including		
		all technical calculations such as hydraulic horse		
		power, volumetric efficiency, mechanical efficiency,		
		RPM, gear ratio, NPSH requirement, etc.		
		iii Detail of Motors and motor glands as per tender.		
		II. The following documents shall have to be forwarded		
		within a month of issue of LOI or placement of firm order		
		Foundation diagrams for the complete pump set indicating		
		the static and dynamic loads of the package.		
		III. The following documents must be forwarded along with		
		the supply of equipment		
		i certified test results		
		ii Certificate of hydrostatic testing		
		iii Manufacturers certificate of authenticity		

Description		OIL's Specification	Bidder's Response
		iv Certificate of test / conformance of pump, motor and	
		associated ancillaries like relief valves etc.	
		v Operation and maintenance manuals, parts list of	
		pump, electric motor, gear box and all other accessory	
		equipment.	
		vi Standard Operating Procedure (SOP) with special	
		emphasis on safety of the equipment and operating	
D CDEED		personnel.	
B. SPEED REDUCTION	The speed reduction from the	Prime Mover (Electric Motor) rated rpm to the desired rpm of	
GEAR BOX		eans of a separate external foot mounted gear box installed	
GLAN BOX	between the prime mover and	the pump.	
	(Gear Box Make: Shanti,	Premium or equivalent).	
		·	
C. PRIME MOVER	Electrical Motor specification	The Prime mover for the Pump shall be Three phase, squirrel	
	is as follows:	cage rotor Induction Motor, FLAMEPROOF type (Ex-d),	
		suitable for installation in Zone-1, Zone-2 Hazardous Area,	
		Gas Group IIA and IIB, of Oil Mine.	
		dus droup in varia ins, or on wine.	
		Details of Motor with starter is attached as separate	
		document in Annexure -A1.	
D. SPECIAL NOTES	1. The offered pump should be	a Horizontal Rotary Lobe Type pump with Rubber / Elastomer	
TO BIDDERS:	Lobes & Metal Housing/Body. A	llso, Pump should have Gear Box having Physical Gap between	
	Pumping Chamber and Gear Bo	x chamber. Any deviation in this regard is not acceptable and	
	such offer will be rejected strai	ghtaway.	
	· · · · · · · · · · · · · · · · · · ·		
		letailed technical specifications with all relevant technical	
	catalogues, statutory certificat	es etc. for Instrumentation items of their offered model no	
	along with the bid for technical	evaluation.	

BIDDER'S RESPONSE SHEET (TECHNICAL)					
Description	OIL's Specification	Bidder's Response			
	3. Bidder shall submit necessary documents along with the offer for all electronic/electrical				
	instruments and equipment used in zone "1" or zone "2" hazardous area as per the				
	Regulation 107(2) of OMR 2017.				
	4. Test and calibration certificates for instruments have to be provided along with the supply.				
	5. The materials shall be packed in robust cartoons so as to avoid damage in transit				
	6. OIL reserves the right to inspect, test and if necessary, reject any part/parts after delivery				
	at site (including incomplete manuals, catalogues, etc.) in case of any fault on the part of the supplier he has to replaced/repair at his own cost.				
	7. The bidders must submit a written undertaking (along with the bid) that they would be				
	able to supply all the requisite spares and consumables (including bought out items) for a				
	minimum period of 10 (ten) years from the Certified date of completion / successful field commissioning of the unit.				
	8. Supply of all necessary accessories & fittings like – Foundation Bolt, Counter Flange etc. required to complete the installation and commission is under the scope of bidders.				
	required to complete the installation and commission is under the scope of bidders.				
E. STAGE- INSPECTION AND TESTING	OIL as purchaser shall have right to carry out Stage-Inspection and shop visit to inspect the manufacturing progress but such inspection shall not relieve the bidder of his responsibility to ensure that the equipment supplied is free from all manufacturing and other defects and conform to correct specifications.				
	For such inspection, no separate cost will be payable by OIL to the successful bidder. However, cost of travel, accommodation, and other expenses of OIL's PDI team will be borne by OIL.				
F. PRE- DISPATCH	,				
INSPECTION	individually inspected, tested and analyzed in terms of the specifications attached to the order and the relevant codes and practices specified therein by expression or implication.				

BIDDER'S RESPONSE SHEET (TECHNICAL)				
	Description	OIL's Specification	Bidder's Response	
		ii) The pump set shall be inspected by OIL's deputed engineer(s) or any other		
		individual/agency authorized by OIL for the purpose of inspection at manufacturers /		
		assembler's works / factory prior to dispatch. However, such inspection will not relieve		
		the supplier of his responsibility to ensure that the equipment supplied conforms to the		
		correct specifications and is free from manufacturing and all other defects.		
		The supplier shall carry out full load performance test on the pump set, at duty conditions,		
		in the presence of OIL's deputed representative(s).		
		The supplier shall make available to OIL or any other individual/agency authorised by OIL		
		for the purpose of inspection, all its records and results in respect of inspection.		
		iii) For false calls for inspection and for the cases where material is rejected on inspection,		
		the successful bidder will bear the actual cost of inspection incurred/suffered by OIL.		
		iv) Supplier shall notify OIL for at least 15 (fifteen) days in advance of each inspection. For		
		such inspection, no separate cost will be payable by OIL to the successful bidder.		
		However, cost of travel, accommodation and other expenses of OIL's PDI team will be		
		borne by OIL.		
		v) The inspection by OIL or by OIL's representative in any manner does not absolve the		
		successful bidder of any liability and/or responsibility under the purchase order.		
		N.B.: Charges for carrying out the above tests at the Manufacturer's facility should be		
		included in the purview of the offer.		
G.	FACTORY	The bidder will have to submit final GA drawing including all the technical details, factory		
	ACCEPTANCE	acceptance test procedure (or Quality Assurance Plan) and inspection plan to OIL for		
	TEST (FAT)	approval. OIL will depute engineer(s) to witness the complete functions and operation of		
		the all the items of the system at one workplace. The acceptance of the system will be		
		signed by OIL representatives at that workplace after final successful functional test and		
		demonstration.		
		Unless otherwise specifically authorized by OIL in writing, the successful bidder shall not		
		ship or dispatch for any material under the purchase order before Inspection.		
н.	TRAINING	a) The bidder shall provide comprehensive training to a group of OIL's engineers at their		
		manufacturing plant/works for a period of 3 days (approx.) on Operation & Maintenance,		
		Troubleshooting of the system. The training is to be supplemented by manual in hard		
		bound copy. Training schedule is to be informed to OIL atleast 15 days in advance. The		
		training schedule is to be preferably immediately after completion of pre-despatch		
		inspection.		

BIDDER'S RESPONSE SHEET (TECHNICAL)		
Description	OIL's Specification	Bidder's Response
	b) After successful installation and commissioning, the bidder needs to provide detailed on- site operation and maintenance training to OIL personnel for minimum two days' duration.	
	c) No separate cost will be paid by OIL to the successful bidder on account of trainings. Cost of training, if any shall be included in the cost for installation & commissioning. All cost related to bidder's personnel during training shall be to bidder's account. However, cost of travel, accommodation and other expenses of OIL's team will be borne by OIL.	
	d) Installation & commissioning shall be construed to be completed only after completion of trainings mentioned above.	
I. INSTALLATION & COMMISSIONIN G:	a) Supervision of Installation & Commissioning of the Pump set shall be carried out by the bidder in the presence of OIL's representatives at its fields in and around Duliajan, Assam (India). Services of qualified and competent personnel from equipment manufacturer are must during installation & commissioning of the pump sets. Only competent service personnel shall be engaged for installation, testing and commissioning of pump sets. OIL will provide necessary statutory permits in classified areas as and when required.	
	b) Supervision of Installation and Commissioning charges must be quoted separately (should not be clubbed together with main equipment) on lump sum basis which shall be considered for evaluation of the offers. These charges should include to and fro fares, boarding/ lodging, local transportation and other expenses of the commissioning engineers during their stay at Duliajan, Assam (India). All Taxes towards the services provided by the supplier shall be borne by the supplier and will be deducted at source. Bidders should also confirm about installation/ commissioning in the Technical Bid.	
J. WARRANTY:	The equipment/materials will be guaranteed for a period of 12(twelve) months from the date of commissioning. The supplier shall repair or replace any item or equipment found defective in materials or workmanship or performance within the above period free of charge. The warranty is applicable to bought out items and system software also. Any system/ software	

	BIDDER'S RESPONSE SHEET (TECHNICAL)		
Description	OIL's Specification	Bidder's Response	
	fault during warranty period, supplier has to attend within 48-hours after receiving of calls		
	from OIL free of charges.		
K. SPARE PARTS	1. COMMISSIONING SPARES & TOOLS		
TOOLS:	The Supplier has to supply all the spare parts for initial commissioning of the unit.		
I	The following special tools must be included [one set against each pump set] in the scope of		
	supply, as commissioning spares. The prices of these spares are to be included in cost of		
	supply which shall be considered during commercial evaluation of the offer.		
	i. A set of tools (Box and open spanner wrenches) for fitting and tightening all bolts		
	installed in the pump set.		
	ii. Any special tools required for repairing/ fitting of the pump's component to be provided by the supplier.		
	NOTE: All the above mentioned tools shall have to be packed separately for handing over the		
	same to Head- Field Engineering and the package to be labeled with following:		
	OIL's Purchase order No:		
	To,		
	Head- Field Engineering		
	OIL INDIA LIMITED		
	DULIAJAN- 786602		
	ASSAM, INDIA		

BIDDER'S RESPONSE SHEET (TECHNICAL)		
Description	OIL's Specification	Bidder's Response
	2. CRITICAL SPARES	
	Supplier shall supply the critical spares for pumps, motors, other electrical and instrumentation items along with the supply of the Unit considering 2 years' consumption.	
	Bidder has to provide the list of spares required along with quantity and part numbers of the spares that shall be required for maintenance of the pump set for at least two years.	
	Note:	
	 i The prices of these spares are to be included in cost of supply which shall be considered during commercial evaluation of the offer. ii All the above mentioned critical spares shall have to be packed separately for handing over the same to Head- Field Engineering and the package to be labeled with following: OIL's Purchase order No:	
	To, Head- Field Engineering OIL INDIA LIMITED DULIAJAN- 786602 ASSAM, INDIA	
	3. RECOMMENDED SPARES	
	 a) The bidder shall furnish a list of spares & components that will be required for regular operation and maintenance, overhauling etc. throughout the life of the equipment complete with price. Annual consumption of each spare should be furnished in a tabular format. Cost of recommended spares shall not be considered for price bid evaluation. Price to be quoted by the bidder against supply should not include prices for recommended spares. 	
	b) The bidders must submit a written undertaking (along with the bid) that they would be able to supply all the requisite spares and consumables (including bought out items) for	

BIDDER'S RESPONSE SHEET (TECHNICAL)		
Description	OIL's Specification	Bidder's Response
	a minimum period of 10 (ten) years from the Certified date of completion/ successful field commissioning of the unit.	
L. AFTER SALES SERVICE:	The nature of after sales service, which can be offered by the bidder during initial commissioning and also subsequently should be clearly stated.	
M. SAFETY PRACTICES:	(i) The successful bidder shall abide by all safety and security rules and regulations existing in the OIL's Installations. The successful bidder shall observe the safety measures required to be undertaken for safety of persons, labour, public and properties at work site/plant premises/ residential premises/ public places etc. The successful bidder shall be required to take work permit from respective shift in charges for each day and each shift for all kind of jobs. There can be instances of not getting permits, withdrawing of permits already issued at any stage of work due some operational safety and security reasons. For any stoppage of work for such reasons no claim whatsoever will not be considered. (ii) Stand by firefighting equipment will be deployed at the work site by OIL. However, at least two of the successful bidder's personnel deployed for the work must be capable of handling the firefighting equipment at the time of emergency and the persons will have to be present at the work site throughout the working time. If required the successful bidder's nominated persons will be imparted training on handling such equipment by OIL's Fire Service department. (iii) Any compensation arising out of the job carried out by the successful bidder whether related to pollution, Safety or Health will be paid by the successful bidder only. (iv) Any compensation arising due to accident of the successful bidder's personnel while carrying out the job, will be payable by the successful bidder. (v) The successful bidder shall have to report all incidents including near miss to Installation Manager/ departmental representative of the concerned department of OIL. (vi) In case the successful bidder is found non-compliant of HSE laws as required, the company will have the right for directing the successful bidder to take action to comply with	

BIDDER'S RESPONSE SHEET (TECHNICAL)		
Description	OIL's Specification	Bidder's Response
	the requirements, and for further non-compliance, the successful bidder will be penalized	
	as per prevailing relevant Acts/ Rules/ Regulations.	
	(vii) When there is a significant risk to health, environment or safety of a person or place	
	arising because of a non-compliance of HSE measures, Company will have the right to direct	
	the successful bidder to cease work until the non-compliance is corrected.	
	(viii) All safety gears like safety boots, helmets, safety belts, hand gloves, safety goggles,	
	gas masks etc. required for carrying the job in a safe manner shall be arranged by the	
	successful bidder. In case the successful bidder fails to provide the safety gears, the same	
	will be provided by OIL and the cost of such safety items will be deducted from the successful	
	bidder's bills.	
	(ix) CLEARANCE OF SITE: - As a part of the job, the successful bidder shall completely	
	remove all the temporary/ disposable materials if needed while execution of work or after	
	completion of work at his own cost and dispose off the same as directed by Engineer-in-	
	Charge.	
	(x) The successful bidder shall maintain first aid facilities for its employees. All critical	
	industrial injuries shall be reported promptly to EMPLOYER, and a copy of the successful	
	bidder's report covering each personal injury requiring the attention of a physician shall be	
	furnished to the EMPLOYER.	
	(xi) The successful bidder shall observe and abide by all fire and safety regulations of the	
	EMPLOYER. Before starting construction work, the successful bidder shall consult with	
	Employer's safety Engineers and must make good to the satisfaction of the EMPLOYER any	
	loss or damage due to fire to any portion of the work done or to be done under this job or to	
	any of the Employer's existing property.	
N.	Along with the technical bid, the bidder should submit following technical check list and dat	a sheets with their response:
TECHNICAL	TECHNICAL CHECK LIST FOR PUMP PACKAGES (Please tick YES or NO)	
CHECK LIST		YES NO

BIDDER'S RESPONSE SHEET (TECHNICAL)		
Description	OIL's Specification	Bidder's Response
	1. Whether quoted as OEM of Pump and whether documentary evidence submitted?	
	2. Whether quoted as authorised dealer of Pump and whether documentary evidences su	ibmitted?
	3. Whether quoted as OEM recommended assembler of Pump sets and whether documen	ntary evidences submitted ?
	4. Whether the offered Pump is a horizontal, Rotary Lobe Pump with Rubber/Elastomer	Lobes & Metal Housing ?
	5. Whether Pump is having Gear Box Security System i.e. Physical Gap between Pumping 6	Chamber and Gear Box chamber
	6. Whether the Pump is designed for continuous service duty?	
	7. Whether the offered Electric Motor meets the specification mentioned in the tender?	
	8. Whether the Calculation behind selection of Motor Rating (HP or KW) furnished with the	ne offer as per NIT?
	9. Whether the Motor is rated for continuous power?	
	10. Whether Test Certificates or Declaration against FLP Items furnished with the offer?	
	11. Whether the speed reduction gear box is external foot-mounted?	
	12. Whether guards shall be provided over couplings?	
	13. Whether the two years spares for the packages indicated have been quoted?	
	14. Whether special tools and commissioning spares have been included in the scope of supply?	
	 15. Whether spares shall be available for 10 years after supply of equipment? 16. Whether separately highlighted any deviation from the technical specifications? 17. Whether the Pre-despatch inspection of the Pump packages shall include Full Load Performance test of the Pump Sets? 	
DATA SHEETS	A. Data sheet (Motor /Gear Box)	
	1. Make	
	2. Model	
	3. Type	
	4. Voltage	
	5. Frequency	
	6. No of phases	
	7. No of poles	
	8. Enclosure	
	9. Cooling system	
	10. Direction of rotation	
	11. Insulation class	
	12. Rated rpm	
	13. Duty	
	14. Mounting	
	15. Starting	

Description	BIDDER'S RESPONSE SHEET (TECHNICAL)		
17. Terminal box 18. Gland 19. Type of drive 20. Bearing 21. Gross HP at rated rpm 22. Net HP available at 1500 rpm B. Data sheet (pump) 1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box 1. Make and model of external gear box 1. Make and model of external gear box 1. Make and model of external gear box	Description	OIL's Specification	Bidder's Response
18. Gland 19. Type of drive 20. Bearing 21. Gross HP at rated rpm 22. Net HP available at 1500 rpm 8. Data sheet (pump) 1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		16. Switching	
19. Type of drive 20. Bearing 21. Gross HP at rated rpm 22. Net HP available at 1500 rpm B. Data sheet (pump) 1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		17. Terminal box	
20. Bearing 21. Gross HP at rated rpm 22. Net HP available at 1500 rpm B. Data sheet (pump) 1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		18. Gland	
21. Gross HP at rated rpm 22. Net HP available at 1500 rpm 8. Data sheet (pump) 1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		19. Type of drive	
22. Net HP available at 1500 rpm 8. Data sheet (pump) 1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		20. Bearing	
B. Data sheet (pump) 1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		21. Gross HP at rated rpm	
1. Make 2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		22. Net HP available at 1500 rpm	
2. Model 3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data Sheet (Gear Box) 1. Make and model of external gear box		B. Data sheet (pump)	
3. Rated Flow 4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		1. Make	
4. Discharge Pressure 5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		2. Model	
5. Suction Pressure 6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		3. Rated Flow	
6. Differential Pressure 7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box			
7. Rated Speed 8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		5. Suction Pressure	
8. NPSHr 9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		6. Differential Pressure	
9. Shaft Power / Power Required 10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		7. Rated Speed	
10. Operating Torque 11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		8. NPSHr	
11. Frequency 12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		9. Shaft Power / Power Required	
12. Pump Housing 13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		10. Operating Torque	
13. Wear Plates 14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		11. Frequency	
14. Rotor/Lobe Material 15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		12. Pump Housing	
15. Shaft Seal 16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		13. Wear Plates	
16. Suction Flange (Size / Rating) 17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box		14. Rotor/Lobe Material	
17. Discharge Flange (Size / Rating) 18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box			
18. Base Plate 19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box			
19. HP requirement as per NIT parameters C. Data sheet (Gear Box) 1. Make and model of external gear box			
C. Data sheet (Gear Box) 1. Make and model of external gear box		18. Base Plate	
Make and model of external gear box		19. HP requirement as per NIT parameters	
		C. Data sheet (Gear Box)	
		1. Make and model of external gear box	
		2. Gear ratio of external foot mounted gear box	
3. Type and size of coupling between motor shaft and gear box input shaft		3. Type and size of coupling between motor shaft and gear box input shaft	
4. Bearing type/ Number		4. Bearing type/ Number	
5. Make and model of external gear box		5. Make and model of external gear box	