



जवाहरलाल नेहरू उन्नत वैज्ञानिक अनुसंधान केंद्र
(विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार की स्वायत्त - मान्यता प्राप्त विश्वविद्यालय)

JAWAHARLAL NEHRU CENTRE FOR ADVANCED SCIENTIFIC RESEARCH

(An Autonomous Institution under Department of Science & Technology, Govt. of India - A Deemed University)

जक्कुर पोस्ट, बेंगलूरु 560 064, कर्नाटका, भारत / Jakkur P.O., Bengaluru - 560 064, Karnataka, INDIA

JNC//PUR/ICMS/2020-2021/87/WO

January 19, 2021

NOTICE INVITING TENDER

Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur invites sealed tenders in Two Bids (Technical & Commercial) from qualified and experienced Vendors for **Supply, installation, & Commissioning of Gas Line Systems** as per the terms and conditions below and as broad specifications shown in ANNEXURE.

TERMS & CONDITIONS:

1. Delivery period should be Eight weeks from the date of Purchase Order.
2. Any item not specifically mentioned in the technical specification but essential for successful implementation of gas line system and associated accessories (in the opinion of the Bidder) must be brought to our notice and quoted accordingly.
3. At the time of installation, if it is found that some additional items are required to meet the operational requirement of the configuration, but not included in the Bidder's original list of deliverables, the Bidder shall supply such items to ensure completeness of the configuration at no extra cost.
4. The Bid validity should be 90 days.
5. The successful Bidder immediately after the award of the Purchase Order shall prepare a detailed plan of supply, installation of gas line system.
6. Performance Security: The successful bidder has to provide 3% Performance Security in the form of Bank Guarantee within 15 days after receiving Purchase Order.
7. Payment terms: 100% payment within 30 days from the date of supply, installation, testing and commissioning of the project and PBG for 3% of PO value valid for 60 days beyond the date of commissioning.
8. Late & delayed quotations will not be considered.
9. As time is the essence of the Contract, delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the successful Bidder will forfeit Security Deposit. If the supplier fails to supply, install and commission the system as per specifications mentioned in the Purchase Order within the due date, the supplier is liable to pay liquidated damage of 0.5% of Purchase Order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier. JNCASR reserves the right to cancel the Purchase Order in case the delay is more than Ten weeks. Penalties, if any, will be deducted from the Security Deposit. The maximum amount of penalty shall be 10%. Liquidated Damages shall be levied on the Purchase Order value, freight, insurance and duties.
10. The place of Applicable Law / Jurisdiction is Bengaluru, Karnataka,

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11. Decision of the President, JNCASR will be final.
12. Free delivery upto Stores, JNCASR.
13. **Goods & Service Tax:** Please note that JNCASR is eligible for GST Concession under 45/2017 notification and IGST under 47/2017 notification, will issue a certificate to this effect.
14. **Custom Duty:** Please note that JNCASR is eligible for Customs Duty Exemption under 51/96 Notification and will issue a Certificate to this effect.
15. **Formats for Price-Bid:** Corresponding to each part in the Technical Bid there should be a pricing referring to the Part name in the Technical Bid and mentioning Quantity, Unit Price and Total Price. If there are any other charges, they should be also added at the end. All pages have to be serially numbered. References if any to Technical Bid should be provided along with the exact location (page number, etc). You are required to use the Price Bid format given by us only for Commercial Bid.
16. **Submission of Proposal:** The proposal should be submitted in a sealed Two Bid system. One containing sealed Technical Bid and the other one a sealed Commercial Bid. The Bidder name, the nature of the envelope (either Technical Bid or Commercial Bid) must be clearly mentioned on top of each of the envelope. The sealed proposals must be addressed to Senior Stores & Purchase Officer, JNCASR. The proposals should be submitted at the Stores & Purchase Department, JNCASR.
19. **Warranty replacement:** Any replacement of defective items during warranty period is the responsibility of the successful bidder. The expenditure involved like Freight Charges, Custom Duty, Insurance Charges, Clearance Charges etc. are to be borne by Vendor.
20. Site visit should be done before submitting the bid.
21. Preference will be given to MSME Vendors.
22. Preference will be given to item manufactured in India as per GOI "Make in India" initiative vide DO#P.4502/146/2019-PP(BE-II)/7682 dated 19.06.2019.

"In view of the prevailing Covid 19 Pandemic situation, Vendors are informed to attach a Certificate stating that the parcel has been sanitized thoroughly and free from contamination of any Virus and Microbes at the time of delivery/ dispatch".

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17. **Evaluation of bids:** Technical Bids will be evaluated by JNCASR. Commercial Bids of technically qualified Bidders only will be opened on date and time that will be decided by the JNCASR.

IMPORTANT DATES:

Last date for submission of bids (Two-bid system)	<u>February 18, 2021 up to 2.00 PM</u> 04.2.2021
(a) Technical Bid Cover : Technical Specs. Commercial Terms and Conditions, Brochures, Compliance statement EMD & Bill of Quantities without Price Information.	
(b) Commercial Bid cover : With complete specs & item wise rates to be indicated, Commercial terms and conditions.	
Opening of Technical Bids :	<u>February 18, 2021 at 4.00 PM</u> 04.2.2021
Opening of Commercial Bids :	Will be informed later

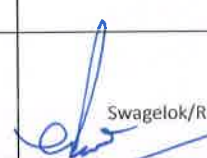
Vendors are informed to download the Tender document from www.jncasr.ac.in free of charge.


(K. Bhaskara Rao)
Sr. Stores & Purchase Officer

ANNEXURE



Sl.No.	Item Description	Qty. (Nos./Mtrs.)	Approved Makes
Measurement Lab - - Requirement for - Hydrogen, CO, CO2, Nitrogen = 40 Bar working pressure			
1	Single Cylinder Panel for Hydrogen, Nitrogen & CO2, MOC=Brass Chromeplated, Specially Cleaned, Inlet Pressure =200Bar,Outlet Pressure = 0 to 50 Bar, Diaphragm=Hastelloy, With 1 Number of Inlet Diaphragm Shut-Off Valves , With 1 Number of Internal Purge Diaphragm Valves, With 1 Number of Outlet Diaphragm Valves, With Safety Relief Valve, With Inlet & Outlet normal Pressure Gauges, With Inlet & Outlet Ports = 1/4" FNPT.	3	Swagelok/Rotarex/Tescom/Matheson
2	Single Cylinder Panel for CO, MOC=SS316, Specially Cleaned, Inlet Pressure =200Bar,Outlet Pressure = 0 to 50 Bar, Diaphragm=Hastelloy, With 1 Number of Inlet Diaphragm Shut-Off Valves , With 1 Number of Internal Purge Diaphragm Valves, With 1 Number of Outlet Diaphragm Valves, With Safety Relief Valve, With Inlet & Outlet normal Pressure Gauges, With Inlet & Outlet Ports = 1/4" FNPT.	1	Swagelok/Rotarex/Tescom/Matheson
3	SS Flexible Hose(Internal SS) along with safety Wire & Cylinder Connector for All Gases, Working Pressure:200 Bar, Length:1 Meter, End Connection : 1/4" FNPT X 1/4" MNPT.	4	Swagelok/Rotarex/Tescom/Matheson
4	Cylinder Bracket to Hold Cylinders,	4	Swagelok/Rotarex/Tescom/Matheson
5	Point of Use Regulator for For H2, N2, CO2, Single Stage, Gas Purity 6.0 Grade, MOC=Brass Chromeplated, Specially Cleaned, Inlet Pressure = 200 bar, Outlet Pressure = 0 to 40 Bar, Diaphragm=Hastelloy, With Inlet & Outlet Pressure Gauges, With Inlet & Outlet Ports = 1/4" FNPT	3	Swagelok/Rotarex/Tescom/Matheson
6	Point of Use Regulator for For CO, Single Stage, Gas Purity 6.0 Grade, MOC= SS316, Specially Cleaned, Inlet Pressure = 200 bar, Outlet Pressure = 0 to 40 Bar, Diaphragm=Hastelloy, With Inlet & Outlet Pressure Gauges, With Inlet & Outlet Ports = 1/4" FNPT	1	Swagelok/Rotarex/Tescom/Matheson
7	Shut of Valves at User Point for for All Gases, Material : SS316, Operating Pressure : 200 Bar, Seat : PCTFE, End Connection : 1/4" OD.	4	Swagelok/Rotarex/Matheson
8	Fittings for Point of Use Regulator Inlet & Outlet, Solenoid Valves,Spare, MOC:SS316L, End Connection : 1/4" MNPTX1/4"OD	15	Swagelok/Rotarex/Matheson
9	FLOW Control Needle Valves at User Point before MFC, Material : SS316, Regulating Stem, Operating Pressure : 5000 PSI, Seat : PTFE, End Connection : 1/4" OD.	5	Swagelok/Rotarex/Matheson
10	Non Return Valve after MFC, Pressure : 200 Bar, Cracking Pressure : 1/3" PSI, End Connection 1/4" OD. Working MOC:SS316,	4	Swagelok/Rotarex/Matheson
11	Weld Fittings - Buttweld tee without shoulder - 1/4"x0.035 buttweld, 0.75 in. (19,1mm) extension connections - Ra 16 µinch	4	Swagelok/Rotarex/Matheson
12	Pressure Gauge to mointor operating pressure after MFC, MOC:SS316, Pressure Range : 0 to 50 Bar, Connection : 1/4" MNPT. End	1	Swagelok/Rotarex/Tescom/Wika


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ANNEXURE



13	SS316 Seamless Tubing - 1/4"ODX0.035" WT ASTM A269 Grade,	138	Sandvik/Dockweiler/Valex
14	SS Unions, 1/4" OD, SS316L	2	Swagelok/Rotarex/Matheson
15	Installation Material along with Panel Integration for MFC's.	1	Indegeneous
16	Instalaltion of the complete system including Orbital Welding, Gas Panels, Tube Laying, User Point Regulators, Valves, Labeling, Leak & Pressure test of complete system.	1	With Orbital Welding

Part 2 - Emergency Shut-Off For H2 & CO + Gas Detection for CO

1	Solenoid Valves 24V(Ex) Low Pressure for Emergency Shut-Off for Hydrogen & Cabon Monoxide,	2	Sewagelok/Rotex/Asco
2	Emergency Shut-Off Control Box for Hydrogen & CO	1	Indegeneous
3	<p>CIMFR Tested, For Ambient Application</p> <ul style="list-style-type: none"> - Gas to be detected : Carbon Monoxide - Range : 0 to 1000 PPM,- Detection Principle : Electrochemical - Display : 2-Line, 4-Digit 8 mm (H) Seven Segment, LED Display, 8 LEDs to Indicate Status of Instrument - Setting : By Using Magnetic Pen Without Opening Cover - Supply Voltage : 18 TO 36 VDC, Typically 24V DC - Standard Output1.: 4-20mA Current Output - Output 2.: THREE SPDT Relays of rating '2A/120VAC, 2A/24VDC'. - Error Detection : During Sensor Break Or Open Display Shows SENSOR OPEN & During Over Range Display Shows OVER RANGE - Operating Temperature : -15 Deg C to +55 Deg,- Protection Class : IP-66 - Cabinet Material : Cast Alluminium Alloy, LM-6,- Sensor Housing : SS 316 OR PPS - Please Refer Attached PDF Catalogue of GT-2500-FLP - Sensor Life : 18-24 months depends on Application & Site Condition. - Calibration of Sensor: Calibration of sensor is highly recommended ONE'S in a Year & IF your process is Critical Then test / calibration has to be done Every Quarter 	1	Honeywell/Ambtronics
4	<p>Scanner Type Gas Monitor with Hooter,- Channel : 4 Channel</p> <ul style="list-style-type: none"> - Input : 4-20mA from Gas Transmitter,- Display : 4 Digits of 13mm (h) Red LED for Gas Concentration 1 digit of 13 mm. (H) Red LED for Channel Number - LED Indication: 8 no. Red LED for Alarm Indication Of both set points AL1 AL2 - Set Point: 2 Independant set points individual, For each channels with 2 common relay output - Accuracy : +/-1% of Full scale value,- Standard Relay Output: 1 NO/C/NC relay contact, Rated 230V AC / 5A for Relay-1 (AL1) & Relay-2 (AL2) - Relay Latching: Programmable latch & non-latch Facility for common relay & relay indication. - Setting: Setting by 5 keys on Front panel MODE SHIFT INC ENT PRN / ACK - Monitoring: Sensor Break / Open Shows oPEN Under shows Undr & over range shows ovEr - Supply Voltage: 230V AC,- Protection Class : IP 65 - Cabinet Material : Cast Alluminium Alloy LM-6 /C. I Enclosure - Mounting : Wall mounting / stand mounting, Please refer attached catalogue 	1	Honeywell/Ambtronics
5	Instalaltion of Solenoid Valves, Emergency Control Box, Gas Detection Panel along with Cables & Installation Material	1	Indegeneous

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PRICE BID FORMAT

Part Name	Item Description (as mentioned in technical bid)	Qty	Unit Price	Total Price
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
	Add: Taxes and Duties			
	Grand Total (INR)			