To,
M/s

Dear Sir,

We request you to submit your quotation for Fabrication, Supply, Installation, Testing and Warranty of “Cryogenic Argon Gas Manifold System Accessories” As per Specification given in Annexure - B.

Yours Faithfully,

(Sivakumar U)
Scientific Officer (D)
(On behalf of the President of India)

Encl.: Annexure - B
       Annexure - C
SCOPE:

Fabrication, Supply, Installation, Testing and Warranty of "Cryogenic Argon Gas Manifold System Accessories"

This specification establishes the requirement for the fabrication, inspection, supply and installation of systems and equipments for delivery, supply and distribution of cryogenic gas system. Further, the scope of the supply includes fabrication, supply and on-site installation of delivery systems. No free issue material will be supplied by the purchaser to the contractor to execute this job. The scope also includes conceptual drawing and thereafter detailing of equipments in consultation with the user.

Ultrasonic testing, Radiography of welded and brazed components shall be in the scope of supply of this job.

Manufacturer shall follow all the instruction given in this annexure and inform the user about the manufacturing and inspection procedures, shall perform the shop-test, prepare for shipment and supply the items detailed in this annexure to purchaser’s stores.

The description of accessories and its quantity are listed in Annexure-C

General Requirement:

➢ The fabrication of the systems required under this NIT demands the highest standard of workmanship. The desired finish and the leak-tightness of the system, shall be of primary concern.

➢ After completing the fabrication and installation the entire site should be properly cleaned.

➢ Workmanship shall be in accordance with high-grade practice and adequate to achieve the accuracy and finish mentioned in the drawings. All tubing and structural work shall be of high quality.

1. MACHINING:
In general, machining shall be as specified. Care shall be taken to ensure that chatter marks, scratches and burrs are removed from the machined surfaces. All sharp corners are to be rounded off inside glove box and wherever possible at outside also. All tolerances, sizes and finishes shall be as per the approved drawings. Surface finish: mechanical polishing: 0.3 < Ra < 0.35
2. **WELDING:**
The system shall be made by certified welding process. Welding procedure to be followed shall be recorded in detail and qualified as per ASME Section IX. Welding procedure qualification shall be carried out in accordance with ASME Section IX. If fillet welding is being used, ASME Section IX QW-183(Macro-Micro) should also be met for welding qualification. This test ensures the weld is clear from cracks and lack of fusion. Visual examination of the cross sections of the weld metal and heat affected zone shall show complete fusion and freedom from cracks.

In general the fabricator/supplier shall ensure the approval of Welding Procedure Specification (WPS), Procedure Qualification Record (PQR) and welder qualification. These have to be evolved separately against this purchase order.

3. **INSPECTION AND TESTING:**
User department shall have access at all reasonable times to all shops and the sub-contractors where material is being fabricated and assembled and all reasonable facilities for such inspection shall be provided in mutually agreeable time. A certificate shall be issued along with each glove box including inspection records and test results. The detailed QAP shall be prepared and submitted by the manufacturer (Department’s QAP is indicative only for reference) for approval and the inspection shall be carried out as per the approved QAP.

**Inspection of Raw Materials**
The bidder shall assure that all materials used comply with the requirements of respective codes. The mill test reports (for chemical and physical properties) in correlation with material markings shall be provided for review. The same shall be approved before fabrication starts.

All the raw materials to be used in fabrication such as tubes, bars etc., should be ultrasonically examined for defects.

**Other general requirements:**
- a. All the points stated above should be addressed in the quotation. In case of any doubt, clarification should be obtained at the earliest.
- b. The terms of guarantee/ warranty should clearly be stated.
- c. Representative of the supplier shall be present during the actual delivery of material at RLG zonal Stores, at BARC Mumbai.
- d. The indent includes the Onsite Supply, installation and commissioning of the equipment (as per the requirement by the indenting officer).
- e. The guarantee of the item should be for a minimum period of one year.
- f. Only consolidated bid of all the items mentioned in Annexure -1 will be accepted. Quotations with Part bidding will be out-rightly rejected.
List of general instructions

- Bidder should quote according to the DPS purchase rules, terms and conditions.
- It is to inform, that all the persons entering BARC, Mumbai premises are required to hold valid “Police Verification Certificate” or government issued photo identity card (Passport/Aadhaar) failing which they will not be allowed to enter inside BARC, during supply of material (If required).
- The tentative working hours for mechanics shall be 09.00 hrs to 17.30 hrs of all BARC working days.
- All material shall be new and of best quality confirming to the relevant Standards/ specification wherever applicable. Material test certificate has to be submitted along with material wherever applicable. All material shall be inspected by the department representatives before delivery.
- Insurance: The manufacturer shall insure all the material during transit from factory to delivery site.
- Rates quoted by the bidder should specifically include all taxes, freight, levies, duties etc. and shall remain firm throughout the currency of the contract.

NOTE to bidder:

"Post supply inspection in respect of supplies made is not permitted. Any offer containing the condition of post supply inspection will be out-rightly rejected. It is therefore, mandatory for the bidders, while quoting, to indicate in clear terms the requirement of post supply inspection by any outside agency."

INSPECTION AND TESTING:

The purchaser will have access at all reasonable times to all shops of the contractor and the sub-contractors where material is being fabricated and assembled and all reasonable facilities for such inspection shall be provided. Prior to the supply of item the manufacture has to get it approved from the purchaser.

The inspected and accepted Assemblies shall be delivered to:

RLG Stores Officer
Radiological Zonal Stores,
Bhabha Atomic Research Centre
Mumbai- 400 085

- You shall send your offer in a sealed envelope (strictly by registered post/Speed post only) indicating delivery period, price inclusive of taxes and other relevant information, to:

U Sivakumar
Metallic Fuels Division
Bhabha Atomic Research Centre
Trombay, Mumbai 400 085

- Quotation shall reach us by speed post/register post only on or before 31-08-2020 before 1600 hrs.
- Please send "REGRET" if not quoting.
- On top left corner of the sealed envelope please indicate
Fabrication, Supply, Installation, Testing and Warranty of “Cryogenic Argon Gas – Manifold System Accessories”

All applicable taxes should be clearly mentioned.

- Overwriting, scratching etc. must be avoided in the quotation. Rewriting the whole figure shall carry out any alteration in the figure. The authorized person from the firm shall countersign such figure.

- The delivery period mentioned in the quotation shall be strictly adhered to. If the contractor fails to supply and secure extension of delivery date before effecting delivery of the supply against the contract, acceptance of such item by the purchaser will in no way prejudice the right of the purchaser to levy liquidated damage nor will it be entitled to the contractor for payment of statutory levies that comes into force after the expiry of the delivery date.
- Guarantee / Warranty of the material supplied for one year.
- Early delivery schedule will be given a consideration.
- You may contact Shri Arihant Jain (25595008) for any clarification.

PLACE OF DELIVERY:
- The inspected and accepted assemblies shall be delivered to:
  Stores Officer
  Radiological Zonal Stores
  Bhabha Atomic research centre
  BOMBAY 400 085

INSPECTION AND TESTING:
The purchaser will have access at all reasonable times to all shops of the contractor and the sub-contractors where material is being fabricated and assembled and all reasonable facilities for such inspection shall be provided. Prior to the supply of item the manufacture has to get it approved from the purchaser.

PAYMENT TERMS:
Full payment will be made only after the satisfactory completion of Work order and delivery of “Fabrication, Supply and commissioning of systems, equipment’s and their parts for delivery, supply and distribution of cryogenic liquefied gas system under controlled dynamic flow to stainless steel enclosures and housing for safe operation of equipments.” Please note that income tax @ 2% will be deducted from your bill. **No part payment or advance payment will be made.** For this mode of payment, you are required to draw your invoice in the name of Director, Nuclear Fuels Group, Bhabha Atomic Research Centre, Mumbai 400085, in **triplicate along** with Advance Stamp receipt and to be submitted along with “Fabrication, Supply and commissioning of systems, equipment’s and their parts for delivery, supply and distribution of cryogenic liquefied gas system under controlled dynamic flow to stainless steel enclosures and housing for safe operation of equipments.”

- Company’s PAN No. should be furnished along with the bill.
- Company’s copy of Sales Tax /Service Tax Registration Certificate has also to be furnished along with the bill.
DELAY CLAUSE:

Any delay which is attributable to the contractor is liable for penalty @0.5% per week (max. 5%) to be imposed on the contractor.

CONFIDENTIALITY:

No party shall disclose any information to any third party, concerning the matters under this contract generally. In particular, any information identified as “Proprietary” in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force. “Restricted information” categories under section 18 of the Atomic Energy Act, 1962 and “official Secrets” under section 5 of the official secrets act, 1923:- Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation. Prohibition against use of BARC’s name without permission for publicity purposes: The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC’s name for any publicity purpose through any public medial like press, radio, T.V. or Internet without the prior written approval of BARC.

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Scientific officer (D)
(On behalf of the President of India)