

Government of India
Bhabha Atomic Research Centre
Radiation Medicine Center
Parel, Mumbai-400012.

Ref: RMC|3(3) a|10364

11-01-2018
12

Sub: Design, Fabrication, Supply, Installation Testing and Commissioning of Cold Room for RMC, BARC (Dimension: 6'8" (L) x 6'8" (D) x 8' (H))

Scope of Work: Fabrication, Supply, Installation, Commissioning, Testing (nitrogen leakage & pressure leakage test) and Certification of Cold Room for RMC, BARC (Dimension: 6'8" (L) x 6'8" (D) x 8' (H)).

- For and behalf of President of India, sealed quotations are invited by **Head, Radiation Medicine Center, BARC** for the abovementioned work. **Detailed specifications and drawings of the Cold Room as given in Annexure: I & II.**
- The purchaser reserves the right to place an order for a quantity more or less than that indicated in the enclosed specification list.
- The taxes, excise duty and transportation charges shall be quoted separately. From-H, Octroi Exemption and Excise Duty Exemption Certificates will be provided, if necessary.
- Sealed quotations must reach **Head, Radiation Medicine Center, BARC, Tata Memorial Hospital Annexe Building, Parel, Mumbai-400012** by **14.02.2018**. **Quotations will be opened on 19.02.2018 at 15:30 Hours. The quotations should be send by speed post only.**
- The above-mentioned Reference No., Date and Time of opening of bids must be clearly written on the sealed envelope containing the quotation.
- The bidder shall finish the job in accordance with our specifications within 60 days from the date of issue of the work order.
- Payment will be made as per rules after completion of the job satisfactorily. Part payments and advance payments are not possible. The offer shall be kept for acceptance for a maximum period of 30 days from the date of opening the quotation
- The undersigned reserves the right to accept / reject any or all the quotation received, without assigning any reason whatsoever.
- A brief list of similar job executed (if any), and name of the organization for which such job was carried out should be furnished along with the quotation.

- The bidder shall furnish the information regarding whether an ex-employee of BARC is working in his organization or whether any of his relatives are working in DAE/BARC or he is an ex-employee of DAE/BARC. In case of absence of such information or wrong information, the quotation or contract is likely to be rejected or cancelled.
- The bidder is requested to acknowledge in writing the terms and conditions mentioned in the contract.
- **The bidder has to give PAN No./VAT No./CST No./Service Tax No. while submitting the sealed quotation. Xerox of the PAN Card/ VAT/CST Registration Slip are required to be attached.**
- Pre-dispatch inspection is required, the party should keep an option to make alternation in fabrication, if required after the inspection.
- Documentary evidence towards payment of service tax (receipt/acknowledgement) by the firm may be furnished for verification/records.
- It is requested to submit Police Verification Certificate for engineers who will be doing work at RMC, without exception.

Arpit Mitra
11.1.18
(Arpit Mitra)
SA/E, MCF, RMC

Through:

S. Banerjee
11.1.18
Dr (Smt) S. Banerjee
Head, RMC, BARC
उत्कृष्ट वैज्ञा. आदि अध्यक्ष, विकिरण औषध केंद्र
OS & Head, Radiation Medicine Centre

cc:

AAO
Works, BARC

Head
SIRD, BARC

Annexure - 1

Specifications of Cold Room and Panels

Walk-in-Chiller room Dimension	:	81.5" (L) X 81.5" (W) X 96" (H) (EXTERNAL DIMENSION) 6.8ft (L) X 6.8ft (B) X 3ft (H) (EXTERNAL DIMENSION)
Room Temperature for Chiller	:	+2°C to +8°C
Insulation type for Chiller	:	60 mm thick PUF panels with 0.4mm sheet of Preprinted G.I Sheet (PP) outside and inside Stainless Steel (SS304) (PP/SS).
Temperature Range	:	-30°C to 80°C
PUF Blowing agent	:	Cyclopentane (C5) - (CFC & HCFC Free) -Eco friendly
Flooring and Racks	:	Stainless Steel Flooring & Equidistant 3 Nos SS racks to be provided inside the cold room
Locking Arrangement	:	CAM lock with metal plunger
Compressive strength	:	1.4 -1.9 Kg/cm ²
Dimensional variation	:	± 2 mm
Pull down time	:	24 hrs
Door Size for Chiller Room	:	Swing door with Stainless Steel (SS304) inside & Preprinted G.I Sheet (PP) outside 60 mm thick 34"X78" (1 No.) Clear opening single leaf door.
Density of Panels	:	40 ± 2 KG/Cubic Meter
Compressor run time	:	18 Hrs.
Door type	:	Heavy Duty Hinges, Swing Type
Door Frame Construction	:	All accessories like light switch, temperature, indicator are fitted on the door frame
Self-Extinguishing	:	Passes as per ASTM D 1692
Thermal Conductivity	:	0.021 -0.023 Mw/mk
Temp. Indicator	:	Digital Type Temperature Indicator

Starts

Specifications of Indoor Unit

Unit Model of Chiller Capacity of cooling Units	:	IDU RUAH-0614KP x 1No. with controller 1 unit of 6,000 btu/hr
Power Supply	:	230V / 1 phase/ 50Hz
Nominal Dimensions (mm)	:	864 mm (L) x 480 mm (D) x 450 mm (H)
Cooling Unit Type	:	Air Cooled
Fan motor (W)	:	70 W
Fan motor (Rpm)	:	1200 rpm
Air Flow (cfm)	:	800 cfm
ACPH	:	24
Air Throw	:	12 feet
Refrigerant for Chiller	:	R404A
Expansion Device	:	Capillary Tube
Expansion Device (Bore & length)	:	0.060" x 55" x 2 Nos.
Material of Body	:	Stainless Steel (SS304)
Valve Connection- Suction End	:	1/2" inch
Valve Connection- Liquid End	:	3/8" inch
No of Rows	:	2
Fins Material	:	Aluminum (AL)

doستا

Quality assurance (QA) test certificate to be provided and following tests to be conducted at purchaser's site

- > Gross Leak Test
- > Evacuation
- > Charging
- > Fine Leak Test
- > High Voltage Test
- > Insulation Resistance Test
- > General Run Test (Voltage, Current & Power)
- > Visual Inspection
- > Noise Test
- > Vibration

Sample QA test certificate for condensing unit indicating the above parameters to be provided with quotation.

EVAPORATING UNIT:

- > No. of unit :1

Quality assurance (QA) test certificate to be provided and following tests to be conducted at purchaser's site

- > Gross Leak Test
- > Evacuation
- > Charging
- > Fine Leak Test
- > High Voltage Test
- > Insulation Resistance Test
- > General Run Test (Voltage, Current & Power)
- > Visual Inspection
- > Noise Test
- > Vibration

Sample QA test certificate for evaporating unit indicating the above parameters to be provided with quotation.

Cold Room Test Certificate to be provided indicating the following parameters:

- > Thickness: 60 MM
- > Wall and Racks: SS 304
- > Wall Corners: SS 304
- > Ceiling Panel: SS 304
- > Door Frame: SS 304
- > LOCKING: CAM LOCKED
- > DENSITY: 40 +/- 2 KG /M3 APPROX.
- > COMPRESSIVE STRENGTH: 1.4 - 1.9 KG / CM2
- > DIMENSIONAL VARIATION: ± 2 MM
- > CLOSED CELL CONTENTS: Above 90 %
- > SELF EXTINGUISHING: PASSES AS PER ASTM D 1692
- > THERMAL CONDUCTIVITY: 0.021 -0.023 Mw /mk

Sample QA test certificate for cold room and panels indicating the above parameters to be provided with quotation.

Handwritten signature

Standby condensing and evaporating unit to be provided.

The party should be able to take Annual Maintenance Contract of the same unit for at least 5 years (AMC will be renewed every year for the 5 year tenure) after expiry of warranty. AMC should also include condensing unit, evaporating unit and cold room certification. AMC charges to be clearly mentioned in the quotation. Company should be able to undertake any number of breakdown visits within the AMC cost. Emergency breakdown call to be attended within 24 hours. Undertaking to be given on submitting the quotation.

QA certificate and Specification of condensing unit, evaporating unit and cold room to be provided in original letter head of manufacturer. A sample QA certificate for all the above (condensing unit, evaporating unit and cold room) to be provided along with quotation. Detailed drawing to be provided with quotation.

Pre-despatch inspection at manufacturing site is mandatory. The party should keep an option to make any changes in the unit after pre-despatch inspection as per indenter requirement.

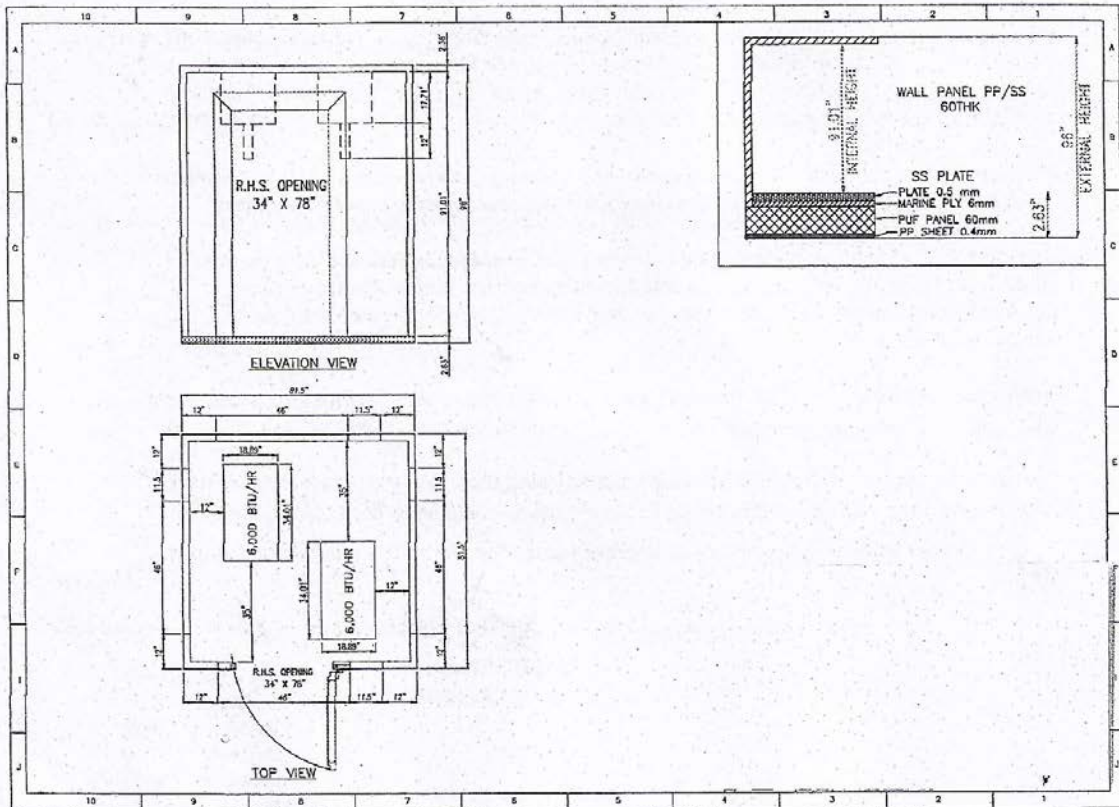
Guarantee & Warranty: Guarantee for condensing unit, evaporating unit and cold room to be provided for ONE year from the date of installation against any manufacturing defects. The whole unit should be under warranty for a period of ONE year from the date of installation at our facility.

Certificate of conformity (COC) for used SS304 from manufacturer to be provided. A sample COC to be attached in the quotation.

Manufacturing site inspection will be done before placing the order, indenter/purchaser have rights to cancel the order if manufacturing facility is not found to be as per their requirement.

Arpit
11.1.18

(Arpit Mitra)
SA/E, MCF, RMC



Ashta
11.1.18