

ANNEXURE-I

Scope of Supply and Technical Specifications for Thermally Cooled Cubicle

A. SCOPE:

Supply of Custom built Thermally cooled Cubicle along with Air Conditioner as per following specifications –Quantity 2 nos.

B. SPECIFICATIONS:

Sl No	Description	Details	Vendors Comments
1	Overall Size of the Cubicle (W*D*H)	1100mm*800mm*2000mm	
2	Design Methodology	Frame Based Design with support beams	
3	Sheet metal covers all around over the frame	CRC sheet with necessary thickness and suitable stiffness as mentioned in the drawings.	
4	Eye bolts	Eye bolts to be provided for lifting (Min. 4 nos.)	
5	Louvers	Bottom 4 sides 2mm CRC sheet with suitable stiffness shall be used. Shall be able to remove / fix at site - so 4 nos. separate pieces with required hardware to be provided for easy removal and fixing at site.	
6	Top Cover	HAT Section Cover with 2mm CRC sheet with suitable stiffness.	
7	Insulation material	All the sides, doors and roof to be made insulated with Rockwool or PU foam.	
8	Foundation Bolting or Fixing Plates	Bottom 4 nos. of MS Foundation Bolting or Fixing Plates are required.	
9	Front and rear Door	Front and Rear Door are required with suitable nos. of Pad Locks & suitable nos. of Strongly Built Latches on either sides of each door. 2mm CRC Sheet with suitable stiffness to be used for inner & outer body. Strong handle on each door.	
10	Air Conditioner	2 Nos. of AC Units on the both side of Side Panels	
		AC Unit should maintain 24±3°C Cooling inside the cubicle.	

		Total wattage of the inside electronic modules will be approx. 300Watts. Suitable AC Unit to be provided for sufficient cooling.	
		Suitable top hat for the AC unit.	
		Suitable anti vibration pad between AC unit and Cubicle side panel	
		Automatic Switching mechanism between AC units.	
		Procurement and installation part of supply.	
11	Frames	5mm CRC with suitable stiffness to be used for making the structure and 3mm CRC sheet with suitable stiffness to be used for folded channel. Refer Isometric view in sheet No. 2	
12	Profiles	2 nos. additional Flat Profiles are required vertically on the sides, 100mm from front door.	
13	Protection Class	IP 52 or higher	
14	Gasket	Suitable gasket between door and respective frame for air tight sealing.	
		Suitable EMI/EMC gasket	
15	Dummy Plate	6U/3U Dummy Plate will be Provided with 3mm thickness painted with interior color. Refer Isometric view without door and roof in sheet No. 2.	
16	Cubicle Earthing	4 nos. of suitable holes for M8 stud shall be provided in the base frame	
17	Horizontal Mounting Rail	4 nos. of horizontal mounting rail structure shall be provided on both sides of the panel at a gap of minimum 500mm height.	
18	Gland Plates	Must be provided with removable 2 piece gland plates	
		Gland plate shall be of 3mm thick CRC sheet at bottom	
		All cables entry and exit are from Bottom only. Position and number of openings will be provided during the detailed engineering design	
19	Electrical Items	01 No. LED Tube light, 230V AC, 50Hz	

		Fixing arrangement for light and door switches are to be provided	
20	Painting	As per drawing RDDG458200_0001 sheet No. 3, Finish section.	
21	Construction Details	Refer attached drawing RDDG458200_0001	
		All dimensions shown are usable dimensions	
		The dimensions shown are based on requirement and may vary but the basic structure of the Thermally Cooled Cubicle will be as per the drawing. Supplier has to provide the conceptual drawing of the cubicle (with dimensions) based on our requirement as mentioned in the drawing no. RDDG458200_0001. Submission of conceptual drawing with dimensions is must for technical acceptance of the offer.	
22	Others	Before fabrication of the cubicle, the supplier shall submit the drawing of the Thermally Cooled Cubicle to BHEL for approval within 10 days of receipt of Purchase Order. Only after BHEL's approval of the drawing, supplier shall fabricate cubicle.	
23	Pre Dispatch Inspection	BHEL Officials will visit vendor premises for inspection of the cubicle before dispatch to BHEL. Supplier shall intimate at least 1 week prior to the inspection.	
24	Delivery Time	12 weeks form the date of release of firm PO.	

C. DOCUMENTATION:

Complete Cubicle Designs/ Drawings to be provided in hard and soft copy.