

**Department of Materials Science & Engineering**

**Indian Institute of Technology Kanpur**

Call for Quotation: Fume Hood for clean room

IITK/MSE/2012/vverma/Fume hood

DATED 25/02/2012

CLOSING DATE: 02/03/2012

This is a call for quotations from the prospective suppliers for the two Fume Hoods with working distance lengths of 4 ft (with sink) with the following minimum specifications/requirements:

Fume hood 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. Please send itemized quotation valid till 30<sup>th</sup> April 2012.

**Fume Hood**

*Key Dimensions*

4 ft model	<b>Inside Fume Hood working volume:</b> 1200 mm W X 850 mm D X 900 mm H <b>Bed size:</b> 1220 mm W X 750 mm D <b>Height of worktop from Ground level:</b> 900 mm <b>Total Height of Fume Hood:</b> 2220 mm
------------	---

*Specifications*

<b>Specification</b>	<b>Description</b>
Design Structure	Aerodynamic, Floor mounted
Airflow Type	Constant Bypass Type
Construction (Exterior)	Epoxy Polyester powder coated (80-100 microns) durable, attractive stainless steel sheets with rigid structure.
Construction (Interior)	Chemical resistant inside faces to be made up of PP of thickness 3mm
Baffle	Baffle of FRP sheet of minimum 3 mm thickness with slots at Table top level and middle level which should be adjustable to balance airflow through them.
Worktop	Telephone black granite fixed
Sink, Water tap with drain arrangement	SS sink with three way water tap and allied fixtures including drain pipe must all be made of PP/SS quality material must be provided in the 5 ft model.
Sash (Shutter)	Vertical sliding clear polycarbonate/safety glass sash of 5 mm thickness or alternatively, clear safety toughened glass of 5 mm thickness with SS metal frame.

Wet & Dry Service fittings	Total 4 nos. service valves with PU plumbing with 6 mm internal dia, withstands up to 15 kgf pressure and brass fittings for gas connections. <ul style="list-style-type: none"> <li>• 1L for Water above the sink</li> <li>• 1L for Nitrogen</li> <li>• 1Lfor Vacuum</li> <li>• 1Lfor Compressed air</li> </ul>
Lighting	At least two Compact Fluorescent lights with necessary fittings to attain a min. intensity of 400 <i>lux</i> at worktop level.
Electrical Utilities	Standard fittings required in fume hoods must be specified and quoted accordingly. All materials used must be comply with fire safety norms.
Chemical Storage Base Cabinet	Non corrosive, fire resistant chamber must be provided below the work bench with a vent to receive pipes from different locations.
Exhaust System	The exhaust system should be devised in such a way that a single blower would be sufficient for both the fume hoods. The adapters must be connected in an inverted 'T' fashion to join up at the blower. Exhaust blower to be fixed on terrace to maintain an average velocity of 0.5 m/sec. Necessary ducts must be provided in PVC/HDPE.
Centrifugal Blower	Blower capacity should be atleast 1500 CMH min.

Please send all technical specifications of the product being quoted and applications details about the system along with the quotation. You may highlight any special features of your product along with support evidence/data sheets.

The quotations must be addressed to:  
Dr. Vivek Verma  
410, Faculty Building  
Materials Science & Engineering,  
Indian Institute of Technology Kanpur  
Kanpur 208016  
[vverma@iitk.ac.in](mailto:vverma@iitk.ac.in), 0512 259 6527