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Indian Institute of Technology Kanpur
Samtel Centre for Display Technologies

Enquiry number: SCDT/FlexE/2015-16/23
Enquiry date: November 6, 2015
Closing date: November 24, 2015

- Dear Sir/ Madam: Quotations are invited for Lab Accessories which includes fumehood

I. Pre –Qualification Criteria

1) The Bidder shall provide the complete documentary evidence for Bidder Pre-Qualification Criteria.
2) The Bidder shall have experience in Designing, Manufacturing, Supply, Execution & Commissioning of Laboratory internal infrastructure on a turnkey basis of Lab furniture and accessories, Fume Hood System, Exhaust System,
3) At least 3 customer feedback forms stating the quality of work and overall feedback of project values of at least Rs.100Lacs each.
4) Bidder /parent company should have SEFA membership certificates for last four years on a continuous basis. A third party test report confirming the manufacturing of lab furniture as per SEFA and ASHRAE standards. Document should be submitted along with the tender.
5) The bidder/parent company should strictly complying fully to ASHRAE-110-1995 & SEFA 8-2010 Cabinet surface finish tests standards for fume hoods and must have ISO 9001: 2008 quality management system as per international standards.
6) The bidder/parent company should have well established manufacturing capability as per international norms
7) Additional certificates should be submitted along with the bid (a)ISO 9001-2008(For manufacturing, supply and installation of fumehood and laboratory furniture)(b)OHSAS 18001: 2007(For design, supply and installation of fume hood and laboratory furniture)(c) ISO 14001: 2004(For design, manufacturing, supply and installation of fumehood and laboratory furniture)
8) 1000 hour salt spray test report for powder coating quality assurance also must be attached to the technical bid.
9) The Bidder shall have an annual financial turnover of not less than Rs. 10 Crores during the last three financial years.
10) The Bidder shall visit IIT, Kanpur, Project site TO UNDERSTAND THE REQUIREMENTS OF THE SITE. The Bidder shall study the scope in detail of total scope of work under this contract.

Sealed quotations are invited for clean room standard **Fume Hood** with all technical specifications for the supply with installation of items.

Common features:
I. Lab accessories (fume hood) specification is as under:

1. Material of Construction: - Completely made of 1 mm GI sheets (IS 277 standard). The shutter & drawer front should be of sandwich construction. Foam sheet filled in shutter gaps is not allowed. Welding of modules is not acceptable.
2. Hardware fitting: should be Standard quality, Hinges Nickle Plated, Handle, screw: - S.S. 304 matt finish.
3. Powder Coating:- Complete module & frame work should be processed with 8 tank pre- treatment and finished with highly corrosion resistant 'Akzonbel/PolyBond' epoxy powder coating With 70 - 80 microns thickness and 1000 hours salt spray test passed.
4. Utility Taps: - Far" Italy Epoxy powder coated brass taps with DIN 12920 colour coding.

		Fume Hood Dimensions		1.00
	a)	Overall Dimensions with base cabinet	: 1800 mm W X 900 mm D X 2400 mm H	
	b)	Fume Hood dimensions	: 1800 mm W X 900 mm D X 1600 mm H	
	c)	Base Cabinet dimensions	: 1400 mm W X 640 mm D X 700 mm H	
	d)	Inside Fume Hood working volume	: 1220 mm W X 750 mm D X 1155 mm H	

e) Bed size : 1220 mm W X 750 mm D

1. Fume Hood Color combination:
   a) Combination Grey & White
3. Power Coating: Pre-treated with 8 tank chemical processes and powder coated with highly chemical resistant epoxy Colors having dry film thickness of 70 to 80 microns. Passes all conformity performance tests as per IS standards.
4. Material of Construction of superstructure;
   Galvanized Iron (GI) as per IS 277: 2003 standard of
   a) 1.0mm thickness for all sheet metal paneling
   b) 1.5 mm for corner post
   c) 1.2 mm for back pillars
5. Front Top Panel:
   Easily openable hinged Top Panel for easy access to Flow Control Valve and Electrical Lighting fixtures for maintenance
6. Work top: Chemical resistant splash & spillage proof dished '*Jet Black Granite* worktop (18 +1 mm thick) with one partition with PP sheet at the center. Skirting of 15 mm from all sides for no chemical spillage
7. Construction (Interior):
   Chemical & Heat Resistant, Fire Retardant, Smooth Finish, Easily Cleanable Panels Made out of durable PRL integral work walls (6 mm thick). ASTM flame spread index < 25. Acid Resistant Inner Liner. SHELF INSIDE THE FUME HOOD (On the RHS of the side liner)
8. Active Kinetics exhaust system:
   Interstitial 7-point active kinetics exhausts system (for light, normal &heavy fumes) with baffle to ensure rapid exhaust of fumes.
   a) Airfoil Aerodynamic Design, Horizontal fixed airfoil mounted on the worktop made of SS 304 (1.2mm).

8. Internal nozzles:
   a) Brass powder coated fittings are staggered in the fume hood to avoid the intermingling of the flexible tubes. Also the taps are tapered in shape to use with flexible tubing of sizes from ¼" to ½" in dia, to provide greater flexibility to the user.

9. Electrical Utilities:
   a) Electrical international Universal type sockets 'North West'/Legaurd make (220 V, 6/16 A,50 Hz), (Qty-4Nos)
   b) MCBs with blower NO/NC switch (with built in starter) & light switch on frontfascia. Cables & wires North West'/ Legrand make *'Fire Retardant' grade (2L+2R)* (Qty-4Nos)
   c) Lighting Fluorescent light (40 watt, 2 Nos.) with vapour-proof fitting for properillumination. Intensity approx 400 *lux* at worktop level.
   d) Built-in Starter: The electrical wiring will have built-in starter of "Telemechanique" make; suitable to blower motor capacity.
   e) Cable entering port for easy access of cables from fume hood to electrical sockets

10. *Chemical Storage Base Cabinet (Ventilated & on castors):*
    Base cabinet will be ready to receive the fume hood at its top. It will have following features:
    a) Internal special chemical resistant material lining to the cabinet walls
    b) Two exhaust ports connected to the fume hood exhaust system internally.
    c) Complete chemical resistant, fire proof pre-lam/MDF cabinet Construction.
    d) One removable horizontal partition to store chemicals.
    e) Cabinets on castors.
    f) Locking System for the Base Cabinet doors
    g) Overall Dimensions: 700mm (W) X 640mm (D) X 700mm (H) – 2nos.
    h) Equipped with chemical storage container
11. Air Flow Monitor AFA 1000*(Optional - To be ordered separately if required)as an optional item*
    1. Model AFA 1000'. This device is an accessory for Fume hood to indicate the approximate face velocity of airflow with primary purpose of warning when a low flow condition occurs. Red & green LED scorrespond to low & normal flow rates. When flow decreases from Normal to Low, an audible alarm will also actuate requiring manual acknowledgement for silence.

	a) Digital display of face velocity in m/sec or fpm b) On screen display for Safe and Alarm conditions with c) Audible alarm and LED indication. d) Push button calibration and configuration e) Plug-in connections for power supply and airflow sensor f) 3 programmable output relays g) 3 configurable inputs h) Com port for local or PC network connection 12. Level adjusting screws: Made of SS Bolts to adjust the fume hood level by + 10 mm 13. Exhaust Port/Noise Level/Flow control valve a) Unique exhaust port design ensures that the fumes will be exhausted b) Smoothly without any turbulence at the exhaust port. Also it ensures c) Low noise level. Dia. 250 mm d) < 70db at 1 meter from fume hood. e) To regulate airflow. 14. DUCTING: 1. Chemical resistant PP + FRP (3mm + 2mm) rigid & flexible ductwork from Fume hood to exhaust stack 2. Point with weatherproof canopy. Total ducting with horizontal, vertical members, flanges, bends, 3. Bracketed supports and gooseneck exhaust stack. Duct dia. 250 mm.	

Note: Lab accessoriess must be clean room compatible. Wood/ ply or any material that release particulates must not be used in manufacturing any of the above units. There must not be any free hanging part that will allow dust to settle.

Terms and Conditions:

1. Supplier/Vendors should submit technical and financial bid together in separately sealed envelopes.
2. Evaluation will be done on the basis of technical specification, financial bid, system capabilities, favorable payment terms, and after-sales services offered, and short delivery time.
3. Financial bit will be open only for those, who meet tender specification.
4. Please do mention tender number clearly on envelop.
5. Payment terms & condition is 70% against delivery, 20% after installation and 10% after approval.
6. Warranty/Guarantee should be clearly mentioned. The Warranty must start from the date of installation at IITK.
7. Quotation should carry proper certifications like proprietary certificate, authorization certificate from manufacturer, etc.
8. Validity of quotation should be at least for 90 days.
9. Maximum educational discounts should be applied.
10. Institute is exempted from payment of Excise Duty under notification No. 10/97.
11. The delivery period should be specifically stated. Earlier delivery may be preferred.
12. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Kindly send the quotation in sealed envelope latest by 3:00pm on 24.11.2015 to the following address;

To,
Dr. Monica Katiyar,
Room No.305,
Samtel Centre for Display Technologies (SCDT), Indian Institute of Technology Kanpur,
Kanpur – 208016, Uttar Pradesh, India