## Indian Institute of Technology Kanpur Department of Civil Engineering

Inquiry No- CE/JNM/2013-14/02

22 August, 2013

## Sub: Quotation for supply of Instrumentation Work -Station as mentioned below.

With reference to the subject mentioned above, you are invited to submit the quotation in a scaled cover in order to reach us latest by August 28, 2013 5.00PM in the form of a hard copy and soft copy to the address mentioned below. If you have any questions please call Dr. J.N.Malik at 2597723, email: javed@iitk.ac.in.

The prospective suppliers are required to send quotation in two parts both in separate sealed envelopes, as "Technical Bid" and "Financial Bid". The Technical Bid should contain detailed technical specification of the product being offered and should not mention any prices. The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges.

## Terms and Conditions:

- 1. Maximum education discount, if any should be offered
- 2. Validity of quotation should be at least for 60 days
- 3. Prices should be on CIF and FOB separately (if imported)
- 4. Prices should include the installation and training cost
- Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/inspection)
- 6. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
- 7. Delivery should be made within 3 months.

## Technical Specifications for Instrumentation Work - Station

Worktable should have granite top fixed on metal base frame suitably designed to carry load of granite
as well as instruments kept on it.. Granite tops should have sponge rubber gasket and facility to level
the top perfectly. PVC rubber silicon sealant would be used to plug the gaps. (Granite work-top will
be supplied by us).

The Load carrying capacity of the Worktop should be 300 KG and Worktables should be designed for Vibration Free Feature.

1.1 Vertical Members

Aluminium extrusions, heavy duty, powder coated. The minimum size of this section should be 85mm x 30mm. These sections would be of multiple uses with grooves to Add, Delete or extend without any welding and drilling operations. These members would have facility to connect either Castor wheels or Levelling cups.

1.2. Sheet Metal Frame

The material of base frame should be M.S. CRCA powder coated Sheet steel frame provided to join the Vertical members. Frame should be fabricated using C type sections of min. 14 swg and should be Powder coated. Frame design should facilitate cable routing and should accommodate Worktop by clamping mechanism Qty. - 1 No.

 Under bench storage module 485 mm length consisting of 4 nos drawers and cup-board with hinged door wherever mentioned. Provision would be made for magnetic latch for all drawers. One adjustable shelf would be provided inside the cup-board at the bottom. The detailed specifications of material for under storage are as follows. The slides used in the Drawers would be of INDUSTRIAL type totake extra loads and also from the point of Durability and long life,

2.1 The M.S.CRCA sheet steel powder coated of 16 swg should be used for fixing on vertical members as side supports. It should have design feature to have one drawer and two-shutter combination. Heavy duty Industrial telescopic slides would be used in Drawer units. S.S handle and lock should be provided. The hinges, handles, locks and all necessary hardware would be chemical resistant. The shutter should be double walled.

SECOND WORK LEVEL / CHEMICAL RACK.

Additional second work level would be provided by using the same extruded aluminium sections of basic frame and horizontally, marine plywood of 19 mm thickness with lamination as work top or using CRCA Sheet steel powder coated panels. The worktop should be properly supported to sustain the load on it. The second work level should be elevated above electrical distribution box OR above pin-up board, as required, by keeping suitable distance. Each length will have 30 mm back and front ply to avoid material falling. These levels should be in multiples as per the requirement.

 Mini-distributor unit: - Each table will have mini-distributor unit with provision for fitment of electrical items elevated at 1100 mm from the ground level and situated at the back side of the

worktop.

Size: - As required (w) x 85 mm (d) x 135 mm (ht)

The detailed specifications of material for Mini-distributor unit are as follows.

Vertical members of heavy duty Aluminum extrusion sections of size minimum 85 mm x 30 mm including M.S.CRCA Sheet 16 SWG powder coated front plate with necessary raceway to accommodate MCB and other electrical fittings.

4.1 Electrical fittings:- One set of electrical fittings consisting of following.

A] MCB as main incoming 25 Amps double pole, 10 KA braking capacity, make – MDS lexic model or equivalent L&T (Hager) with multiple LED type indicating lamp of red colour, make Altos/Technique.

B] Switch board each of MK/Cabtree/Anchor Roma make modular type plate, switches with silver contacts. For each 970 mm module, electrical items as under.

Electrical items --

Single pole on/off switches, 16 Amps, Modular –6 Nos. 5 pin multiple 16/6 Amps socket, Modular –6 Nos. IIRC fuses, 16 Amps, Modular –6 Nos. 6 Nos. 6 Nos. 1 No. 7 III No. 7 III

All above switch board accessories should be wired with 2 x 2.5 Sq.mm copper wire and looping of modules by 2 x 4 sq.mm copper wire, Make – Finolex / RPG cable and 1.5 sq.mm pvc green insulated flexible FRLS type1000 V grade wire for earthing. Necessary connector strips should be standard colour codes, ferruling and with proper tying arrangement.

Dr. J.N.Malik

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