

Government of India  
Bhabha Atomic Research Centre  
Chemical Technology Division


Tender: CHTD/MDS/VK/35

Date 21/1/2022

Sub: Fabrication, erection and installation of MS Storage racks, Aluminium partition and cladding, mezzanine and plant wall painting as per the specification in annexure-1, at CEL-3 & behind CEL-4, CTD, BARC

Quotations are invited for the execution of subject work.

1. Taxes and other duties shall be quoted separately.
2. The supplier shall submit the cost for supply, fabrication, assembly, installation and testing.
3. All necessary tools, instruments have to be arranged by the supplier.
4. The quotation must reach the undersigned on or before 12 pm on 31<sup>st</sup> January 2022 and must be in a sealed envelope super scribed with the ref no & due date.
5. The quotation must reach on or before the aforesaid date by India Post (by speed post or ordinary post) only.
6. The address on the envelop should read:  
The Head,  
Chemical Technology Division,  
BARC Trombay Mumbai-85  
(Attn: Shri Vishal Kambli)
7. Delivery, packing and forwarding charges if any must be clearly mentioned in the offer.
8. Quotation must indicate the PAN and GSTIN no of the vendor. Minimum validity of 60 days is preferred.
9. The quotation has to be duly signed by authorized person with company seal. Unsigned offer shall be treated as invalid.
10. All above work for R&D purpose in BARC Mumbai-85.
11. For any technical clarifications, please contacts vide email: nafeesva@barc.gov.in, vskambli@barc.gov.in; Tel: +912225591868/1984.



Vishal Kambli

Scientific Assistant (E), MDS, ChTD  
For & on Behalf of the President of India  
(The Purchaser)

**Annexure-1**  
**Technical specification**

**Scope:** Fabrication, erection and installation of MS Storage racks, Aluminium partition and cladding, mezzanine and plant wall painting as per the specification in annexure-1, at CEL-3 & Ac plant area behind CEL-4, CTD, BARC

**A. MS fabrication and installation work:**

SR. No.	Description	Quantity
1.	<p><b>MS Storage racks at CEL-3.</b> Bill of Material: MS channel 100X100X6mm total Length: 50 meter MS angle 50 X 50 X 5mm, total length:250 meter MS angle 50 X 50 X 6mm, total length:80 meter MS Checker plate area: 60 sq meter.(Thickness of checker plate:3mm) Anchor fastener (including Nuts, washer and studs /bolts) M14, length100mm, qty:100 Nos. <b>Note:</b> On-site fabrication requirement.</p>	1 Set.
2.	<p><b>MS Storage racks and Shed behind CEL-4 building.</b> Bill of Material: MS channel 100X100X6mm total Length: 30 meter MS angle 50 X 50 X 5mm, total length:200 meter MS angle 50 X 50 X 6mm, total length:70 meter MS Checker plate area: 40 sq meter.(Thickness of checker plate:3mm) MS Checker plate area: 30 sq meter.(Thickness of checker plate:6mm) Anchor fastener (including Nuts, washer and studs /bolts) M14, length100mm, qty:80 Nos. <b>Note:</b> On-site fabrication requirement.</p>	1 Set.
3.	<p><b>MS Storage racks and supports in MCL area, behind CEL-3</b> Bill of Material: MS channel 100X100X6mm total Length: 20 meter MS angle 50 X 50 X 5mm, total length:100 meter MS angle 50 X 50 X 6mm, total length:50 meter MS Checker plate area: 20 sq meter.(Thickness of checker plate:3mm) MS Checker plate area: 20 sq meter.(Thickness of checker plate:6mm) Anchor fastener (including Nuts, washer and studs /bolts) M14, length100mm, qty:50 Nos. <b>Note:</b> On-site fabrication requirement.</p>	1 Set.

**B. Signage fluorescent on PVC paper with adhesive**

1. Entry & its symbol with arrow:50 Nos. 20 cms X 10 cms
2. Exit & its symbol with arrow: 25 Nos. 20 cms X 10 cms
3. Fire extinguisher symbol: 25 Nos. 20 cms X 15 cms
4. Arrow marks in all corridor, control room and ground floor: 50 Nos.–20 cms X 10 cms
5. Directional strips: 80 meters, width- 5 cms

**C. Wall Painting:**

1. All the indoor walls need to be painted with epoxy based paint
2. Before painting the following need to be done on the wall
3. Remove the loose particles, dust, dirt, grease, wax, mortar dropping and growth of fungus, algae, dampness etc. with the help of wire brush or putty knife.
4. Fill the holes and cracks (up to 3 mm) with the putty or gypsum and leave for hardening.
5. Sand the wall with sandpaper to make a smooth surface and wipe off the dust with the dry cloth.
6. Undercoat to be applied where necessary followed by a mist coat and two top coats. All snots must be rubbed down and top coat reapplied.
7. Application of floor paint by standard roller / brush.
8. **Total area for painting is 50 sq meters**

**D. Mezzanine Painting:**

1. The surface has to be dry, free of anything which would hinder bonding, such as dust, loose particles, grease, rust or any kind of corrosion before painting and the same must be ensured.
2. The surface should be prepared by brushing, rubbing down, etc. and then thoroughly cleaned from dust.
3. A scraper to remove loose, flaking paint to be used. Sand the metal with a fine –grit sanding block to smooth rough edges and to degloss the surface for painting.
4. Antirust epoxy primer is to be applied for active anti-corrosive and rust protection.
5. To prime the surface, 2 coats of epoxy paint to be applied with brush or roller. The second coat is applied once the first one is dry, but within 24 hours.
6. Subsequently, in the next 24 hours and after the prime is completely dry, application of epoxy to be done.
7. **The mezzanine surface area including chequer plates, supports structure to be painted is appx. 200 sq meters.**
8. The epoxy color of the painting is grey color. Exact shade will be intimated before painting.

**E. Aluminum cladding along with insulation:( On site fabrication required)**

1. Aluminum sheet along with ceramic insulation and its installation on piping, tanks, equipment - **200 sq meter**
2. The thickness of insulation shall be 1 inch.
3. The thickness of aluminium sheet shall be 22 swg
4. All the cladding shall be installed with necessary bolting arrangements.

**F. Aluminum partition:(On site fabrication required)**

1. All the Aluminum material should be anodized.
2. **Area of partitioning is 16 sq meters**
3. Prior to fabrication, all the materials shall be checked and confirmed to be of the required quality for the intended purpose.
4. All components shall be neatly finished in a good workmanship manner. All exposed metal surfaces shall be smooth and free from burrs and sharp corners etc.
5. The work includes fabrication, installation of all the partitioning including all the necessary accessories.

**G. Material Requirements:**

Material & workmanship shall be of high quality & in accordance with good practice pertinent to the manufacture of Aluminum components. All the materials & consumables required for fabrication & testing shall be in the scope of the vendor.

**H. General:**

1. In the event of any conflict between or within the various sections of this specification or in case of any doubt, Contractor/vendor is supposed to clarify the same well before the quotation

is submitted. In case the Contractor /vendor fails, the interpretation of the purchaser shall be final and binding to both the parties.

2. The purchaser reserves the right to make minor changes in numbers, length of, supports etc.
3. Expenditure incurred in all the steps of scope of supply shall be borne by the contractor.
4. The welding should be as per API standards.
5. Any modification during erection needs the approval of the field supervisor and field supervisor reserves the right to modify the design or layout during erection.

**I. Evaluation criteria:**

1. The party must have experience in executing similar contracts conforming to the technical specification and cost. Such as handling of glasslined tanks, PTFE lined spools, etc. If required by the purchaser, the vendor needs to submit list of such works carried out earlier.
2. The party must have adequate number of trained and skilled manpower, infrastructure for welding, testing, lifting tackles, scaffold to work at heights, tools, personal protective equipment's (PPE) etc. MS welder must be a qualified welder.
3. The manpower must have police verification certificate (PVC) from police commissioner's office. No worker shall be work inside BARC without PVC.
4. All bought out material must be from reputed make. Details of such material is to be produced.

**J. Test Laboratories:**

All the material tests shall be carried out in reputed and renowned test laboratories only, approved by BARC. Vendor has to take the written consent from the purchaser for the laboratory.

**K. Notes:**

**1. Any deviation from the specifications shall be mentioned clearly**

2. Supply shall be guaranteed against any manufacturing, fabrication defect or mal-performance for 12 months from the date of commissioning.
3. Completion period: 4 month from the date of receipt of work order. Failure on the part of the bidders by not adhering to delivery schedule will invite penalty.
4. *Chain pulley block of 1 tones capacity is available at the site. Other material handling equipment are not available at the site. Lifting tackles, scaffold, supports structure if required to work at heights shall be included in scope of supply.*
5. The quotation should give a complete break up of all material, labour, welding rate, testing charges, GST, other charges if any. If the details are not given then such quotation are liable to rejected.
6. Rates in the quotation shall be type written only and hand written shall not be considered.
7. The party shall contact undersign for necessary queries, technical discussions.
8. The party shall give the details of their manufacturing capability for the item and facilities they have. These facilities shall be open to purchaser for evaluation before placement of order. Contactor is responsible for taking electric connection from the specified point by taking all the necessary safety precaution against damage to property, man, material or machine.

**L. Packing, Transportation & Delivery:**

1. Contractor shall be responsible for any damage to the components and equipment during transit due to improper and inadequate packing.
2. All items shall be protected for the entire period of dispatch, storage (in transit delay) and transportation; against corrosion, sun-light, rain, high temperature, humid atmosphere, rough handling in transportation and storage in the open.