



**DEPARTMENT OF BIOTECHNOLOGY**  
**Indian Institute of Technology, Madras, Chennai, 600 036.**  
**Telephone No.22574126, 22574101, FAX No.22574102**

---

Dr,D.Karunagaran

DUE DT: 15/06/2018

Professor and Head

DT: 25/05/2018

DUE DT: 15/06/2018

**Ref: BT/GUHA/2018/012/SPL**

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
- 2.The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
- 3.The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
- 4.If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
- 5.Relevant literature pertaining to the items quoted with full specifications (and drawing , if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
- 6.Local Firms: Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. Firms outside Chennai: Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex Godown, Packing, forwarding and freight charges must be indicated.
- 8.The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage

and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.

9. Goods should be supplied carriage paid and insured.

10. Goods shall not be supplied without an official supply order.

11. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later

## Fume Hood Specifications

Numbers: 3

External Size: 4 feet ( $\pm 10$  mm)

Model: Floor-standing, ducted

Must include the hood, work surface and base cabinet

Average face velocity: 0.5 m/s; 90-100 fpm

Air volume: 1000 CFM

Static pressure loss: 124 Pa at 0.5m/s or 2" WG

Hood external:

Fabricated from 1.2mm $\pm 5\%$  thick cold roll sheet steel

Exterior painted surfaces epoxy-coated

Panels:

Should be removable without disassembly of the pan structure and outer steel panels

Fabricated of 6 mm ( $\pm 5\%$ ) thick white solid phenolic resin boards

Front Panel detachable, Fabricated from 1.2mm $\pm 5\%$  thick cold roll sheet steel with epoxy powder coating

Airfoil:

Fabricated from 1.5mm ( $\pm 5\%$ ) thick epoxy coated Electro galvanized steel.

Hinged on 2 sides to allow easy access to under-side for cleaning

Shall have a containment trough to contain spills along the rim

Worktop:

Made of Solid 25mm thick epoxy resin

Baffles:

Made of FRP (6 mm)

Must be perforated to capture fumes quickly

Should be easily removable for cleaning and replacement by bare hands

Load-bearing capacity of each baffle > 100kg

Sash:

Sash frame Must include molded plastic (PP Material) concave handle, side and upper frames.

Single vertical sliding

Sash glass should be surrounded by plastic or steel frame

Maximum Opening : 740 mm

Shall operate smoothly without tilting when raised or lowered

Sash Glass: 6mm ( $\pm 5\%$ ) thick laminated Tempered Safety Glass

Sash Chain can load up to 150kg without fatigue.

Sash Stop at 18" to ensure safe user practices with a safety handle and creep down mechanism

Must have Key Lock to lock the sash at open or close position

Light fixture:

Must be isolated from hood interior with glass panel

Must be serviceable from outside the fume hood cavity

Light Intensity  $\geq 100$  ft candles.

Switches for light and blower with anti-dust cover

Base Cabinet :

Fabricated of 1.2mm  $\pm 5\%$  cold roll sheet steel epoxy coated steel with four leveling feet. Consists of a vented storage cabinet and a cabinet for collecting all required piping and wiring lines.

Cabinet with one horizontal partition and shutters, with epoxy-coated handles and lock. The back panel shall be removable to provide the passage for maintenance and repair.

Blower:

Centrifugal

Motor - single phase , with fully moulded PP impeller

Exhaust duct:

PVC or FRP with suitable fittings

Must have supplied to IITM or other reputed lab in Chennai

Must have service in Chennai

Certifications: CE/ ASTM/ ASHRAE

Ref: **BT/GUHA/2018/012/SPL**

DT: 25/05/2018

DUE DT: 15/06/2018

HEAD OF THE DEPARTMENT

