

INDIA LIMITED
(A Govt. of India Enterprise)
4, India Exchange Place,
Kolkata – 700 001.
E-mail : oilcalmn@oilindia.in
INVITATION FOR BID
NATIONAL COMPETITIVE BID

OIL INDIA LIMITED invites National Competitive Bid through its e-procurement portal – <https://etender.srm.oilindia.in/irj/portal> for the following items :-

| E-Tender No. | Bid Closing Date | ITEM |
|---------------------|-------------------------|---|
| SKI9923P19/03 | 04.01.2019 | Supply , installation & commissioning of Heat Exchanger |

Period of sale of documents, Bid Closing / Opening date, the complete bid documents and details for purchasing bid documents, participation in e-tenders etc. are available on OIL's e-procurement portal <https://etender.srm.oilindia.in/irj/portal> as well as OIL's website <http://www.oil-india.com/>.

No separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.



OIL INDIA LIMITED
(A Government of India Enterprises)
4, India Exchange Place
Kolkata -700001

TELEPHONE NO. (033) 22301657

FAX NO: (033) 22302596

Email: kolpur2@oilindia.in

FORWARDING LETTER

| | |
|--------------------------|---|
| Tender No & Date | :SKI 9923 P19/03 |
| Tender Fee | : NIL (PLEASE REFER TO DOCUMENT-'SPECIAL NOTE') |
| Bid Security Amount | : Rs. 80,400 /- |
| Bidding Type | : Single Stage Two Bid |
| Bid Closing on | : As mentioned in the e-portal |
| Bid Opening on | : As mentioned in the e-portal |
| Performance Guarantee | : Applicable |
| Integrity Pact | : Not Applicable |
| Delivery Required | : At Duliajan, ASSAM |

OIL invites Bids for **Supply , Installation & Commissioning of Heat Exchanger** through its E-Procurement site under **SINGLE STAGE TWO BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/CALCUTTA/E-01/2016. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents. The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions. The details of items tendered can be **found in the Item Data and details uploaded under Technical RFx.**

The tender will be governed by:

- a) For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's ERP-MM Department at following: Tel. No.s = 0374-2807178, 0374-2807171 , 0374-2807192. Email- id = erp_mm@oilindia.in.**
- b) "General Terms & Conditions" for e-Procurement as per Booklet NO. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).**
- c) Technical specifications with Quantity and BEC/BRC and Price bid format as per ANNEXURE AAA & II, ANNEXURE BBB and ANNEXURE CCC respectively.**
- d) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents.**
- e) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).**

- f) Bidder are advised to fill up the **Undertaking of authenticity of information/documents submitted (Annexure- K), Technical evaluation sheet (Annexure DDD & HHH), Technical bid check list (Annexure EEE) , Response sheet (Annexure FFF) and Bank Details (Annexure GGG)** given in this bidding document uploaded in Technical RFX -> External Area - > Tender Documents. The above filled up documents to be uploaded in the Technical RFX Response.
- g) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.

Special Note:

1.0 Bidders to take special note of the following conditions:

~~1.1 Against Tender Fee — Payment should be made only through online mode and no other instrument (Cash/DD/Cheques/Cashier Cheque, etc) will be acceptable.~~

~~Vendors who do not have OIL's User ID & password, may generate User ID & password online by the Vendor by using the link for supplier enlistment given in OIL's e tender portal and then pay Tender Fee online through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e portal). (PLEASE REFER DOCUMENT-' SPECIAL NOTE')~~

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

1.3 A) Bidders submitting bank guarantee as **Bid Security** should note that the bank guarantee issued by the bank must be routed through SFMS platform as per following details:

- (i) MT 760 / MT 760 COV for issuance of bank guarantee
- (ii) MT 767 / MT 767 COV for amendment of bank guarantee

The above message / intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Corporate Banking Branch, IFSC Code - UTIB0001164. Branch Address - AXIS Bank Ltd, Corporate Banking Branch, 3rd Floor, AC Market, 1, Shakespeare Sarani, Kolkata 700071."

B) The Bidder shall submit to OIL the copy of SFMS message as sent by the issuing bank branch along with the original bank guarantee.

Note : In the event of an order, similar process will be required to be followed by the bidder in case of submission of Performance Security in the form of Bank guarantee.

2.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with Tender no. and Due date to **GM-Kolkata Office, Oil India Limited, 4, India Exchange Place, Kolkata – 700 001** only on or before the Bid Closing Date and Time mentioned in the Tender.

- a) Original Bid Security
 - b) Detailed Catalogue (if any)
 - c) Any other document required to be submitted in original as per tender requirement
- All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in triplicate.

3.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to

the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.

4.0 To participate in OIL's E-procurement tender, bidders should have a legally valid Digital Signature Certificate as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (<http://www.cca.gov.in>). The digital signature should be of Class 3 digital certificate alongwith encryption certificate for the designated individual with organization name. Please also refer **"Guideline to Bidder for participating in OIL"**. All the Bids must be Digitally Signed.

5.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.

6.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. Bidders shall quote accordingly under Single Stage Two Bid System. **The bidders are required to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic format in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.**

6.1 Please ensure that Techno-commercial Bid / all technical related documents related to the tender are uploaded in the Technical Attachment as shown in the screen shot below. The "TECHNO-COMMERCIAL UNPRICED BID" shall contain all techno-commercial details except the prices. Please note that no price details should be uploaded in Technical Attachment.

6.2 The "PRICE BID" must contain the price schedule and the bidder's commercial terms and conditions. Details of prices as per Price Bid format/Priced bid can be uploaded as Attachment in the attachment option under "Notes & Attachments" tab as shown in the screen shot below.

A screen shot in this regard is shown below.

1.

Response - Oil India Ltd - SRM QAS Portal - Internet Explorer

http://srmqas.oilindia.in:50100/ry/portal

Response

Display RFx Response:

RFx Response Number: 60065572 RFx Number: 60065572 Status: Saved Submission Deadline: 11/04/2017 00:00:00 Opening Date: 11/04/2017 00:00:00

Total Value: 100000 INR RFx Response Number: 60065572 Active Version: 1

RFx Information Items Notes and Attachments Conditions Summary Tracking

Basic Data Questions **Technical Attachments**

Event Parameters

Currency: Indian Rupee

Detailed Price Information: Price with Conditions

Terms of Payment: OTH Others (Please specify under attributes)

Service and Delivery

Incoterms: FOB SINGAPORE

Area for uploading "Priced Bid" if the detailed price information is "No Price"

Area for uploading "Priced Bid" if the detailed price information is "Price with Condition"

Area for uploading "Techno-commercial Unpriced Bid"

Please do not upload price under "Technical Attachment"

Partners and Delivery Information

Details Send Email Call Clear

| Function | Number | Name |
|-------------------------------------|--------|------|
| The table does not contain any data | | |

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

[illegible]

"The "Techno-Commercial Unpriced Bid" shall contain all technocommercial details except the prices.

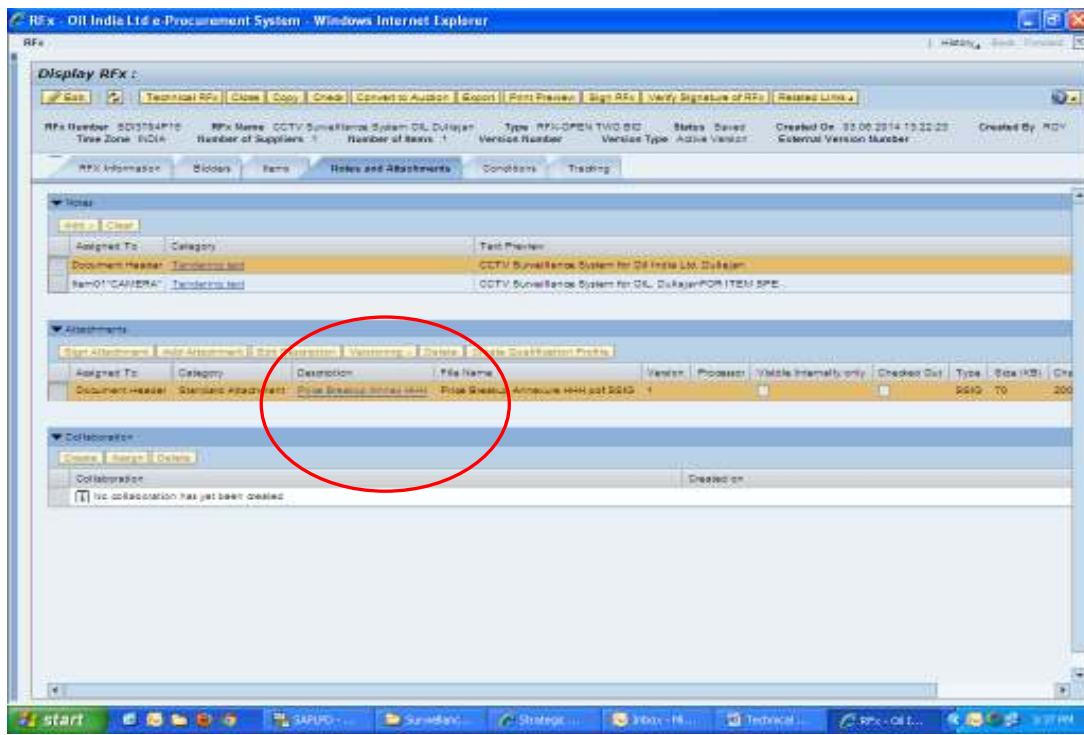
**** Please follow the instructions as per Vendor User Manual for Uploading Price under "Notes and Attachment" or "Condition"**

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

6.4 Only the price-bids of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.

6.5 Price Breakup/format:

Bidders should submit the price breakup/format of all the items as per “Annexure CCC” which has been uploaded under “Notes & Attachments” > “Attachments” as shown below. The price breakup/format “Annexure CCC” should be filled up, signed and uploaded under “Notes & Attachments” > “Attachments” only. **The filled up price breakup/format of all the items should not be uploaded in Technical Attachment.**



Please do refer “**NEW INSTRUCTION TO BIDDER FOR SUBMISSION**” for the above two points and also please refer “**New Vendor Manual (effective 12.04.2017)**” available in the login Page of the OIL’s E-tender Portal.



NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

7.0 Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.

8.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-BBB**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-BBB**) contradict the Clauses of the tender and / or "General Terms & Conditions" as per Booklet No. MM/CALCUTTA/E-01/2016 for E- Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.

9.0 Please do refer the User Manual provided on the portal on the procedure-How to create Response for submitting offer.

10.0 In order to bid for OIL e-tenders all the vendors are required to obtain a legally valid Digital Certificate Class III [Organization] along with encryption certificate as per Indian IT act from the licensed certifying authorities(CA) operating under the root certifying Authority of India (RCAI), controller of certifying authorities (CCA) of India. Digital Signature Certificate comes in a pair of Signing/Verification and Encryption /decryption certificate. Bidder should have both the Signing/Verification and Encryption /decryption certificate for signing and Encryption, decryption purpose respectively. The driver needs to be installed once, without which the DSC will not be recognized. While participating on e-Tendering the DSC token should be connected to your system.

Encryption certificate is mandatorily required for submission of bid. In case bidder created response with one certificate (using encryption key) and bidder change his Digital Signature Certificate then old certificate (used for encryption) is required in order to decrypt his encrypted response for getting the edit mode of the response. Once decryption is done, bidder may use new DSC certificate for uploading and submission of their offer. It is the sole responsibility of the bidder to keep their DSC certificate properly. In case of loss of the certificate, OIL INDIA LIMITED is not responsible.

11.0 ~~For exemption for tender fee, please refer Clause No. 3.3 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).~~
{PLEASE REFER DOCUMENT-' SPECIAL NOTE'}

12.0 Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

13.0 In addition to the existing clause of accepting Bid Security and Performance Security in the form of Bank Guarantee in Para No. 8.2 and 9.3 in the "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders) to include the below mention point as well:

"#Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non -Scheduled Bank of India shall not be acceptable."

14.0 CLAUSES RELATED TO GST

(A) Taxes:

- i. For the purposes of levy and imposition of GST, the expressions shall have the following meanings:
 - (a) GST - means any tax imposed on the supply of goods and/or services under GST Law.
 - (b) Cess - means any applicable cess, existing or future on the supply of Goods and Services as per Goods and Services Tax (Compensation to States) Act, 2017.
 - (c) GST Law - means IGST Act 2017, CGST Act 2017, UTGST Act, 2017and SGST Act, 2017and all related ancillary Rules and Notifications issued in this regard from time to time.

- ii. The rates quoted by the bidders shall be inclusive of all taxes, duties and levies. However, bidders are required to provide separately the rate and amount of all types of taxes, duties and levies. In case, the quoted information related to various taxes, duties and levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have the right to recover the difference in case the rate of duty/ taxes finally assessed is on the lower side. Further, bidders have to clearly show the amount of GST separately in the Tax invoices. Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.
- iii. Offers without giving any of the details of the taxes (including rates and amounts) as specified above will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates and amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ contracts will be binding on the bidder.
- iv. Bidder is required to pass on the benefit arising out of introduction of GST, including seamless flow of Input Tax Credit, reduction in Tax Rate on inputs as well as final goods by way of reduction of price as contemplated in the provision relating to Anti-Profiteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the bidder must confirm that benefit of lower costs has been passed on to OIL by way of lower prices/taxes and must also provide details of the same as applicable. OIL reserves the right to examine such details about costs of inputs/input services of the bidder to ensure that the intended benefits of GST have been passed on to OIL.
- v. Statutory variation (increase/decrease) of GST within the contractual delivery period will be to the account of OIL subject to documentary evidence. However, any increase in statutory levy after the expiry of the scheduled date of delivery shall be to the supplier's account.
- vi. Bidder agrees to do all things but not limited to providing GST compliant Tax Invoices or other documentation as per GST law relating to the supply of goods and/or services covered in the instant contract like raising of and /or acceptance or rejection of credit notes / debit notes as the case may be, payment of taxes, timely filing of valid statutory Returns for the tax period on the Goods and Service Tax Network (GSTN), submission of general information as and when called for by OIL in the customized format shared by OIL in order to enable OIL to update its database etc. that may be necessary to match the invoices on GSTN common portal and also for claiming input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.
- vii. In case Input Tax Credit of GST is denied to OIL or demand is recovered from OIL by the Central / State Authorities on account of any non-compliance by Bidder/Supplier, including non-payment of GST charged and recovered, the Bidder/Supplier shall indemnify OIL in respect of all such claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. OIL, at its discretion, may also withhold/recover such an amount demanded and recovered by the authorities/ state authorities from the pending payments of the Bidder/Supplier.
- viii. GST liability, if any on account of supply of free samples against any tender/purchase order (wherever applicable) shall be to bidder's/ supplier's account.

Yours Faithfully,

(Aparajita Gogoi)
Sr. Manager Materials (P)
For GM-Kolkata Office

Annexure - AAA

TECHNICAL SPECIFICATIONS WITH QUANTITY

| SLNO & MATERIAL CODE NO. | MATERIAL DESCRIPTION. | QUANT ITY | UO M |
|--------------------------------|--|--------------|---------|
| 10 ----- 0C000259 | Horizontal Shell and Tube Type Heat Exchanger Detailed description are in Annexure- II | 2 | NO |
| 20 | INSTALLATION & COMMISSIONING | 1 | AU |

Special terms & conditions:

1. Bidders are to submit their offer (Technical) by duly filling up the "Bidder's Offer" column of the attached Bidder's Response Sheet (**annexure DDD & HHH**). Additional sheets may 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 not be accepted for evaluation.
3. All the Annexures / Attachments are to be suitably marked and a list of the same to be submitted alongwith the offer.
- 4.(a)Maximum allowable delivery period after receipt of PO for supply: 06 (six) months.
(b) Maximum allowable delivery period after receipt of site clearance from OIL for the case of Installation/Commissioning : 01 (one) month

Annexure- II

Detailed ITEM description

A. BRIEF DESCRIPTION

Manufacture and Supply of Horizontal Shell and Tube Type Heat Exchanger

B. QUANTITY Two (02) Nos.

C. 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 Sheet (**annexure DDD & HHH**).. Additional sheets may 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 not be accepted for evaluation.

3. All the Annexures / Attachments are to be suitably marked and a list of the same to be submitted alongwith the offer.

D. GENERAL DESCRIPTION

1. Type Horizontal Shell and Tube Type
2. Orientation Horizontal
3. Standards Should generally conform to ASME section VIII Div I and TEMA 'C' for

Mechanical Design

4. TEMA Type BET
5. Head & Tube Bundle Floating Head , Removable tube bundle
6. Make (To be specified by the bidder)
7. Model (To be specified by the bidder)

E. PROCESS DATA

1. Shell Side

a) Fluid Crude Oil

NB: The general Properties of Crude Oil are as detailed below:

API Gravity at 60 Deg F : 30

PH : 7.2

Salinity (ppm) : 4400

CO₃ : NIL

HCO₃ : 305

Pour Point (Deg C) : 27

Water Content (% v / v) : 21

Pumping Temp : 30 to 35 Deg C

Viscosity :13cp @ 26 Deg C, 17 cp @ 24

Deg C, 29 cp @

22 Deg C

Sp Gravity : 0.8574 @ 35 Deg C and 0.8718 @ 15 Deg C

b) Flow Rate 90 - 120 KLPH (approx.)

c) Inlet Pressure 4 - 5 kg/cm²

d) Temperature at Inlet (?C) 30?-35? C

e) Required Temperature at Outlet (?C) 40?-45? C

2. Tube Side

a) Fluid Dry Saturated Steam

b) Pressure at Inlet 5 - 6 kg/cm²

c) Temperature at Inlet (?C) 160 ? C - 162 ? C

F. CONSTRUCTIONAL DATA

1. Shell Sidea) Shell Outside Diameter (mm) 718

b) Shell Inside Diameter (mm) 695

c) Shell Length (excluding heads) (mm)3000

2. Tube Side a) Bundle Diameter (mm) 637 (Apporx.)

b) Total Number of tubes 474

c) Number of Tube Pass 06 (Six)

d) Type of Tube (bare / finned) Bare

- e) Construction of Tube All Tubes shall be seamless and cold drawn.
- f) Tube OD 19.05 MM (3/4")
- g) Tube Thickness (mm) 2.1
- h) Tube pitch (mm) 25.4 (1")
- i) Tube lay out angle (30° /45° /60° /90°) 60° (Triangular)
- j) Tube to Tube Sheet joint Tube to Tube Sheet joints should be expanded. All

Tube Sheet holes and grooving in them should conform to TEMA and the following supplements. Grooves shall be squared, edged and concentric. When heat treatment of Tube Sheet is required, final Tube hole sizing shall be attained by reaming after heat treatment. After reaming operation, suitable precautions shall be taken to ensure that interior surfaces of the Tube holes are maintained free of rust, until Tubes are inserted.

- 3. Baffles
 - a) No of baffles 21
 - b) Baffle Type Single Segmental
 - c) Baffle-spacing (mm) 130
 - d) Baffle cut (%) 22
- 4. Nozzle Data
 - a) Shell Side Inlet (mm) 100
 - b) Shell Side Outlet (mm) 100
 - c) Tube Side Inlet (mm) 100
 - d) Tube Side Outlet (mm) 100

NB: All nozzle end connections are to be slip on welding forged steel flange (weld neck type), Class -150, as per ANSIB16.5. Flange holes are to be drilled as per table-E of BS-10. Materials as per ASTM-A-105 Forged Carbon Steel.

5. Vents Suitably designed vents should be incorporated and the design of the same to be furnished along with the offer.

6. Painting The shell, head and the external accessories are to be sand blasted and with painted with one coat of Grey primer.

7. Name Plate Stainless Steel Name Plate should be provided by the Supplier on each Heat Exchanger Shell, clearly indicating the following:

- i. Name of the Manufacturer
- ii. Year of Supply
- iii. OIL's Purchase Order No
- iv. Manufacturer's ID No

G. DESIGN DATA 1. Design Code ASME section VIII div I and TEMA 'C' for Mechanical Design

- 2. Design Pressure
 - a) Shell side 7.5 kg/ cm²
 - b) Tube Side 8.0 kg/ cm²
- 3. Design Temperature
 - a) Shell side 80 ° C
 - b) Tube Side 200 ° C
- 4. Design Temperature of Shell Fluid Outlet 40°-45° C
- 5. Hydro pressure As per Code (To be specified by the bidder)

H. MATERIALS OF CONSTRUCTION 1. Shell SA 516 GR.70 or equivalent

- 2. Baffles SA 516 GR.70 or equivalent
- 3. Tubes SA 179 (19.05 mm OD x 2.108 mm thick, seamless and cold drawn) or equivalent

4. Gaskets NAB/ IJA/SS Spiral Wound.

NB: The bidder shall have to furnish undertaking in writing along with the offer, that the offered Materials of Construction shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT.

I. CERTIFICATES AND DOCUMENTS TO BE FORWARDED

- 1. Documents should be forwarded along with the quotations:
 - a) Mechanical and thermal design calculations and fabrication drawings
 - b) Undertaking in writing, that the offered Materials of Construction shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT.

- c) Undertaking in writing, that the design of the offered heat exchanger(s) shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT.
 - d) The bidder shall have to provide undertaking that in case the order is placed on the bidder, the Heat Exchanger(s) to be supplied (including major component and all its accessories), will be manufactured after the bid closing date of this tender.
2. The following documents shall have to be forwarded within a month of placement of firm order
 - a) Fabrication drawings made to scale and showing the followings (for reference only):
 - i. Overall size of the Equipment and assembly
 - ii. Sketch showing Tube layout, indicating pass positions, cross Baffle cut, orientation etc.
 - iii. Bundle layout, giving location of first and last Baffles and the Baffle spacing
 - b) Testing plan, indicating the tests to be conducted on welds/materials and assemblies such as NDT tests/Hydrotest/Pneumatic test and Destructive tests, etc.
 - c) A Civil foundation diagram for the complete Heat Exchanger Package(s) indicating the static and dynamic loads of the package.
 3. Material test (MOC) certificates of the components must be forwarded along with the pre-despatch inspection notice from supplier.
 4. The following documents must be forwarded along with the supply of equipment
 - a) Certified test results
 - b) Certificate of hydrostatic testing
 - c) Manufacturers certificate of authenticity

NOTE: All the above mentioned document Under Clause I.4 shall have to be packed separately with a packing list and prominently labeled with OIL's Purchase order No: _____ and to be dispatched to:

To,
 Head- Field Engineering
 OIL INDIA LIMITED
 DULIAJAN- 786602
 ASSAM, INDIA

J. PRE DESPATCH INSPECTION AND TESTING (a)The heat exchanger(s) shall be inspected by OIL's deputed engineer at manufacturers / 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.

(b) OIL's representative shall witness hydrostatic tests. When hydrostatic tests are performed, the indicating Gauge shall be connected to the uppermost part of the Equipment. Testing water shall be Salt free. Final hydrostatic tests shall be carried out using service Gaskets and the Equipment shall be dispatched in as tested condition. Minimum metal temperature during hydrostatic tests shall be 20oC. Test pressures shall be maintained for at least one hour. Shell and Tube sides shall be tested separately.

(c) N.B. :

(i) Material test (MOC) certificates of the components must be furnished at the time of Pre- Despatch Inspection for review.

(ii) Charges for carrying out the above tests at the manufacturer's facility should be included in the purview of the offer. However, cost of travelling, boarding, lodging of OIL's engineers will be to OIL's account.

K. PACKING & TRASPORTATION Packing shall be sufficiently robust to withstand handling during shipment and up country journey. The package should be suitably packed to withstand ingress of water. All items shall have their respective identification letters or numbers painted on them and they shall be suitably packed to provide ease of handling and storage and maximum protection during transport and storage period. Crates and boxes shall have a list of items contained therein secured to the exterior by piece of an enveloping piece tin sheet nailed to the wood. A duplicate list shall also be included inside, with the contents, sling points shall be clearly indicated on the crates.

NB: Any Item found defective/ damaged during transit shall have to be replaced / rectified by the supplier at no additional cost.

L. INSTALLATION & COMMISSIONING a) The Heat Exchangers are to be supplied in assembled condition, so that, after construction of recommended foundation and completion of necessary grouting, the Heat Exchangers can be put to use by simply connecting the Inlet - Outlet pipings. Necessary Civil work and laying of Inlet - Outlet pipings shall be done by OIL.

b) Installation and Commissioning of the Heat Exchangers shall be carried out by the bidder in the presence of OIL representatives at its fields at Duliajan, Assam (India). Service of qualified and competent personnel from equipment manufacturer is essential during commissioning.

c) Commissioning charges should be quoted separately which shall be considered for evaluation of the offers. These charges should included amongst others to and fro fares, boarding/ lodging and other expenses of the commissioning engineers during their stay at Duliajan, Assam (India). Bidders should also confirm about installation/ commissioning in the Technical Bid.

d) The Heat Exchangers shall be treated as commissioned only after successful completion of a trial run for a minimum period of 72 hrs and on satisfactory performance shall be subsequently handed over to OIL.

M. WARRANTY The warranty period for the Heat Exchangers and all ancillary equipment shall be a minimum of 18 months from the date of dispatch / shipment or 12 months from the date of commissioning whichever is earlier.

N. CHECK LIST TECHNICAL CHECK LIST FOR HEAT EXCHANGERS (Please tick YES or NO)

1. Whether the bidder has submitted their offer(Technical) by duly filling up the "Bidder's Offer" column of the attached Bidder's Response Sheet. YES / NO

2. Whether quoted as OEM of Heat Exchangers and whether documentary evidences submitted ? YES / NO

3. Whether quoted as authorised dealer of Heat Exchangers and whether documentary evidences submitted ? YES / NO

4. Whether the offered Heat Exchangers design conforms to ASME section VIII div I and TEMA 'C' for Mechanical Design specifications? YES / NO

5. Whether the designed Temperature of Shell Fluid Outlet of the Heat Exchangers is 40?-45? C? YES / NO

6. Whether separately highlighted any deviation from the technical specifications? YES / NO

7. Whether the Pre-despatch inspection of the Heat Exchangers shall include Hydro Test of Shell and Tube Separately? YES / NO

8. Whether the Commissioning charges should are quoted separately which shall be considered for evaluation of the offer(s)? YES / NO

9. Whether the bidder has submitted the undertaking that the offered Materials of Construction shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT? YES / NO

10. Whether the bidder has submitted the undertaking that the design of the offered heat exchanger(s) shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT? YES / NO

11. Whether the bidder has submitted the undertaking that in case the order is placed on the bidder, the Heat Exchanger(s) to be supplied (including major component and all it's accessories), will be manufactured after the bid closing date of this tender? YES / NO

Annexure-BBB
BID REJECTION & BID EVALUATION CRITERIA

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

I. A. BID REJECTION CRITERIA (TECHNICAL)

1.0 The bidder should be an OEM of Heat Exchangers or authorized dealer of OEM of Heat Exchangers. Valid documentary evidence in this regard must be furnished along with the offer by the bidder.

2.0 The Bidder should have the experience of successfully executing at least 01(one) similar order of total value Rs. 20,08,270.00 (Rupees Twenty Lakhs Eight Thousand Two Hundred Seventy) only in the last 05 (Five) years preceding the bid closing date (technical) of the tender in PSUs, State/ Central Govt. Undertakings, Public Limited Companies.

The bidder shall submit documentary evidence in support of his previous supply experience as follows :

- i) Copy (ies) of Purchase Order(s) clearly mentioning the Gross value of the order,
AND
- ii) Any one or combination of the following documents that confirms the successful execution of each of the purchase order(s).
 - Completion report / performance certificate from the clients,
 - Consignment note.
 - Delivery challan / invoice etc.
 - Any other documentary evidence that can substantiate the successful execution of each of the Purchase Orders(s) cited above.

Note :

i. Similar order means: Orders for Manufacture and Supply of Shell and Tube Type Heat Exchangers.

Note: The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly.

B) BID REJECTION CRITERIA (FINANCIAL) :

1.0 Annual Financial Turnover of the bidder during **any of preceding three financial / accounting years from the original bid closing date** should be at least **Rs.20,08,270/-**

1.1 Net worth of bidder must be positive for preceding financial/ accounting year.

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

Note: (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 **ANNEXURE-B**.

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.

Note: The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly.

C) BID REJECTION CRITERIA (COMMERCIAL):

Commercial Bid Rejection Criteria will be as per “General Terms & Conditions” for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 with following Special Bid Rejection Criteria.

1.0 Bids are invited under **Single Stage Two Bid System**. Bidders shall quote accordingly under Single Stage Two Bid System. **Please note that no price details should be furnished in the Technical (i.e. Unpriced) bid.** The “Unpriced Bid” shall contain all techno-commercial details except the prices, which shall be kept blank. The “Price Bid” must contain the price schedule and the bidder’s commercial terms and conditions. Bidder not complying with above submission procedure will be rejected. **Technical RfX Response folder is meant for Technical bid only. Therefore, No price should be given in Technical RfX Response folder, otherwise the offer will be rejected.**

The bidder has to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" bid through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.

1.1 In Technical Bid opening, only Technical Rfx will be opened. Therefore, the bidder should ensure that "TECHNO-COMMERCIAL UNPRICED BID" should contain details as mentioned in the technical specifications as well as BEC/ BRC , techno- commercial details including quantity offered except prices which shall be kept blank and upload the same in the Technical RfX Response-> User - > Technical Bid. **No price should be given in above Technical Rfx otherwise the offer will be rejected.** Please go through the help document in details before uploading the document and ensure uploading of technical bid in the Technical RfX Response-> User - > Technical Bid only. The "PRICE BID" must contain the price schedule and the bidder’s commercial terms and conditions. **Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments".** Priced bids of only those bidders will be opened whose offers are found to be techno-commercially acceptable.

2.0 Bid security of **Rs. 80,400/-** shall be furnished as a part of the TECHNICAL BID (refer Clause No. 8.0 (Section A) of “General Terms & Conditions” for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders)). The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to

CGM-KOLKATA OFFICE, OIL INDIA LIMITED, 4 INDIA EXCHANGE PLACE, ICC BUILDING, 4TH FLOOR, KOLKATA – 700001, INDIA on or before the Bid Closing Date and Time mentioned in the Tender.

Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.

A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.

2.1 For exemption for submission of Bid Security, please refer Clause No. 8.16 (Section A) of “General Terms & Conditions” for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).

2.2 The Bank Guarantee towards Bid Security shall be valid upto 02.08.2019. (i.e. 90 days from the Bid Validity)

3.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. Validity of the performance security shall be valid for 90 days beyond contract period/duration and applicable warranty/guarantee/defect liability period (if any). Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.

4.0 The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.

5.0 Validity of the bid shall be minimum 120 days from the Bid Closing Date. Bids with lesser validity will be rejected.

6.0 Bids containing incorrect statement will be rejected.

7.0 No offers should be sent by Telex, Cable, E-mail or Fax. Such offers will not be accepted.

8.0 All the Bids must be Digitally Signed using “Class 3” digital certificate (e-commerce application) with Bidder’s organization name as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than “Class 3” digital certificate with Bidder’s organization name, will be rejected.

9.0 The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly.

10.0 Bidders are required to submit the summary of the prices in their Commercial (Priced) bids as per bid format (Summary), given in **Annexure CCC** below :

PRICE SCHEDULE

Tender No.: _____

| | | |
|----|---|-----------|
| | Item No. | |
| | HSN Code | |
| | Basic material Value (Unit Rate) | In Rupees |
| | Quantity | |
| | | |
| A. | Total Basic Material Value (Unit rate x Quantity) | |
| B. | Pre-despatch Inspection charges, if any | |
| C. | Packing and forwarding charges, if any | |
| D. | Total Ex-works value (A+B+C) | |
| E. | GST on (D) | |
| F. | Compensatory Cess, if any | |
| G. | Total FOR Despatching Station Value (D+E+F) | |
| H. | Freight Charges upto destination | |
| I. | GST on freight charges | |
| J. | Insurance charges inclusive of GST | |
| K. | Installation & Commissioning Charges, if any | |
| L. | GST on I & C charges | |
| M. | Total FOR Destination Value (G+H+I+J+K+L) | In Rupees |

Gross weight of the total consignment
Gross volume of the total consignment
Name of Despatching Station
Delivery Period
Validity
Payment terms
Name of original manufacturer
Other terms if any

Name of Bidder _____

Full Name :

Address :

Date :

Note:

- Bidders must quote Freight Charges upto destination specified in tender. In case bidder fails to quote inland freight charges, highest freight quoted by the other bidder (considering pro-rata distance) against this tender or OIL's estimated freight , whichever is higher, shall be loaded to their offer for comparison purpose.
- Inspection Charges (Ref. B) and I&C Charges (Ref K & L) are to be quoted wherever specifically asked for in the tender.
- Other clauses on Goods & Service Tax shall be applicable as incorporated elsewhere in this tender.

II) BID EVALUATION CRITERIA

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

1.0 The evaluation of bids will be done as per the Price Schedule (SUMMARY) detailed vide **Para 10.0** of Bid Rejection Criteria (commercial) .

2.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

3.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be done on FOR Destination basis, subject to corrections / adjustments given herein.

4.0 In case any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses in the General Terms & Conditions of the Tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

COMMERCIAL CHECKLIST*(To be filled up and submitted along with the bid)*

| | |
|----------------------|--|
| Tender no. | |
| Bidder's name | |

| SL. NO. | BEC / TENDER REQUIREMENTS | COMPLIANCE BY BIDDER | |
|---------|--|--|--|
| | | Indicate 'Confirmed'/'Not Confirmed' /Not applicable | Indicate Corresponding page ref. of unpriced bid or Comments |
| 1 | Confirm that validity has been offered as per NIT.(120 days from BC date) | | |
| 2 | Confirm that Bid Security / Earnest Money has been submitted as per NIT (Wherever Applicable)? | | |
| 2.1 | Confirm that original bid bond guarantee has been submitted in format MENTIONED IN NIT. | | |
| 3 | Confirm that you shall submit Performance security as per NIT (in the event of placement of order) (Wherever Applicable)? | | |
| 4 | Confirm that duly signed Integrity Pact has been submitted as per NIT? | | |
| 5 | Confirm that you have submitted documentary evidence as per BRC Technical | | |
| 6.1 | Confirm that you have submitted proof of annual turnover and net worth certified by a chartered accountant as per NIT requirement (with membership number and Firm registration number) . | | |
| 6.2 | Confirm that you have submitted affidavit/undertaking (wherever applicable) as mentioned in bid rejection criteria (financial) in Annexure -BBB | | |
| 7 | Confirm that the offers and all attached documents are digitally signed using Class 3# digital certificate (e-commerce application) in Organization Name issued by an acceptable Certifying Authority (CA) as per Indian IT. Act 2000.NIT. | | |
| 8 | Confirm that you have not taken any exception/deviations to the NIT. | | |
| 9. | Confirm that the product offered strictly conform to the technical specifications. | | |
| 10 | Confirm that the prices offered are firm. <i>(Conditional offer shall be liable for rejection.)</i> | | |
| 11. | Confirm that you have submitted undertaking of authenticity of information/documents as per annexure- | | |

NOTE: Please fill up the greyed cells only.

Bidders Response Sheet- Annexure FFF

| | | |
|-----|--|---------|
| No. | Tender No. | |
| | Bidders Name | |
| | | |
| | | |
| Sl | Description | Remarks |
| 1 | Place of Despatch | |
| 2 | Whether Freight charges have been included in your quoted | |
| 3 | Whether Transit Insurance charges have been included in your | |
| 4 | Make of quoted Product | |
| 5 | Offered Validity of Bid as per NIT | |
| 6 | Bid Security Submitted (if applicable) | |
| 6 | Details of Bid Security Submitted to OIL (if applicable) | |
| | a) Bid Security Amount (In Rs): | |
| | b) Bid Security Valid upto: | |
| 7 | Whether you shall submit Performance Security in the event of placement of order on you | |
| 8 | Integrity Pact Submitted | |
| 9 | Delivery Period in weeks from placement of order | |
| 10 | Complied to Payment terms of NIT (if applicable) otherwise to Standard | |
| 11 | If bidder is MSE whether you have quoted your own product | |
| 12 | If bidder is Small scale unit, whether you are owned by SC/ST | |
| 13 | If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager | |
| 14 | Confirm that the Bid Security submitted (In case of Bank Guarantee) is in toto as per format provided in the bidding | |
| 15 | Bid Security if Not submitted, reasons thereof | |

NOTE: Please fill up the greyed cells only.

**(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETER HEAD)
(ALL FIELDS ARE MANDATORY)**

Tender No. :.....
Name of Beneficiary :M/s.....
Vendor Code :.....
Address :.....
Phone No. (Land Line) :.....
Mobile No. :.....
E-mail address :.....
Bank Account No. (Minimum
Eleven Digit No.) :.....
Bank Name :.....
Branch :.....
Complete Address of your
Bank :.....
IFSC Code of your Bank
a) RTGS :.....
b) NEFT :.....
PAN :.....
VAT Registration No. :.....
CST Registration No. :.....
Service Tax Registration No. :.....
Provident Fund Registration :.....

I/We confirm and agree that all payments due to me/us from Oil India Limited can be remitted to our above mentioned account directly and we shall not hold Oil India Limited responsible if the amount due from Oil India Limited is remitted to wrong account due to incorrect details furnished by us.

Office Seal
Signature of Vendor

Counter Signed by Banker:
Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

- 1) PAN Card
- 2) VAT Registration Certificate
- 3) Service Tax Registration
- 4) CST Registration
- 5) Provident Registration Certificate
- 6) Cancelled cheque of the bank account mentioned above (in original).
- 7) Bank Statement not older than 15 days on the date of submission.

**Format of undertaking by Bidders towards submission of authentic information/documents
(To be typed on the letter head of the bidder)**

Ref. No _____

Date _____

Sub: Undertaking of authenticity of information/documents submitted

Ref: Your tender No. _____ Dated _____

To,
The General Manager-Kolkata Office
Oil India Limited
Kolkata

Sir,

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,
For (type name of the firm here)

Signature of Authorised Signatory

Name :

Designation :

Phone No.

Place :

Date :

(Affix Seal of the Organization here, if applicable)

ANNEXURE-B**CERTIFICATE OF ANNUAL TURNOVER & NET WORTH**TO BE ISSUED BY PRACTISING **CHARTERED ACCOUNTANTS' FIRM** ON THEIR LETTER HEAD**TO WHOME IT MAY CONCERN**

This is to certify that the following financial positions extracted from the audited financial statements of **M/s.....**(Name of the Bidder)for the last three (3) completed accounting years upto.....(as the case may be) are correct.

| YEAR | TURN OVER In INR (Rs) | NET WORTH In INR (Rs) |
|-------------|---------------------------------|---------------------------------|
| | | |
| | | |
| | | |

Place:

Date:

Seal:

Membership No..

Registration Code:

Signature:

ANNEXURE -DDD

| BIDDER'S RESPONSE SHEET AGAINST TENDER NO. SKI 9923P19/03 | | | |
|---|---|---|----------------|
| Description | OIL's Specification | | Bidder's Offer |
| A. BRIEF DESCRIPTION | Manufacture and Supply of Horizontal Shell and Tube Type Heat Exchanger | | |
| B. QUANTITY | Two (02) Nos. | | |
| C. 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 Sheet. Additional sheets may 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 not be accepted for evaluation. 3. All the Annexures / Attachments are to be suitably marked and a list of the same to be submitted alongwith the offer. | | |
| D. GENRAL DESCRIPTION | 1. Type | Horizontal Shell and Tube Type | |
| | 2. Orientation | Horizontal | |
| | 3. Standards | Should generally conform to ASME section VIII Div I and TEMA 'C' for Mechanical Design | |
| | 4. TEMA Type | BET | |
| | 5. Head & Tube Bundle | Floating Head , Removable tube bundle | |
| | 6. Make (To be specified by the bidder) | | |
| | 7. Model (To be specified by the bidder) | | |
| E. PROCESS DATA | 1. Shell Side | a) Fluid Crude Oil NB: The general Properties of Crude Oil are as detailed below: API Gravity at 60 Deg F : 30 PH : 7.2 Salinity (ppm) : 4400 CO3 : NIL HCO3 : 305 Pour Point (Deg C) : 27 Water Content (% v / v) : 21 Pumping Temp : 30 to 35 Deg C Viscosity : 13cp @ 26 Deg C, 17 cp @ 24 Deg C, 29 cp @ 22 Deg C | |

ANNEXURE -DDD

| | | | | |
|------------------------|---------------|---|--|--|
| F. CONSTRUCTIONAL DATA | | | Sp Gravity : 0.8574 @ 35 Deg C and 0.8718 @ 15 Deg C | |
| | | b) Flow Rate | 90 – 120 KLPH (approx.) | |
| | | c) Inlet Pressure | 4 – 5 kg/cm ² | |
| | | d) Temperature at Inlet (°C) | 30°-35° C | |
| | | e) Required Temperature at Outlet (°C) | 40°-45° C | |
| | 2. Tube Side | a) Fluid | Dry Saturated Steam | |
| | | b) Pressure at Inlet | 5 – 6 kg/cm ² | |
| | | c) Temperature at Inlet (°C) | 160 ° C - 162 ° C | |
| | 1. Shell Side | a) Shell Outside Diameter (mm) | 718 | |
| | | b) Shell Inside Diameter (mm) | 695 | |
| | | c) Shell Length (excluding heads) (mm) | 3000 | |
| | 2. Tube Side | a) Bundle Diameter (mm) | 637 (Apporx.) | |
| | | b) Total Number of tubes | 474 | |
| | | c) Number of Tube Pass | 06 (Six) | |
| | | d) Type of Tube (bare / finned) | Bare | |
| | | e) Construction of Tube | All Tubes shall be seamless and cold drawn. | |
| | | f) Tube OD | 19.05 MM (3/4") | |
| | | g) Tube Thickness (mm) | 2.1 | |
| | | h) Tube pitch (mm) | 25.4 (1") | |
| | | i) Tube lay out angle (30° /45° /60° /90°) | 60° (Triangular) | |
| | | j) Tube to Tube Sheet joint | Tube to Tube Sheet joints should be expanded. All Tube Sheet holes and grooving in them should conform to TEMA and the following supplements. Grooves shall be squared, edged and concentric. When heat treatment of Tube Sheet is required, final Tube hole | |

ANNEXURE -DDD

| | | | | |
|-----------------------|--------------------|--|--|-------------------------|
| | | | sizing shall be attained by reaming after heat treatment. After reaming operation, suitable precautions shall be taken to ensure that interior surfaces of the Tube holes are maintained free of rust, until Tubes are inserted. | |
| | 3. Baffles | a) No of baffles | 21 | |
| | | b) Baffle Type | Single Segmental | |
| | | c) Baffle-spacing (mm) | 130 | |
| | | d) Baffle cut (%) | 22 | |
| | 4. Nozzle Data | a) Shell Side Inlet (mm) | 100 | |
| | | b) Shell Side Outlet (mm) | 100 | |
| | | c) Tube Side Inlet (mm) | 100 | |
| | | d) Tube Side Outlet (mm) | 100 | |
| | | NB: All nozzle end connections are to be slip on welding forged steel flange (weld neck type), Class -150, as per ANSIB16.5. Flange holes are to be drilled as per table-E of BS-10. Materials as per ASTM-A-105 Forged Carbon Steel. | | |
| | 5. Vents | Suitably designed vents should be incorporated and the design of the same to be furnished along with the offer. | | |
| | 6. Painting | The shell, head and the external accessories are to be sand blasted and with painted with one coat of Grey primer. | | |
| | 7. Name Plate | Stainless Steel Name Plate should be provided by the Supplier on each Heat Exchanger Shell, clearly indicating the following: i. Name of the Manufacturer ii. Year of Supply iii. OIL's Purchase Order No iv. Manufacturer's ID No | | |
| G. DESIGN DATA | 1. Design Code | | ASME section VIII div I and TEMA 'C' for Mechanical Design | |
| | 2. Design Pressure | | a) Shell side | 7.5 kg/ cm ² |
| | | | b) Tube Side | 8.0 kg/ cm ² |

ANNEXURE -DDD

| | | | | | |
|---|--|--|---------|--|--|
| | 3. Design Temperature | a) Shell side | 80 ° C | | |
| | | b) Tube Side | 200 ° C | | |
| | 4. Design Temperature of Shell Fluid Outlet | 40 ^o -45 ^o C | | | |
| | 5. Hydro pressure | As per Code (To be specified by the bidder) | | | |
| H. MATERIALS OF CONSTRUCTION | 1. Shell | SA 516 GR.70 or equivalent | | | |
| | 2. Baffles | SA 516 GR.70 or equivalent | | | |
| | 3. Tubes | SA 179 (19.05 mm OD x 2.108 mm thick, seamless and cold drawn) or equivalent | | | |
| | 4. Gaskets | NAB/ IJA/SS Spiral Wound. | | | |
| | NB: The bidder shall have to furnish undertaking in writing along with the offer, that the offered Materials of Construction shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT. | | | | |
| I. CERTIFICATE S AND DOCUMENTS TO BE FORWARDED | 1. Documents should be forwarded along with the quotations: | a) Mechanical and thermal design calculations and fabrication drawings | | | |
| | | b) Undertaking in writing, that the offered Materials of Construction shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT. | | | |
| | | c) Undertaking in writing, that the design of the offered heat exchanger(s) shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT. | | | |
| | | d) The bidder shall have to provide undertaking that in case the order is placed on the bidder, the Heat Exchanger(s) to be supplied (including major component and all it's accessories), will be manufactured after the bid closing date of this tender. | | | |
| | 2. The following documents shall have to be forwarded within a month of placement of firm order | a) Fabrication drawings made to scale and showing the followings (for reference only): | | | |
| | | i. Overall size of the Equipment and assembly | | | |
| | | ii. Sketch showing Tube layout, indicating pass | | | |

ANNEXURE -DDD

| | | | |
|--|--|---|--|
| | | positions, cross Baffle cut, orientation etc. | |
| | | iii. Bundle layout, giving location of first and last Baffles and the Baffle spacing | |
| | | b) Testing plan, indicating the tests to be conducted on welds/materials and assemblies such as NDT tests/Hydrotest/Pneumatic test and Destructive tests, etc. | |
| | | c) A Civil foundation diagram for the complete Heat Exchanger Package(s) indicating the static and dynamic loads of the package. | |
| | 3. Material test (MOC) certificates of the components must be forwarded along with the pre-despatch inspection notice from supplier. | | |
| | 4. The following documents must be forwarded along with the supply of equipment | a) Certified test results | |
| | | b) Certificate of hydrostatic testing | |
| | | c) Manufacturers certificate of authenticity | |
| | NOTE: All the above mentioned document Under Clause I.4 shall have to be packed separately with a packing list and prominently labeled with OIL's Purchase order No: _____ and to be dispatched to: To, Head- Field Engineering OIL INDIA LIMITED DULIAJAN- 786602 ASSAM, INDIA | | |
| | J. PRE DESPATCH INSPECTION AND TESTING | (a)The heat exchanger(s) shall be inspected by OIL's deputed engineer at manufacturers / 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. | |
| | | (b) OIL's representative shall witness hydrostatic tests. When hydrostatic tests are performed, the indicating Gauge shall be connected to the uppermost part of the Equipment. Testing water shall be Salt free. Final hydrostatic tests shall be carried out using service Gaskets and the Equipment shall be dispatched in as tested condition. Minimum metal temperature during hydrostatic tests shall be 20°C. Test pressures shall be maintained for at least one hour. Shell and Tube sides shall be tested separately. | |

ANNEXURE -DDD

| | | |
|--|---|--|
| | <p>(c) N.B. :</p> <p>(i) Material test (MOC) certificates of the components must be furnished at the time of Pre-Despatch Inspection for review.</p> <p>(ii) Charges for carrying out the above tests at the manufacturer's facility should be included in the purview of the offer. However, cost of travelling, boarding, lodging of OIL's engineers will be to OIL's account.</p> | |
| K. PACKING & TRANSPORTATION | <p>Packing shall be sufficiently robust to withstand handling during shipment and up country journey. The package should be suitably packed to withstand ingress of water. All items shall have their respective identification letters or numbers painted on them and they shall be suitably packed to provide ease of handling and storage and maximum protection during transport and storage period. Crates and boxes shall have a list of items contained therein secured to the exterior by piece of an enveloping piece tin sheet nailed to the wood. A duplicate list shall also be included inside, with the contents, sling points shall be clearly indicated on the crates.</p> <p>NB: Any Item found defective/ damaged during transit shall have to be replaced / rectified by the supplier at no additional cost.</p> | |
| L. INSTALLATION & COMMISSIONING | <p>a) The Heat Exchangers are to be supplied in assembled condition, so that, after construction of recommended foundation and completion of necessary grouting, the Heat Exchangers can be put to use by simply connecting the Inlet – Outlet pipings. Necessary Civil work and laying of Inlet – Outlet pipings shall be done by OIL.</p> | |
| | <p>b) Installation and Commissioning of the Heat Exchangers shall be carried out by the bidder in the presence of OIL representatives at its fields at Duliajan, Assam (India). Service of qualified and competent personnel from equipment manufacturer is essential during commissioning.</p> | |
| | <p>c) Commissioning charges should be quoted separately which shall be considered for evaluation of the offers. These charges should included amongst others to and fro fares, boarding/ lodging and other expenses of the commissioning engineers during their stay at Duliajan, Assam (India). Bidders should also confirm about installation/ commissioning in the Technical Bid.</p> | |
| | <p>d) The Heat Exchangers shall be treated as commissioned only after successful completion of a trial run for a minimum period of 72 hrs and on satisfactory performance shall be subsequently handed over to OIL.</p> | |

ANNEXURE -DDD

| | | | |
|---|--|-----|----|
| M. WARRANTY | The warranty period for the Heat Exchangers and all ancillary equipment shall be a minimum of 18 months from the date of dispatch / shipment or 12 months from the date of commissioning whichever is earlier. | | |
| N. CHECK LIST | TECHNICAL CHECK LIST FOR HEAT EXCHANGERS (Please tick YES or NO) | | |
| | | YES | NO |
| | 1. Whether the bidder has submitted their offer(Technical) by duly filling up the "Bidder's Offer" column of the attached Bidder's Response Sheet. | | |
| | 2. Whether quoted as OEM of Heat Exchangers and whether documentary evidences submitted ? | | |
| | 3. Whether quoted as authorised dealer of Heat Exchangers and whether documentary evidences submitted ? | | |
| | 4. Whether the offered Heat Exchangers design conforms to ASME section VIII div I and TEMA 'C' for Mechanical Design specifications? | | |
| | 5. Whether the designed Temperature of Shell Fluid Outlet of the Heat Exchangers is 40°-45° C? | | |
| | 6. Whether separately highlighted any deviation from the technical specifications? | | |
| | 7. Whether the Pre-despatch inspection of the Heat Exchangers shall include Hydro Test of Shell and Tube Separately? | | |
| | 8. Whether the Commissioning charges should be quoted separately which shall be considered for evaluation of the offer(s)? | | |
| | 9. Whether the bidder has submitted the undertaking that the offered Materials of Construction shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT? | | |
| | 10. Whether the bidder has submitted the undertaking that the design of the offered heat exchanger(s) shall be suitable for the Operation of the Heat Exchanger(s) under conditions as mentioned in the NIT? | | |
| | 11. Whether the bidder has submitted the undertaking that in case the order is placed on the bidder, the Heat Exchanger(s) to be supplied (including major component and all its accessories), will be manufactured after the bid closing date of this tender? | | |
| Signature | | | |
| Name | | | |
| Designation | | | |
| Contact Number | | | |
| E-mail ID | | | |
| Name of Company / Organization | | | |
| Stamp / Seal of Company / Organization | | | |

| | |
|--|--|
| | |
|--|--|

ANNEXURE HHH- Technical evaluation matrix for BEC/BRC for TENDER NO. SKI 9923P19/03

| Srl No | Clause No of Tender Document/ BEC/BRC Technical Specification/ Scope of Work | Description | Bidders Remarks Complied/ Not Complied/ Deviation | Bidder to indicate Relevant Page No of their Bid to support the remarks/ compliance |
|--------|--|--|---|---|
| | | The bid must conform to the specifications and terms and conditions given in the enquiry. Bid will be rejected in case the items offered do not conform to all the required technical parameters stipulated in the technical specifications and to the respective international / national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements shall have to be particularly met by the bidders, without which the offer will be considered as non-responsive and rejected. | | |
| 1. | <u>BID REJECTION CRITERIA (TECHNICAL)</u> | 1.0 The bidder should be an OEM of Heat Exchangers or authorized dealer of OEM of Heat Exchangers. Valid documentary evidence in this regard must be furnished along with the offer by the bidder. | | |
| 2. | | 2.0 The Bidder should have the experience of successfully executing at least 01(one) similar order of total value Rs. 20,08,270.00 (Rupees Twenty Lakhs Eight Thousand Two Hundred Seventy) only in the last 05 (Five) years preceding the bid closing date (technical) of the tender; in PSUs, State/ Central Govt. Undertakings, Public Limited Companies. Copies of purchase orders from the clients are to be forwarded along with the offer. Note: Similar order means: Orders for Manufacture and Supply of Shell and Tube Type Heat Exchangers. | | |
| 3. | <u>BID REJECTION CRITERIA (FINANCIAL)</u> | 1.0 Annual Financial Turnover of the bidder during any of preceding three financial / accounting years from the original bid closing date should be at least Rs. 20,08,270/- 1.1Net worth of bidder must be positive for preceding financial/ accounting year. 2.0Considering 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 | | |

| | | | | |
|--|--|--|--|--|
| | | <p>year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year..... (as the case may be) has actually not been audited so far'.</p> <p>Note: (a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-</p> <p>i) A certificate issued by a practicing Chartered/ Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE-B.</p> <p>OR</p> <p>ii) Audited Balance Sheet along with Profit & Loss account."</p> <p>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.</p> <p>Note: The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly.</p> | | |
|--|--|--|--|--|

SPECIAL NOTES

- a) Bidders without having E-tender Login ID and Password should complete their online registration at least seven (7) days prior to the scheduled bid closing date and time of the tender. For online registration, Bidder may visit the OIL's E-tender site <https://etender.srm.oilindia.in/irj/portal>
- b) Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.
- c) MSEs Units (manufacturers/Service Providers only and not their dealers/distributors) who are already registered with District Industry Centers or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts & Handloom or any other body specified by Ministry of MSME are exempted from payment of Bid Security (EMD) irrespective of monetary limit mentioned in their registration, provided they are registered for the item they intend to quote/participate.
- d) For availing benefits under Public Procurement Policy (Purchase preference & EMD exemption), the interested MSE Bidders must ensure that they are the manufacturer/ service provider of tendered item(s) and registered with the appropriate authority for the said item(s). Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority specifying the item as per tender. Therefore, it is in the interest of such MSE Vendors to furnish a copy of complete certificate to the concerned tender handling officer of OIL at least seven (7) days prior to the scheduled Bid Closing Date of the tender; seeking clarification/confirmation as to whether their registered item is eligible for EMD exemption or not. Late communication in this regard and request for bid closing date extension on that plea shall not be entertained by Company.