

ORGANISATION

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् राष्ट्रीय वांतरिक्ष प्रयोगशालाएं Council of Scientific & Industrial Research National Aerospace Laboratories

एनडब्ल्यूटीसी, बेलूर कैम्पस / NWTC, Belur Campus, बेंगलूरु / Bengaluru - 560 037, भारत / INDIA फोन / Phone (का / Off.): +91-80-2505 1505, 2505 1548 ; के क्स / Fax : +91-80-2505 1636

ई-मेल / E-mail ; purchasebelur@nal.res.in

Date: 24-07-2024

Invitation for e-Bids / Notice Inviting e-Tender

Tender No. NAL/PUR/PR/061/2024

CSIR - National Aerospace Laboratories (NAL), Bengaluru, Republic of India, is one of the premier research laboratories under aegis of Council of Scientific and Industrial Research (CSIR), an autonomous body under the Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organisation. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites e-bids from the Manufacturers, their distributors and Indian Agent of Foreign Principals, if any, for the procurement of the following Goods/Services for its day-to-day research

Sr. No.	Tender No.	Brief Description of material (s)		Qty.	Type of Bid	Mode of Procurement
1	NAL/PUR/PR/061/2024	01	Raw material supply and installation and commissioning of Oxygen supply pipe line system (As per technical specifications attached)		Single Bid	Limited Tender

E-Bids are invited through the electronic tendering process and the Tender Document can be downloaded from the e-Tender Central Public Procurement Portal (CPPP) of Government of India, https://etenders.gov.in The submission of e-Bids will be only through the e-Tender portal https://etenders.gov.in. Bids will not be accepted in any other form.

Interested bidders may obtain further information from the office of the: 2.

Stores & Purchase Officer

Purchase Section

CSIR- National Aerospace Laboratories

NWTC-Belur, Bengaluru - 560037

Karnataka-India

Tel #: 080 25051548 / 1636

Email: mahesh_r@nal.res.in, sauravkumar@nal.res.in

The prospective bidders should adhere to deadlines specified in Tender Details 3. Screen corresponding to this Tender on E-Tender portal https://etenders.gov.in.

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The Schedule for Submission of e-Bids and Opening of e-Bids is as follows:

Date and Time of Opening of e-Bid		
ne (IST)		
00 Hrs.		

5. Bid Security (BS) / Earnest Money Deposit (EMD):

The bidders have to furnish/submit BID SECURING DECLARATION as per the FORMAT, in the name of "The Director, National Aerospace Laboratories, Bengaluru", without which the bid is liable to be rejected.

6. Performance Security (PS)

- 6.1 Performance Security shall be submitted by the successful bidder within 21 days of receipt of the notification of award / Purchase Order for the amount specified in the Purchase Order, valid for 60 days beyond the fulfilment of all contractual obligations including warranty.
- 6.2 The Performance security shall be in the form of a Bank guarantee (format shall be provided along with the Purchase Order) or stand-by Letter of Credit issued by a Nationalized / Scheduled bank located in India or a bank located abroad.
- 6.3 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations. In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

7. Open Tender enquiry:

Only Local suppliers with prescribed local content as detailed in DIPPT Order No. P-45021/2/2017-PP (BE-II) dated 16th Sep, 2020 and subsequent orders issued by Ministry of Finance, Government of India from time to time, are eligible for bidding. Bidders must enclose the certificate declaring the local content of supplies as per the format.

8. Global Tender Enquiry:

Either the Indian Agent on behalf of the Foreign Principal or the Foreign Principal can bid directly in a tender but **not** both. However, the offer of the Indian Agent should also accompany the authorisation letter from their principal. To maintain sanctity of tendering system, one Indian Agent cannot represent two different foreign principals in one tender.

(a) In case of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry.

One manufacturer can also authorize only one agent/ dealer. There can be only one bid from the following:



i)	The Principal manufacturer directly or through one Indian agent on his behalf; and
ii)	Indian/foreign agent on behalf of only one principal.

- (b) Foreign bidders' must disclose the name and address of agent and representative in India and Indian bidders' must disclose their foreign principal or associates.
- (c) If bidders' is Indian Agent of Foreign Principal, the following instruction shall be complied and as amended from time to time as on the date of issue of Tender:
 - Bidders must necessarily comply with conditions of "Make in India" Order No. F-45021/2/2017-PP (BE-II) dated 16-Sep-2020 of Ministry of Commerce and Industry, Government of India, as amended from time to time on the date of issue of Tender.

 The bidders shall comply with restrictions under Puls 144(xi) and the CEP.
 - The bidders shall comply with restrictions under Rule 144(xi) of the GFR 2017 related to restrictions on participation of Foreign bidders' and their Authorised Indian Agent/Dealer in terms of Order No.P-45021/112/2020-PP(BE-II) (E-43780) dated 24-Aug-2020 of the Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade, as amended from time to time as on the date of issue of Order.

Note: Kindly refer to the first page of Notice Inviting Tender for tender type/mode of procurement and submit the bid accordingly

- 9. Documents comprising Single Bid
- 9.1 All the documents (<u>as applicable</u>) specified in Annexure A to F should be submitted in Single E-Bid along with BOQ- Price bid.
- 10 Documents comprising Two Bid (Technical Bid & Price Bid)
- 10.1 Technical bid should comprise documents (<u>as applicable</u>) specified in Annexure A, B, D, E and F along with the technical specification.
- 10.2 Price Bid should comprise of BOQ and Annexure-C.
- The bids of those bidders failing to comply the following clauses will be summarily rejected.
 - (a) The bidders proposing to supply finished products directly/indirectly from bidders of Countries sharing the land border with India should submit copy of registration done with the Ministry of Home Affairs and Ministry of External Affairs.
 - (b) If the products supplied are not from bidders of Countries sharing Land border with India, the bidders should enclose a declaration
 - (c) The debarment of a bidders in this tender, if any.





Note: Kindly refer to the first page (NIT) for tender type (i.e. Open Tender Enquiry (OTE) / Global Tender Enquiry (GTE)) and submit your bid accordingly.

- 12. As per Govt. of India procurement policies,
 - a) The purchaser intends to give purchase/service preference to local supplies (Preference to Make in India) in case the cost of procurement is up to Rs.50.00 (fifty) lakhs.
 - b) The procuring entity intends to give purchase/service preference to products/goods manufactured by micro, small and medium enterprises.
- 13. Bidders are requested to refer to the instructions regarding Procurement Policies for "Make in India", issued by Ministry of Commerce and Industry, Department of Industrial Policy and Promotion dated. 28-May-2018, and 4-Jun-2020 and guidelines as and when issued.
- Printed conditions, if any, submitted along with the quotation shall not be binding on us.
- 15. Bidders have to certify that the quoted price is not higher than the price quoted with other Government Institution for similar specifications and quantity during the current financial year.

16. Terms of Payment:

16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as specified below:

I	Payment for Goods and Services supplied from abroad
by op	ent of foreign currency portion shall be made in currency of the Contract ening irrevocable Letter of Credit for 100% value of Purchase Order in ollowing manner:
(a)	On Shipment: Ninety (90%) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favour of the Supplier in a bank in its country, upon submission of documents
(b)	On Acceptance: Ten (10%) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation & commissioning, upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security, if any.
(c)	The LC for 100% value of the contract shall be established after deducting the agency commission payable if any, to the Indian agent from the FOB / FCA value.
(d)	The LC will be confirmed at the suppliers cost, if requested specifically by the supplier. All bank charges abroad shall be to the account of the beneficiary i.e. supplier and all bank charges in India shall be to the account of the opener i.e. Purchaser. If LC is requested to be extended/reinstated for reasons not attributable to the Purchaser, the charges thereof would be to the supplier's account. Payment of local currency portion shall be made in Indian Rupces within thirty (30) days of

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	presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.						
II	Payment for Goods and Services supplied from India						
The p	payment shall be made in Indian Rupees, as follows:						
(a)	In case of supplies where installation & commissioning is not required 100% payment will be made within 30 days from receipt of items by purchaser as per purchase order contract.						
(b)	In case of supplies where installation & commissioning is required						
On shipment: Eighty (80%) percent of the Contract Price on receipt of the Goods and upon submission of the docume							
	On Acceptance: The remaining twenty (20%) percent of the Contract value shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate issued by the Purchaser subject to submission of performance security, if any.						
	On Acceptance: The remaining twenty (20%) percent of the Contract value shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate issued by the Purchaser subject to submission of performance security, if any.						
(c)	Payment of Indian Rupees may also be made by opening irrevocable inland Letter of Credit for 100% value of Purchase Order with stage payments mentioned in (a) or (b) above.						
(d)	E-Payment: CSIR-NAL prefers to make Electronic Transfers (RTGS) through State Bank of India, NAL Branch, Bengaluru						
Ш	Payment for Annual Maintenance Contract						
The pwork/	payment shall be made on quarterly basis after completion of the services and certification by the Indenting Officer						

Mandatory fields in	Tax Invoice and Receipt Vouchers
Invoice Number and Date	Name, address and GSTIN of the supplier
Shipping and billing Address	Customer Name & GSTIN [CSIR-NAL]
HSN Code/SAC Code	Place of Supply
Taxable value and discounts	Item details i.e. description, quantity (number), unit, the total value
Signature of the Supplier	Rate and amount of taxes i.e. CGST/SGST/IGST
Bank details	

- 16.2 While claiming the payment, the supplier should certify in the bill/invoice that the payment being claimed strictly in terms of the contract and all obligations on the part of the supplier for claiming the payment have been fulfilled as required under the contract.
- 16.3 Payment shall be made in currency as indicated in the contract.
- 16.4 All payments due under the Contract shall be paid after deduction of statutory levies at source (like Income Tax, etc.), wherever applicable.
- Kindly, note CSIR-NAL GST No.29AAATC2716R1ZB. The bidders are requested to furnish their GST no. in their invoice, failing which NAL will not be able to make the timely payment.



18. Delivery Terms:

For Goods and Services supplied from abroad	FOB, FCA, Ex-Works, CIP, etc.
For Goods and Services supplied from abroad	FOR, Destination
Annual Maintenance Contract	On-site

- 19. Unsolicited / conditional / unsigned Quotations/Quotations received after the due date and time shall be summarily rejected. The bidders shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
- 20. The prospective bidders are requested to refer to the Standard Terms and Conditions available on NAL Internet (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids.
- 21. The Director, CSIR-National Aerospace Laboratories (NAL), Bengaluru, India reserves the right to accept or reject any bids or accept all tenders either in part or in full or to split the order, or to annul the bidding process without assigning any reasons there for.

Thanking you,

Yours faithfully

PPS / In-Charge(S&P)
For and on behalf of CSIR-NAL



General Instructions to Bidders: -

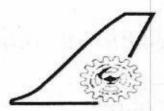
- O1. For participation in e-procurement all bidders (including Foreign Bidders) need to enroll themselves on the CPP Portal (https://www.etenders.gov.in) Only enrolled/registered bidders in the CPP portal shall be eligible to participate in the e-tendering process.
- O2. Tender Documents may be downloaded from Central Public Procurement Portal https://www.etenders.gov.in Aspiring bidders who have not enrolled/ registered in e-procurement should enroll/ register before participating through the website https://www.etenders.gov.in The portal enrolment is free of cost. Bidders are advised to go through the instructions provided at 'Instructions for online Bid Submission'.
- 03. Tenderers can access tender documents on the website (For searching in the NIC site https://www.etenders.gov.in kindly go to Tender Search option, select tender type and select 'Council of Scientific and Industrial Research' in organization tab and select NAL-Bengaluru-CSIR' in department type Thereafter, click on "Search" button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://www/etenders.gov.in as per the schedule.
- The bidders should have Java 8 update 231 version-32 bit for uploading the bid in the CPP Portal.
- 05. Purchase Section, CSIR-NAL neither operates nor manages the CPP Portal where online bids are submitted and. Therefore, will not be responsible for any technical issues related to bid submission (viz., not being able to upload bid, blank/missing/part documents etc.). If the bid is incomplete on account of these issues, it will be treated as such and evaluated further. For any technical queries/issues related to online bid submission, the bidders must directly approach support service of CPP Portal as per the details given on the CPP website.



Specification

TECHNICAL SPECIFICATION FOR RAW MATERIAL SUPPLY AND ERECTION & COMMISSIONING OF THE

OXYGEN SUPPLY PIPE LINE SYSTEM



PROPULSION DIVISION
CSIR - NATIONAL AEROSPACE
LABORATORIES BENGALURU - 560017
JUNE 2024

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DRAWINGS



01 INTENT OF THE SPECIFICATION

CSIR - National Aerospace Laboratories (CSIR-NAL), a constituent Research & Development Laboratory of the Council of Scientific & Industrial Research (CSIR) is renewing an Oxygen supply pipe line system at Propulsion Division, NWTC, NAL, Bengaluru - 560 037.

The intent of this specification is to cover raw material (Cupro-nickel-90/10) supply, erection, commissioning, testing, chemical cleaning for oxygen service and external painting of the oxygen supply piping system.

1.1 Process Description of the Oxygen Piping System

The piping system consists of two parts; the first one is PN150 (Class 900), a 2-inch pipeline. It draws Oxygen gas from the existing Oxygen storage trailer to the pressure regulator. The second piping system is a 2-inch pipeline PN50 (Class 300) from downstream of the pressure regulator to a 4-inch pipeline in the Oxygen gas shed. The Oxygen is stored at 140 bar (max) and regulated to 30 bar (max) through a pressure regulator. There is a manual valve and a filter between the pressure regulator and storage trailer.

The vendor is requested to visit the erection site and take the exact measurements for the Oxygen pipeline requirement.

02 SCOPE OF WORK

- 1. Raw material Supply, erection, commissioning, testing, chemical cleaning, and painting of Sch-160 and Sch-40 2-inch piping system as shown in the drawing Fig.1 with an existing support structure are in the vendor scope. The support structure is already available and not in the vendor's scope. The bill of quantities is given in the Table 1.
- 2. The new pipeline shall be matched with the existing venting stack system connections are shown in Fig.1. Hence, the vendor is strongly advised to take actual dimensions from the site before the start of the fabrication.
- 3. The hydraulic pressure test at 1.5 times of the maximum working pressure of the pipe line shall be done. During the testing both end of the pipe line and relief valve entry shall be blanked with blank flanges. The vendor shall bring the required blank flanges for the pressure test. Only De-mineralized water shall be used.
- 100% radiography and Ultrasound at flange weld joints test shall be done for weld joints.

- Chemical cleaning of the pipeline for oxygen service as per ASTM G93
- 6. The supply of bolts, nuts, and gaskets shall be under the scope of vendor.
- 7. External Painting of the pipeline shall be done with two coats of black color enamel paint.

03 GENERAL INSTRUCTION TO TENDERER

All instructions given in the documents of the purchaser (M/s. CSIR-NAL) shall be strictly adhered to, for fabrication, erection, testing, chemical cleaning, and commissioning.

Material certificates shall be produced for all the materials supplied

All the Flanges shall be as per ASME B16.5

The vendor shall use the qualified welders

During welding, care shall be taken to avoid any weld cracks. Pre-heating if necessary shall be used to get a good weld.

Weld protrusion shall be avoided. A metal ball with a diameter equal to a pipeline ID shall be pulled through the pipeline to check for weld protrusion. If any weld protrusion is found, that area shall be removed and rewelded.

The certificate for the chemical cleaning of the pipeline for the oxygen service shall be produced by the vendor.

The vendor shall bring his welding machines, cranes, and the required items, with the prior permission of the concerned authorities of CSIR-NAL for executing the work.

The purchaser shall have the authority to make alterations in, omissions from, additions to, and substitutions for original specifications, drawings, design, and instructions that may be necessary during the progress of the work to a maximum extent of about 10%. The contractor shall be bound to carry out the job in accordance with any instructions which may be given to him by the representatives of purchaser during the progress of the work within the limits of rules/ regulations of official frame work. Such alterations, omissions, additions, or substitutions which the contractor may be directed to do, in the manner specified above as a part of the work, shall be carried out by the contractor on the same conditions in all respects on which they agreed to do the main work. The same rates as specified in the original tender for the main work shall prevail.



The successful tenderer shall have to carry out the erection, testing, chemical cleaning for oxygen service, and commissioning in such a manner that the operation and running of the existing setup are not disturbed. The necessary shutdowns of the running units/ part of the unit required for erection and commissioning shall have to be pre-planned in consultations with the purchaser.

The tenderer shall take note of the working conditions, practices, and agreements prevailing in the area. The tenderer shall carry out the erection work in such a manner that it shall not affect the operations of other units.

All items (Including supply items) wherever indicated are to be under the scope of the contractor and shall be included in the unit rate quoted, if not mentioned otherwise in this specification.

The contractor shall be responsible for paying strict attention to the statutory regulations for prevention of accidents and to other safety rules as stipulated in IS 5216-1982 and IER 1956.

The tenderer shall satisfy the purchaser that he possesses necessary technical know-how and facilities to execute the order. Necessary particulars and statement of major orders executed in the last five years shall be submitted along with the tender.

The tenderer shall submit with the tender a list of tools and tackles available with him and which he proposes to use for the proper execution of work involved under the specifications.

The tenderer shall submit the quotations for various items of work as enumerated in the schedule of quantities, units, prices of this specification.

No claims on extra payments on grounds of any special local working conditions other than those agreed upon at the time of acceptance of tender shall be entertained after the award of contract.

The tenderer shall include in his offer a firm time-bound schedule giving details of erection, commissioning, testing, painting, and chemical cleaning of pipes.

The tenderer shall clearly spell out the deviation, if any, from the specification. After the contractor has accepted materials and equipment from the purchaser's stores in proper condition, he shall be responsible for their safety and protection from loss or damage of any nature, until the facilities are finally handed over to the purchaser and surplus materials and equipment are accounted for and accepted by the purchaser. Identification of the materials received and installed shall be maintained by contractor.

The contractor shall take care of positioning, leveling, and plumbing of all pipelines and fittings as well as structural support, in required accuracy in accordance with the approved drawings.

The contractor shall take care of all precautions to prevent any damage to the pipelines and equipment's during erection. If any pipe lines/ accessories are damaged during erection due to the fault of the contractor or his representative, the contractor shall be responsible for the repair of the pipelines/ accessories at his own cost, to the satisfaction of the purchaser. If the pipelines/ accessories are damaged beyond repair, contractor shall have to replace the pipeline/ accessories and take approval of the purchaser or his representative regarding suitably replaced pipelines/ accessories before erection.

CSIR-NAL will provide power at one point near the site. The contractor will have to make their own arrangement to draw power from supply point to consumption point. Contractor shall make his own arrangement for handling the equipment, pipelines and accessories at the stores of the purchaser and transporting it to the site for installation.

The contractor shall ensure utmost safety conditions during erection. He shall depute well-trained and disciplined personnel for the job.

The Pipeline may be pre-fabricated, cleaned and painted at the Vendor site and brought to CSIR-NAL for final assembly.

The dimensions given in the drawing are approximate (± 50 mm). Hence Vendor is requested to take the exact dimensions before start of fabrication to avoid any mismatch with the existing system.

04 INFORMATION TO BE FURNISHED BY THE TENDERER.

- 1. Name of the tenderer
- 2. Tenderer's proposal No.
- Tenderer's proposal date
- Name & designation of the Officer of the tenderer to whom All references shall be made for expeditious co-ordination
- 5. Validity period of Tenderer's proposal



With

6. Particulars on time schedule

In weeks from the date of Issue of PO

 Details of facilities available the contractor for Executing the work

List of major similar jobsExecuted by the tenderer

A list of tools and tackles
 Proposed to be used by the
 Contractor for the above work

05 BILL OF MATERIALS

Please Refer Table -1

06 TESTING OF PIPE LINES

Preliminary acceptance tests for erected pipelines shall be carried out as follows:

- a. Checking of metal marks as per manufacturer's certificates/ approved drawings.
- b. Visual examination of welds
- c. Checking of test results of radiographic tests.
- d. Dimensional checks as per the approved erection drawings.
- e. Checking of proper installation of supports, valves, and fittings.
- f. In case defects are found, these shall be rectified prior to the leakage test.
- For pipeline, following tests shall be conducted by qualified persons and interpreted by a person holding not less than level 2 certificate.
 - Radiography to the extent of 100% of welded joints shall be carried out.
 - b. The pipeline shall be cleaned from inside, all debris removed and pipeline blown with dry air to remove all dirt, rust particles, etc.
 - c. Strength and leakage test for pipelines : -
 - Test pressure equivalent to 1.5 times the maximum operating pressure shall be applied using water.

Test pressure shall be maintained for 4 hours and then reduced.

iii. Any defects found shall be rectified after releasing the test pressure.

- iv. Pressure readings shall be taken at the beginning and end of the test. The percentage pressure drop (ΔP) shall be calculated as follows:
- v. $\Delta P = 100 [1 (P2/P1)] \%$
- vi. Where P1 and P2 are the pressures in the pipe at beginning and end of the test.

vii. The allowable pressure drop shall not exceed 1% in 4 hours.

viii. Tests shall be carried out before painting of the pipelines.

ix. Clean the piping system by passing dry air at 2 bar pressure for about 30 minutes to remove the traces of water.

x. Dry Air will be supplied by CSIR-NAL if the work is carried out at the site.

Chemical cleaning shall be carried out after the leak test as per ASTM G93.

Chemical cleaning procedure involves the following steps;

a. Alkaline cleaning:

Alkaline cleaning shall be carried out to remove any oil and grease present in the system. Aqueous mixture of 8-10% sodium hydroxide solution by volume at room temperature minimum immersion time of 30 minutes shall be used for alkaline cleaning.

After cleaning, the components shall be rinsed with DM water (3times) to avoid the risk of stress corrosion.

b. Acid cleaning:

Acid cleaning shall be carried out with aqueous 25-45% HNO3 by volume at room temperature for minimum immersion time of 30 minutes (SAE AMS 2700F) for the removal oxides, light rust, light soils, fluxes and certain protective coatings. Following pickling, passivation is necessary to prevent flash rusting.

c. DM water cleaning:

After chemical cleaning operation, the components shall be rinsed using DM water (3 times).

d. Drying:



The final step after chemical cleaning procedure purging the system with dry Nitrogen gas free from oil, grease and particulate matter. The dew point of dry N2 gas employed shall be \leq -40° C at 1.013 bar.

The pipeline cleaning procedure for Oxygen service is given only guideline purpose. The vendor shall follow the procedure in ASTM G93 Strictly

6.1 Standards and Codes:

Welding

: IS-2811-1998, IS-5206-2003, UNSC70620,

BS EN ISO 24373 or equivalent.

NDT Tests

: ASTM-E-543-06, ASTM-E-1316-07b or equivalent. : ASTM-E-94-04, ASTM-E-1742-06 or equivalent.

Radiographic tests Chemical Cleaning

: ASTM G93.

Cu-Ni Pipe

: ASTM, ASME B36.19, DIN 86019, EEMUA

144, EEMUA 234, MIL-T-16420K.

07 PAINTING

The pipe lines shall be painted with two coats of black colour enamel paint.

08 ACCEPTANCE

Acceptance of contractor's work shall be carried out within a reasonable time of about 15 days after completion of erection work as per the mutually agreed terms and conditions.

09 TIME SCHEDULE

The work as specified under the scope of work shall be completed within schedule time which is mentioned in the tender.

10 GUARANTEE

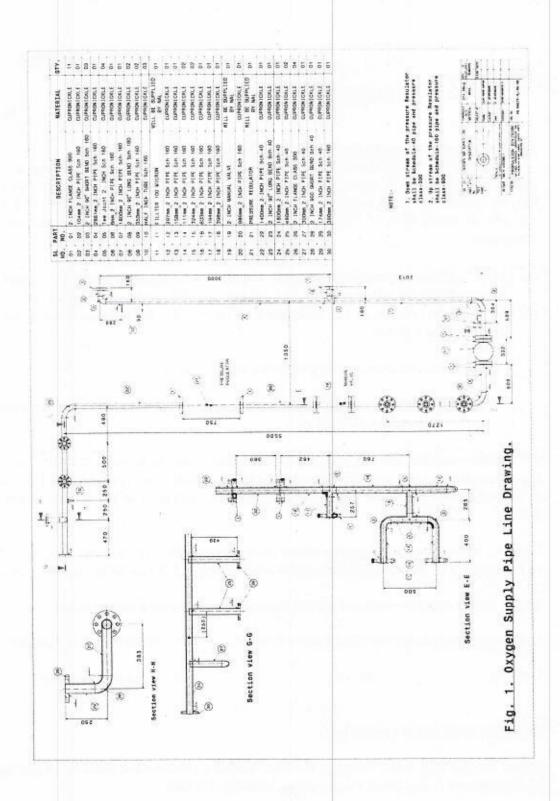
The contractor shall give a guarantee of 18 months, from the date of completion of this contract for his work. Contractor shall rectify any defects found within the guarantee period, at his own cost.

11 DRAWINGS

Please Refer Figure 1 Oxygen Supply Pipe Line - Top view.

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SL NO.	PART NO.	DESCRIPTION	MATERIAL	QTY
1	1	2-INCH FLANGE CLASS-900	CUPRONICKLE - 90/10	11
2	2	104mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
3	3	2 INCH 90 DEGREE SHORT BEND Sch-160	CUPRONICKLE - 90/10	3
4	4	2861mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
5	5	Tee Joint 2- INCH Sch-80	CUPRONICKLE - 90/10	4
6	6	117mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
7	7	1800mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
8	8	2-INCH 90 DEGREE LONG BEND Sch-160	CUPRONICKLE - 90/10	2
9	9	353mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	2
10	10	HALF INCH TUBE Sch-160	CUPRONICKLE - 90/10	3
11	11	FILLTER 100-MICRON	WILL BE SUPPLIED BY NAL	1
12	12	297mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
13	13	158mm 2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
14	14	111mm 2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	2
15	15	324mm_2-INCH PIPE 5ch-160	CUPRONICKLE - 90/10	2
16	16	633mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
17	17	194mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
18	18	398mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
19	19	2-INCH MANUAL VALVE	WILL BE SUPPLIED BY NAL	1
20	20	986mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
21	21	PRESSURE REGULATOR	WILL BE SUPPLIED BY NAL	1
22	22	1400mm_2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1
23	23	2 INCH 90 DEGREE LONG BEND Sch-40	CUPRONICKLE - 90/10	1
24	24	1800mm 2-INCH PIPE Sch-40	CUPRONICKLE - 90/10	1
25	25	486mm 2-INCH PIPE Sch-40	CUPRONICKLE - 90/10	2
26	26	2-INCH WELD NECK FLANGE CLASS-300	CUPRONICKLE - 90/10	4
27	27	300mm_2-INCH PIPE Sch-40	CUPRONICKLE - 90/10	1
28	28	2 INCH 90 DEGREE SHORT BEND Sch-40	CUPRONICKLE - 90/10	1
29	29	174mm_2-INCH PIPE Sch-407	CUPRONICKLE - 90/10	1
30	30	380mm 2-INCH PIPE Sch-160	CUPRONICKLE - 90/10	1





ANNEXURE - A

-	100		-		
1	OF	 OF	·N	a	
•			- 1		-

	<u>B</u>	ID-SECURING D	ECLARATION FORM	
			Date:	Bid
			No.	
con may the	nditions, bids must be ay be disqualified from	signed, declare the supported by a Bion bidding for any co	the purchaser) at:I/We understand that, as d Securing Declaration.I/We ontract with you for a period n a breach of any obligation	accept that I/W of one year from
(a)	have withdrawn/m my/our Bid during t	odified/amended, the period of bid va	impairs or derogates from	n the tender,
(b)	having been notifie period of bid validit	d of the acceptance	e of our Bid by the purchas	ser during the
	(i) fail or reuse to	execute the contrac	et, if required, or	
	(ii) fail or refuse Instructio	to furnish the Perf ns to Bidders.	ormance Security, in accord	lance with the
the	successful Bidder, up the successful Bidder;	on the earlier of (i)	ion shall cease to be valid if the receipt of your notificate after the expiration of the value.	ation of the name
Sigr in th	gned: (insert signature the capacity of (insert	of person whose na legal capacity of pe	me and capacity are shown) erson signing the Bid Securit	ng Declaration).
Nan	me: (insert complete n	ame of person signi	ing he Bid Securing Declara	tion)
Dul	ly authorized to sign th	ne bid for an on beh	alf of: (insert complete nam	ne of Bidder)
Date	ted on	day of	(insert date of s	igning)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)





ANNEXURE - B

Tender No.:

Certificate of Local Content (to be enclosed along with Technical Bid)

We M/s.		(Name	of Bidder) hereby certify
that we meet th	e minimum	(r turne	or bluder) hereby certify
Local content for	or the Goods and services of dated	offered vide our of	
➤ Class-I I	ocal Supplier with local co	ontent of 50% and	above
O	R		
Class-II (Tick ap	Local Supplier with local opropriate category of Lo	content of 20% and cal Supplier)	d above but less than 50%
commissioning	claiming the services su training, after sales decustom clearance including	service (warranty	tion, insurance, installation, or AMC/CMC support), local value addition.
Rule 175(1)(i)(successors can	h) of the General Financi	al Rules (Govt of vo years as per R	of the Code of Integrity under f India) for which we or our Rule 151 (iii) of the General hissible under law.
	signature of person whose of [insert legal capacity of		
	complete name of person si I to sign the bid for and on		
Dated on	day of	,	[insert date of signing]
		20	

Tender No.:

Certificate of Price break up of Local Content (to be enclosed along with Price Bid)

We, M/s	9(Part-A) of the Tender No (Name of Bidder) hereby certify	that we meet the
		dated
as specified below	I services offered vide our offer/bid Nov;	dated
 Class-I Local Supplier 	with local content of 50% and above	
OR		
 Class-II Local Supplier (Tick appropriate categ 	with local content of 20% and above but less than 50% ory of Local Supplier)	e e e e e e e e e e e e e e e e e e e
Minimum Local content is	% as per Price break up given below:	

Component of Cost		Imported Product		Domestic value addition to product	
		In Foreign Currency US% or specify	In Rupees Exchanged Rate 1 US\$ - Rs.	In Rupees	Location of value addition
	Goods				
i)	Material				
ii)	Equipment				
iii)					
	Total Quoted Price = [X + Y]		X=	Y=	



Dated on

CSIR - National Aerospace Laboratories, Bangalore - 560 037, INDIA

We are not claiming the services such as transportation, insurance, installation, commissioning, training, after sales service (warranty or AMC/CMC support), consultancy and custom clearance including custom duty as Local value addition.

We are aware that the false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules (Govt of India) for which we or our successors can be debarred for up to two years as per Rule 151 (iii) of the General Finance Rules along with such other actions as may be permissible under law.

Signed: [insert signature of person whose name and capacity are shown]
In the capacity of [insert legal capacity of person signing the Bid Submission Form]
Name : [insert complete name of person signing the Bid Submission Form]
Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]

day of

ANNEXURE - D

TERMS & CONDITIONS

Tender No.			
Sr. No.	Approximate weight of the Consignment	Approximate dimensions of the consignment	
1			
2	Indian Customs Tariff No. and HSN No. (ICT & HSN No.)		
3	Country of Origin		
4	Percentage of Local Content		
5	Annual Turnover		
6	Type of Supplier		
7	Mode of Shipment By Air / SEA / Road / e-download		
8	Port of Destination	Final Destination	
9	Delivery Term (INCO Term), as the case may be		
10	Delivery Schedule including Supply, Installation, Commissioning, Training & Acceptance		
a)			



	Installation & Commissioning from	
- 1	the date of Delivery of item [In weeks/Days/Months]	

Tender No.			
Sr. No.	Approximate weight of the Consignment	Approximate dimensions of consignment	the
c)	Training from the date of Installation & Commissioning of item [In weeks/Days/Months]		
d)	Acceptance from the date of Training [In weeks/Days/Months]		
11	Installation & Commissioning (if any) Quoted Price inclusive or exclusive		
12	Training (if any) Quoted Price inclusive or exclusive		
13	Partial Shipment [If partial shipment required, the charges incurred towards partial shipment to be borne by Bidder]		
14.	Payment Term		
15	Currency of Bid/Quotation		
16	Statutory Levies [GST/IGST or any other taxes, duties] % of tax to be mentioned.		
17	Bidder GST No.		
18	Bidder Bank Details along with Cancelled cheque		
19	Insurance Coverage		

20	Warranty	
21	Agree to submit Performance Security, if any	
22	Validity of offer	
23	Order to be placed [Full address, Tel #, Fax #, Email Id, Contact Person]	

Tender No.		
Sr. No.	Approximate weight of the Consignment	Approximate dimensions of the consignment
24	Nature of the item [to be specified] Hazardous/Radio Active/ Perishable/ Dangerous/ Shelf-life or any other	
25	Bidder to mention in the quote, any special carrier requirement is necessary for transport viz., Special License, ODC etc.,	
26	Total Price quoted as per BoQ/Price Schedule/List of Deliverables exclusive of tax	
27	Total Price quoted as per BoQ/Price Schedule/List of Deliverables inclusive of tax	
Note:	Unit Price indicating currency FO (named place of delivery)	OB (named port of shipment or FCA



ANNEXURE - E

Tender No.:

Format for declaration by the Bidder for Code of Integrity & Conflict of Interest (This declaration should be furnished on the Bidders Letter Head

Ref. No:	Date	
To,		
(Name & address of the Purchaser)		
Sir/Madam,		
With reference to your Tender N	No. dated	I/We
country during the last three years or of under:	ressions of the Code of Integrity with any ent being debarred by any other Procuring Ent	ity in any ity are as
a)	는 사람이 살아왔다니다.	
b) c)		
We undertake that we shall transgression/contravention of this code.	be liable for any punitive action in	case of
Thanking you,		
	Yours Sincere Signature (Name of the Authorised S	Signatory)

ANNEXURE - F

Tender No.:

SELF CERTIFICATION

With reference to Clause No. 1.1.3, of this tender and GoI, Ministry of Finance Order No.: F. No. 6/18/2019-PPD, dated 23rd July, 2020, on "Restrictions under Rule 144 (xi), of the General Financial Rules (GFRs)", & OM No. F. No. 18/37/2020-PPD, dated 8th February, 2021, and as amended from time to time on the date of issue of Tender:

It is certified that

We are not a bidder of a country which shares a land border with India.

OR

We are a bidder of a country which shares a land border with India, however, we are eligible to bid in any procurement whether of goods or services as we are registered with the Competent Authority as specified in Ministry of Finance (GoI) Order No. 6/18/2019 – PPD, dated 23rd July 2020. Copy of valid registration is attached.

☐ Tick as applicable

Place:

Date:

Authorised Signatory Name: Company Seal