

दूरभाषि :  
TELEPHONE :  
तार : बार्क-मुंबई, चेम्बुर.  
TELEGRAMS: BARC-MUMBAI, CHEMBUR.  
टेलिक्स : ०११-६१०१७/०११-६१०२२ बार्क ईन  
TELEX: 011-61017/011-61022 BARC IN  
फेक्स संख्या : ११ - २२ - ५५० ५१५१  
FAX NUMBER: 91-22- 5505151



सत्यमेव जयते

भारत सरकार  
GOVERNMENT OF INDIA

भाभा परमाणु अनुसंधान केन्द्र  
BHABHA ATOMIC RESEARCH CENTRE  
RESEARCH REACTOR MAINTENANCE DIVISION  
Mechanical Maintenance Section, Dhruva

ट्रॉम्बे,  
मुंबई-४०० ०८५.  
TROMBAY,  
MUMBAI-400 085.

Ref: RRMD/ TN- 48 /2019

August 28, 2019

**Sub: Fabrication, Supply and Installation of PUF insulated air tight SS doors for ATP, Dhruva.**

Sir,

Sealed quotation is invited for Fabrication, Supply and Installation of PUF insulated air tight SS doors for ATP, Dhruva, as per the description and scope of work given below. Sealed quotation, subscribing the tender notice no. with name of work over the envelope, shall be sent to Administrative Officer - III, Reactor Group Office, Dhruva, BARC, Trombay, Mumbai-85 so as to reach on or before 19.09.2019.

**The quotation shall be sent through registered post/speed post through Indian postal services only.** Quotation delivered by person or through courier will not be accepted and not considered for bidding process.

The quotation shall be in the format of attached schedule-B and shall show the basic cost and GST separately, if applicable and shall include the tender ref. no., PAN and GST no. of the firm.

**1. Description:**

Conditioned air to Dhruva reactor building is supplied through an Air Treatment Plant (ATP). The ATP consists of spray nozzles, cooling cum dehumidifying coils, eliminators, associated piping etc.

The ATP casing is an insulated casing, fabricated out of 1.6 mm thick SS sheets and stiffened by SS structural work. The complete unit is insulated with 50 mm thick thermocol and plaster. Air tight insulated CS access doors are provided on the ATP casing to facilitate inspection and maintenance. These doors and frames are badly corroded and damaged. An opening with insulated bolted cover, is provided on back side of ATP for removal/installation of cooling coils during maintenance. The access doors and the bolted opening need to be converted to SS doors with PUF insulation. Apart from this, the CS man hole cover of main damper BFD#1 is also need to be converted to SS door with PUF insulation.

The uninsulated doors to filter rooms, also are to be converted to SS and provided with rubber seals.

## **2. Scope of Work:**

- 2.1 Fabrication & supply of SS 304 paneled air tight PUR Foam insulated doors along with frames, quantity as per schedule – B. Thickness of SS 304 plates shall be minimum 1.5 mm for door and 3.0 mm for frame, thickness of door shall be of 50 mm thick. Frames shall be box type with PUF insulation, thickness 100 mm.
- 2.2 Sturdy industrial SS 304 hinges (minimum two nos. for each door) shall be used for fixing of doors with frame so that no buckling or sagging shall be there.
- 2.3 EPDM rubber ‘D’ type seals shall be used on the door frame for sealing.
- 2.4 Two nos. of lever type mechanical stopper locking arrangement shall be provided on the doors for locking and air tightness.
- 2.5 One sturdy lock and key provision with three keys shall be provided on each door.
- 2.6 Removal of existing insulation, removal of existing CS door with CS frame by cutting or other means, installation of new PUF insulated SS door with frame by welding, insulation of exposed surfaces ( approximately 7 Sq M ) with Armaflex nitrile rubber insulation sheets of 25 mm thick (minimum) and finished with plastic tape.
- 2.7 Fabrication & supply of SS 304 air tight doors along with SS304 frames of thickness 100mm, quantity as per schedule – B, for Filter room doors. Thickness of SS 304 plates shall be minimum 1.5 mm for door and 3.0 mm for frame. Door shall be box type construction, thickness 40mm minimum, with stiffeners inside.
- 2.8 Removal of existing filter room doors by breaking/chipping of wall, erection of new SS framed doors and remaking of wall.
- 2.9 After erection of frames all openings/gaps shall be sealed by polysulfide compound/ waterproof sealing compound which shall be arranged by the contractor.
- 2.10 Removal & installation of doors along with frames shall be as directive by EIC of the job.
- 2.11 Cutting into suitable size, transport and disposal of scrap/removed material to designated location at site.
- 2.12 Welding shall be done using SMAW/GTAW process.
- 2.13 Cleaning of internal and external surfaces of all fabricated items.

## **3. Terms and conditions:**

- 3.1 Installation of new PUF insulated and uninsulated SS door with frame shall be as directed by EIC of the job.
- 3.2 The entire job shall be of good workmanship.
- 3.3 All burrs & sharp edges shall be removed by suitable machining process.
- 3.4 Only tested and approved material, as per specifications, shall be used for fabrication & supply.
- 3.5 The contractor shall make arrangements for all the necessary Tools, tackles, equipments, consumables etc., required for the job.
- 3.6 The work shall be started within 15 days after the receipt and acceptance of work order.
- 3.7 All the Personnel brought for the work shall have valid Police Verification Certificates. As per prevailing security regulations, the contractor is required to obtain valid entry passes from the security section for working inside BARC, for which related documents will be required to be submitted.
- 3.8 The contractor may visit the site in advance and familiarize himself with the quantum of work.
- 3.9 All the workers arranged by the contractor shall be physically and mentally fit. All the Industrial Safety standards shall be followed and all safety gadgets as per safety engineer shall be arranged by the contractor. Department shall not be responsible for any untoward incident during the work.

- 3.10 GSTN and PAN shall be indicated in the quotation.
- 3.11 The prices quoted by the vendor shall be valid for at least 90 days from the date of opening of the tender.

#### **4. Technical Specification:**

- 4.1 Doors & frames shall be made from SS 304 material and shall be of reputed make conforming to ASTM A240 TP-304.
- 4.2 PUR foam shall be of reputed make conforming to IS 12436.
- 4.3 All the electrodes used for welding shall be of Advani-Oerlicon/Ador welding Ltd./ESAB make.
- 4.4 Materials which are not specifically mentioned herein and which are necessary for the fulfillment of this specification shall be of good quality and in accordance with good practice in the fabrication and erection of Structures & frames. Workmanship shall be in accordance with the best Engineering practice adequate to ensure satisfactory and safe erection of Frames & doors as per this specification.
- 4.5 Existing CS ATP door frame shall be removed by grinding off the welding between MS frame and SS casing. New frame shall be installed in a similar manner.
- 4.6 All welding has to be carried out by qualified welders and welder qualification certificate for respective welders shall be produced for verification.

#### **5. Testing**

- 5.1 Only tested and approved material shall be used for fabrication & supply. The vendor shall arrange to cut, seal and deliver one sample each from PUR Foam & SS sheet and/or structural material, randomly selected by BARC representative, for Physical and chemical analysis at M/s TCR Engineering Services, Mumbai or any other Government approved laboratory to qualify as per relevant latest IS/ASTM grade. Materials that does not qualify shall be rejected.
- 5.2 Testing charges shall be borne by the vendor & necessary arrangements required for the above testings shall be the responsibility of the vendor only.
- 5.3 All the weld joints shall be D P tested in presence of BARC representative and results shall be defect free. Chemicals and other consumables for LPT shall be arranged by the contractor.
- 5.4 All the doors & frames shall be inspected visually and dimensions checked, at vendor's premises.
- 5.5 Vendor shall submit all the original test certificates (physical chemical, DPT and dimensional) to BARC prior to dispatch of the material.
- 5.6 After erection of frames & doors, Air tightness of the door shall be checked.

#### **6. Scope of department:**

- 6.1 Necessary power / compressed air supply arrangement shall be provided.
- 6.2 Municipal water at 3 to 4 Kgf/cm<sup>2</sup> will be provided at the location.
- 6.3 Electrical power supply at a point will be provided

#### **7. COMPLETION SCHEDULE:**

- 7.1 The job shall be completed within a period of 6 **months** from the date of issue of approved documents.
- 7.2 Time is the essence of the contract. If you fail to comply with this condition you shall be liable to pay penalty.
- 7.3 **Penalty clause:** Any delay in the completion of the job which is attributable to the vendor, is liable for a penalty @ ½ % of the work-order value per week (max. 5%).
- 7.4 In case extension in the job completion period is required, the vendor has to write to BARC for approval in advance with reason.

## **8. Commercial Terms & Conditions**

- 8.1 The prices quoted by the vendor shall be valid for at least three months from the date of opening of the tender.
- 8.2 As per notification issued by the Ministry of Finance, Department of Revenue of Government of India, the goods (other than services) specified herein are exempted from GST to certain extent to including Department of Atomic Energy. Interstate transaction for R&D will attract IGST @ 5% only as per notification No. 47/17-Integrated Tax (Rate) dated 14.11.2017. Transaction within the state will attract Central Goods and Service Tax (CGST) @ 2.5% and State Goods Service Tax (SGST) @2.5% as per notification no. 45/2017- dt. 14.11.2017. This limits the total GST component to 5%. A GST exemption certificate approved by Competent Authority will be issued to the firm before dispatch of the items. Hence this limit may be considered while submitting the quotation.
- 8.3 Transportation and safe delivery of the items to BARC shall be done by the vendor.

## **9. Payment terms & conditions:**

- 9.1 No advance or part payment is admissible. The full and final payment will be made within 45 days after completion of the job in all respects and submission of following documents:
- a) Bill in duplicate. (Taxes need to be shown separately in the bill).
  - b) Advance stamped receipt.
  - c) GSTN & PAN number to be indicated in the stamped invoice.
  - d) The attached GST undertaking shall be filled and submitted.
- 9.2 Payment will be made only through ECS/Core Banking System. Hence, please furnish the bank details such as Bank's name & address, A/c No. and IFSC code in the invoice.
- 9.3 Income tax @ 2% will be deducted from your bill.
- 9.4 BARC is the final consumer of the goods/services procured and does not intend to make any outward supply. BARC will not avail the benefits of Input Tax Credit and hence, the goods can be supplied without quoting the GSTIN of BARC, Mumbai on the invoice. The invoices taxed under GST, as per rates applicable under the GST Schedule of Rates, shall be admitted for payment.

## **10. CONFIDENTIALITY CLAUSES.**

### **10.1 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.

### **10.2 “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.

### **10.3 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 media like Press, Radio, T.V. or Internet without the prior written approval of BARC.

**11. SECURITY INSTRUCTIONS:**

Please indicate whether any of your relatives are employed in BARC or you or any of your employees were employed in BARC or any other units of DAE.

**12. General information to vendor:**

- 12.1 The interested bidders can contact Shri S. K. Tripathi (Tel. 25594260) for any clarifications.
- 12.2 Site work i.e. removal & erection of frames & doors shall be done during ventilation shut down. The site will be free to do the work for one to two days in a month hence, contractor shall be prepared to do the work on a short notice.
- 12.3 The bidder shall quote clearly with item wise break-up as per given format for quotation.
- 12.4 The quotation shall be inclusive of all the charges including the transportation, mobilization, testing etc.
- 12.5 Vendor shall execute the entire work within a **period of six months** from the date of acceptance of work order.
- 12.6 The prices quoted by the vendor shall valid at least 3 months from the date of opening of the tender.

Encl:

- i) Format for Quotation

-sd-  
(Manoj Tilara)  
Maint. Supdt. (Mechanical), RRMD  
On & Behalf of President of India

Estimate / Schedule- B

Name of work: **Fabrication, supply and installation of PUF insulated air tight SS doors for ATP, Dhruva.**

Sl. No.	Description	Unit	Quantity (a)	Cost/unit i.e. Rate (b)	Amount (Rs) c = a x b
1	Fabrication & supply of PUF insulated, air tight, SS 304, 50mm thick door with SS304 100mm thick frame, and seals, as per specification, of following sizes:				
1.1	Frame size: 1590 mm x 840 mm.	Nos.	4		
1.2	Frame size: 2200 mm x 1000 mm	Nos.	1		
1.3	Frame size: 1000 mm x 1000 mm .	Nos.	1		
2	Fabrication & supply of air tight SS 304 door (40mm thick min) with SS304, 100mm thick frame and seals, as per specification Frame size: 1800mm x 800 mm	Nos.	3		
3	Removal of Existing doors & frames by Cutting or other means, deburring, cleaning etc.	Nos.	9		
4	Installation of new doors alongwith frames, as supplied against Sr. No.1 & 2, as per specifications, including cementing/ concreting/ insulation, as mentioned in tender specifications.	Nos.	9		
5	Welding of door frames with ATP structure openings by using SMAW process (SS to CS / SS)	Mtr.	15		
6	Supply of SS 304 equal angles (size-50 x 50 x 5mm thick).	Kg.	75		
7	Supply of SS 304 sheet (size-2000 x1000 x1. 5mm thick).	Kg.	50		
8	Supply of Aluminum chequered plate with long rice shaped projections, Size: 2440 X 1220 X 10 mm thick	Kg.	500		
9	Supply of Rubber solution SR 998 (500 ml pack)	Ltr.	15		
10	Supply of Armaflex make closed coil nitrile rubber insulation sheets of 25 mm thick X 9 Sq M	Roll	2		
11	Supply of Teflon gasket sheet (1.5 mtr X 1.5 mtr X 1.5 mm thick)	Sheet	1		
Sub total					
GST @ _____					
Total ( Rupees					

(Signature of Contractor with rubber Stamp)

Annexure-I

UNDERTAKING

(Goods & Service Tax)

The following certificates should be submitted by the suppliers / contractors to the paying authority on the bill itself when Goods & service Tax (GST) is claimed as extra by the contractors / suppliers.

1. **Certified that** the Goods and packing on which Goods & Service Tax (GST) has been charged, have not been exempted under the Goods & Service (GST) or the rules made there under.
2. **Certified further that** we have actually paid Goods & Service Tax (GST) and are being assessed to Goods & Service Tax (GST) and also that where there are statutory exemptions under the GST act concerned we have availed of the same and certify non availability of such provision for Goods & Service Tax (GST).
3. **Certify that** in respect of the amount claimed in the bill, no claim is pending for refund / or is admissible. Certify that in the event of our getting refund in whole or in part of the element of Goods & Service Tax (GST), we shall pass on the benefit of the amount of refund obtained by us.

4. **Certified further that** we (our branch of agent)

\_\_\_\_\_

(Address) \_\_\_\_\_

\_\_\_\_\_

are registered as dealer in the State of \_\_\_\_\_ under the  
Central Registration No. \_\_\_\_\_ for  
the purpose of Goods & Service Tax (GST).

(Signature with rubber Stamp)