

Indian Institute of Technology, Kanpur

Enquiry No: **IMGC/2014-15/FEB/02**

Enquiry Date: 19-02-15

DUE DATE

02-03-2015

Sealed Quotations are invited in two bid system (Technical bid and financial bid separately in sealed envelopes) for our upcoming Imaging centre lab. Detailed specifications, term and conditions and lay out of the labs are mentioned below:

TECHNICAL SPECIFICATIONS

S/no	ITEM DESCRIPTION	QTY#	UNIT
1	Laboratory work bench of size 600mm X 770mm with storage unit under the worktop.	21	Nos
2	Laboratory work bench of size 600mm X 770mm without storage unit under the worktop.	21	Nos
3	Island work bench of size 3680mm X 1540mm comprising of 6 units with under storage and 6 units without under storage.	1	Nos
4	Wall Cabinets (Over head Units)	25	Nos
5	Sink (PP Sink)	4	Nos

Quantity of items can be changed in actual

LABORATORY FURNITURE

➤ **Scope of Work**

- Supply and Installation of Laboratory Workbenches/Storage units including granite worktops and other supporting structures/hardware's based on the specified Make List. This includes delivery to ABC, unloading the consignment and transporting it from the place of storage to the installation site.
- Supply & Installation of all utility service outlets and accessory fittings, electrical receptacles, plumbing and electrical switches & fittings identified on drawings as mounted on the laboratory furniture.
- Supply & Installation of all laboratory sinks, bottle traps, drain troughs etc.
- Supply & Installation of service structures where specified and setting in place reagent shelves of the type shown in the drawings.
- Removal of debris, dirt and rubbish accumulated as a result of installation/commissioning of the laboratory furniture and accessories and leaving

the premises broom clean and orderly.

➤ **Basis of Work**

- It is the intent of this specification to use specified make list as the standard of construction for steel laboratory furniture. The construction standards of this product line shall provide the basis for quality and functional installation.
- ABC reserves the right to reject qualified or alternate proposals and to award based on product value where such action assures the owner greater integrity of product.
- Participants in the quotation process have the option of clarifying deviations to the specified design, construction or materials. Without such clarifications, sealed quotations to ABC will be construed as being in total conformance to the requirements of the specification.

➤ **Quality Assurance**

- The steel laboratory furniture manufacturer shall provide work tops and casework all manufactured & shipped with proper packing & should take the full responsibility of the entire Scope of Works as specified in the tender.
- General Performance: Furniture shall meet the performance requirements and should follow SEFA 8 guidelines

➤ **Submittals**

- Manufacturer's Data: Submit installation instructions for each type of casework.
- Samples: Samples if called for will be reviewed for color, texture, and pattern only.
- Shop Drawings – Submit shop drawings for furniture assemblies showing the required details.

➤ **Products/Manufacturers**

- The selected manufacturer must warrant for a period of one-year starting (date of acceptance or occupancy, whichever comes first that all products sold under the contract referenced above shall be free from defects in material and workmanship.
- ABCD will retain the above samples of the successful manufacturer or owner to insure that material delivered to jobsite conforms in every respect to the samples submitted if need be.

C-Frame Assembly

- All C-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994.

C-Frame System

- The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops.
- Its superior strength combined with aesthetically appealing end caps should give maximum flexibility and modularity while making a layout.
- C-frame should be constructed from a rectangular pipe with a cross section of 60mm x 30mm and should be 2 mm thick and should be without a vertical front leg to give a clean look. This should provide more knee space or leg space and should facilitate uninterrupted lateral movement of the under-bench units within the bench run.
- The C-frame legs should be supplied with adjustable feet (tolerance from -5mm to +20mm) to correct the unevenness of flooring.
- The tubular enclosed type construction should discourage dust accumulation and unwanted development of bacteria & fungus.
- Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems.
- The structure should have a removable back panel to provide access for maintenance throughout the length of table.
- The C-frame should also have skirting at back bottom side. The C-frame should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively.
- The nominal table depths should be 620 mm, 770 mm and 920 mm for wall side and 1540mm, 1840mm for Island tables.
- The Corner Units should fit well with 770mm & 920mm table depths. All frame-work is to be pre-treated with superior pure epoxy powder coated finish.

Uprights

- The Upright system will form the back-bone for internal distribution of GDS,
- Electrical supply systems Shelves and Top Units and should be constructed from 16 gauge CRCA formed steel panels with removable covers.
- Shelf height should be adjusted with an increment of 1inch / 25mm.
- Upright should also provide support to Top Units for hanging thus eliminating the danger of fixing the Top Units on non-rigid partition wall / panels.
- Uprights should be supplied with adjustable feet from -5mm to +20mm.

Horizontal Service Boom

- Horizontal service boom should be made out of 18 gauge CRCA steel panels and should span the length between uprights and should be provided with removable service panels.
- Electrical and GDS supplies should be supplied through this horizontal service boom.
- Boom should be supplied with factory fitted combinations of switch & sockets with 15amps standard grade.

Reagent Shelf

- Height adjustable shelves should be provided between uprights which are independent from the floor with 1" of height adjustability.
- Complete modular design consisting of 2 stage horizontal storage shelves.
- The ends and intermediate vertical supports should be 2mm thick aluminum extrusion with MS brackets of 2 mm thick.
- Toughened glass should be put-on over these shelves for taking care of bottle marks/corrosion.

Welded Cabinets (Hanging Type)

- Welded cabinet body should be flush face construction with intersection of vertical and horizontal members like LH and RH side panel along with front horizontal channel, back panel and bottom panel.
- It should be relocated anywhere easily as it is an independent unit.
- Cabinet should of square non-sharp edge construction.
- Doors should be assembled with SS-304 hinge assembly.
- Removable back panel should be provided to easily access the service lines running behind the cabinet benches.
- Intermediate horizontal channels should be provided between door and drawer.
- Shelf should be eight-bend panel with 20mm height.
- Drawer tray should be of single piece construction. Drawer should be well supported on LH and RH ball slide suspension system.
- Steel door and drawer front should be of double wall construction with sound dampening material filled inside.
- Doors should be easily removable and hinges should be easily replaceable. Knee space panel should be in 22 gauge construction
- **Dimensions:** W=300/450/580/600/750/900 mm, D = 530mm, H = 875/725 mm
- **Configurations:** 1 Shutter + 1 Drawer/4 Drawers/Leg Spaces/1 Shutter/2 Shutters/3 Drawers/2 Shutters + 1 Drawer/Sink Unit + 2 Shutters
- **MOC:** MSCRCA: IS – 513 (1994)
- **Thickness:**
 - LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel is of 1.2mm thk.
 - Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel is of 0.8mmthk
- **Finish:** Powder coating pure epoxy, thickness 40-50 microns
- **Handle:** Anodized Aluminum Recessed-Type, **CTC:** 160.0mm
- **Lock:** Units have a locking facility with 180° and 10 lever cam lock mechanism (except for sink and corner unit)
- **Hinge:** SS Hinge **Screw:** SS 304

Shutter should be of twin-type construction with sound dampening effect using profeel. Shutter cover should be equipped with Bump on for sound dampening. Base Moulding should be made of PVC with corner clips. Ball Slide: 500mm Length (Godrej-Make) (required only for drawer unit). Shutter should have provision of roller catch

3. WORKTOP

a. GRANITE

- It should be 20 +/- 2 mm thick, jet black granite with edges having chamfer of 4 x 4 mm on top side. The overhang on the storage cabinet should be 25 mm at the front side and 30 mm at the sides
- The backing material used for granite should be a neoprene mat of 6 mm thickness

4. WALL CABINETS

- Flush face construction with intersection of vertical and horizontal members like LH and RH side panel along with front horizontal channel, back panel and bottom panel.
- Cabinet should be of square-edge construction.
- Doors are assembled with SS-304 hinge assy.
- Shelf should be eight bend panel with 20mm height.
- Steel door and drawer front should be of double wall construction with sound dampening material filled inside
- Doors should be easily removable and hinges are easily replaceable
- Shutters should have glass or made of metal alone depending as per BOQ

5. SINK (PP SINK)

- It should be made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents
- PP Bottle-traps should be offered with PP Sinks
- Standard bowl size (L x W x D) should be 500 x 400 x 300 mm
- 1-way/2-way/3-way Faucet should be provided (Make: Broen/Watersaver)

6. PEGBOARD (MOC: SS)

- These should be Single faced high grade stainless steel pegboard having a tray hole for water drainage and detachable pegs.

- The essence should be made up of 1 mm thick stainless steel (SS 304) whereas the pegs should be made up of polypropylene and will be adjustable with a minimum 10mm distance between each peg

7. ELECTRICAL TRUNKING

- Electrical trunking is made up of 0.8mm thick CRCA MS Sheet.
- The complete M.S. material of cabinet should be pre-treated (degreased, Zinc phosphated) and epoxy powder coated for better corrosion resistance.
- The thickness of powder coat should be 45-50 microns, which passes the test of Salt Spray for 1000 hours.
- It should have a high temperature withstanding capacity with excellent electrical insulation properties.
- The rear portion of above accessories which is in contact with live metal should be made from thermo set material which will not melt on heating.

8. SWITCHES AND SOCKETS

- These are made of High gloss virgin grade engineering thermoplastics to impart a defect free surface.
- They impart excellent electrical insulation properties i.e. do not melt on heating or catches fire.
- Owing to this all electrical switches and sockets are capable of handling higher currents and operating temperatures.
- Front plates can be changed at any time with ease without disturbing the wiring to quickly and economically match changes in the surroundings

9. KEY-BOARD PULLOUT TRAY

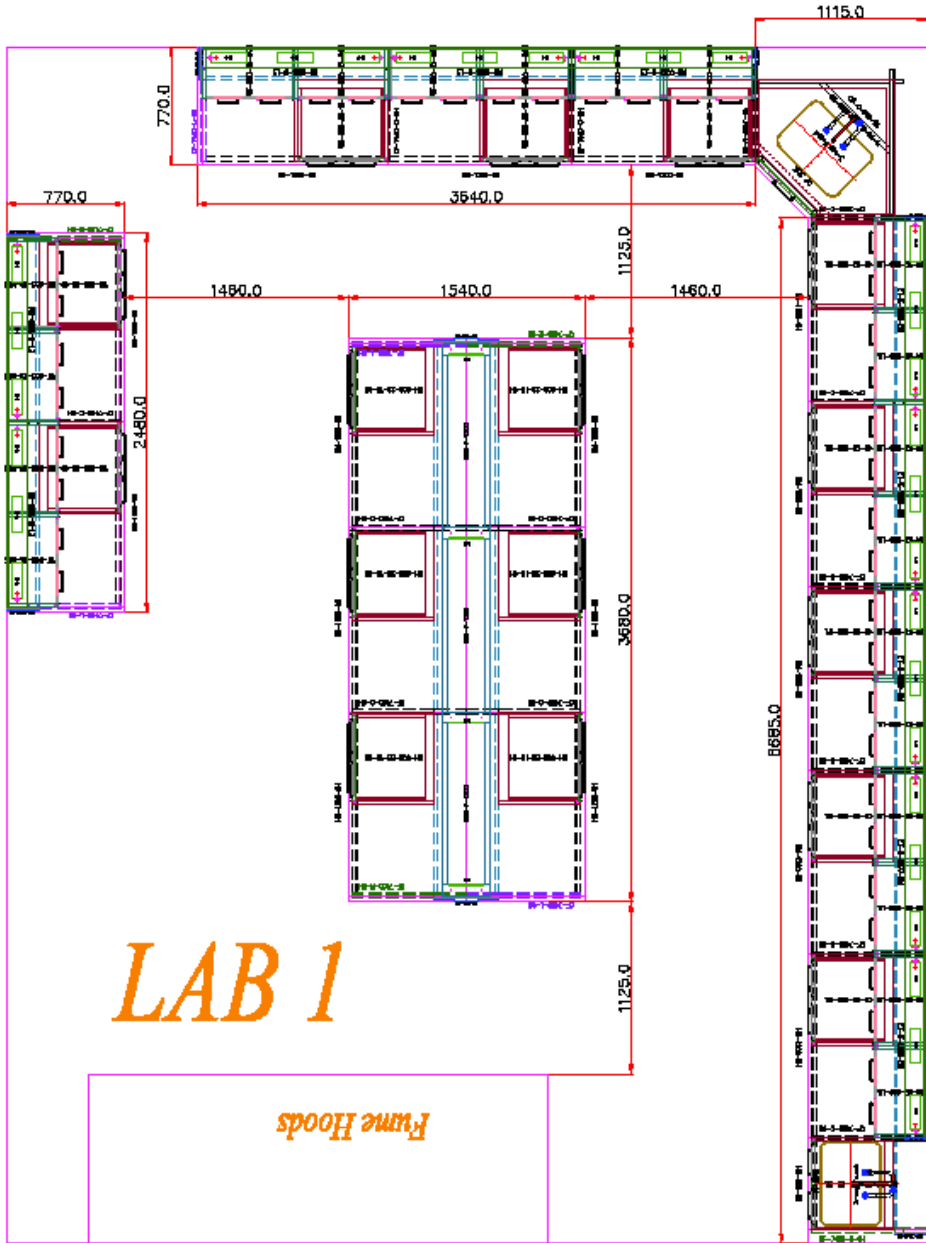
- KBPT used should have a sliding mouse pad tray
- The mounting brackets ensure height adjustment.
- It also should have a smooth quite movement because of ball bearings and a load bearing capacity of 12 kg

10. MAKES OF ITEMS

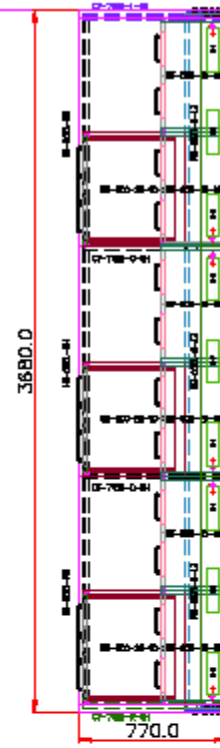
Steel	TATA Steel/Jindal
Powder Coating	Kansai Nerolac/Asian Paints
Water Faucets and Gas Valves	Broen/Watersaver
Switches and Sockets	Northwest/Legrand/Norisys
Locks	Godrej

Ball Slides	Godrej/Hettich
Keyboard Tray	Ebco
Hinges	Hettich/Darshana

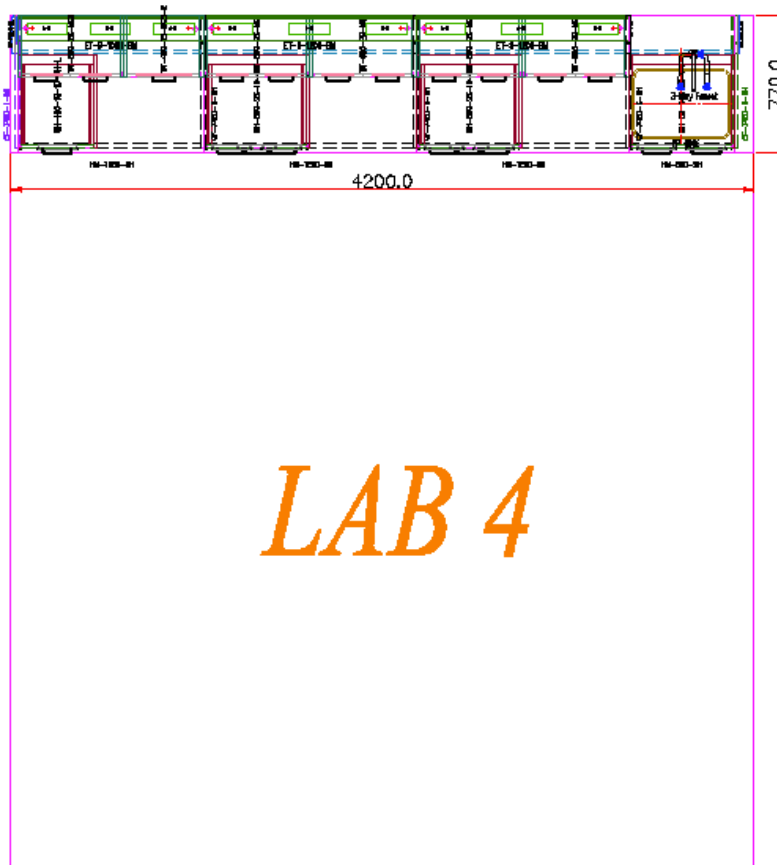
Details of the lab lay out is given below



LAB 2







Terms and conditions:

- Quote should be made in two parts: Technical bid and financial bid separately in sealed envelopes.
- Technical Bid should contain compliance statement of specifications.
- Quotes should have a minimum validity of 60 days
- Financial bids for the product whose technical bid is not acceptable will not be opened. Any quote with the financial bid included in the technical bid will be summarily rejected.
- The sealed envelopes with the quotes should be super scribed with the Inquiry number and whether it is a technical or financial bid.
- Item wise picture of all the items should be included with the technical quotation.
- The delivery period should be specifically stated.
- Quotes should be made FOR delivery to IIT Kanpur

- Maximum educational discounts should be provided.
- Vender should have prior experience for the installation of such kind of furniture at IIT Kanpur.
- Venders should clearly mention about the material and (make Indigenous/ Imported).
- Actual numbers of the components may be increased or decrease, payment will be made on the basic of actual numbers.
- Vender should have authorized local service office in Kanpur.
- Standard comprehensive warranty and support should be three year.
- Installation: the price should be inclusive of full installation on site with full functionality demonstration.
- Delivery time: 1-2 weeks from the date of purchase order.
- Installation within 10 days
- All envelopes should be marked with enquiry number.
- All quotes should be in Indian Rupees (INR).

Addition of the above terms and conditions vendors should fulfill following conditions also:

- 1. Should follow Environmental Management Systems like ISO-14001:2004 consistent with the bidders Environmental Policy, Compliance to quality management systems like ISO – 9001:2008 function effective by adopting a process approach. Should have adopted Quality, Environment, health and safety Policy to meet the changing expectations of the customers.**
- 2. The bidder should have its own in-house testing facility complying to SEFA-8, EN-14175 and ASHRAE-110 standards for the LAB furniture., Quality management systems as per International Standards. The bidder shall furnish all such certificates as and when required. The bidder should be an official member with SEFA prior to its notification and should have SATARA certificate for Storage product.**
- 3. The bidder/OEM should have its own manufacturing/fabrication machinery and infrastructure facilities, which should preferably have automated cutting machines, bending machines, power presses, spot welding machines, anti rust treatment facilities, powder coating facilities etc. in sufficient numbers.**

Please send your quotation latest by March 02, 2015 to the following address:

Prof. Sandeep Verma
 Coordinator,
 Advanced Imaging Centre
 Indian Institute of Technology Kanpur
 Kanpur 208016 INDIA