

## DEPARTMENT OF MECHANICAL ENGINEERING

### INDIAN INSTITUTE OF TECHNOLOGY DELHI

Dated: January 22<sup>nd</sup>, 2013

#### **Notice Inviting Quotations**

Quotations are invited for the purchase of a branded glovebox with stringent permitted levels of oxygen and moisture. More details on the desired specifications are provided below.

- 1) Stainless steel (SS) glovebox of minimum size 900 mm x 1100 mm x 750 mm with bolted side panels, box windows of 10 mm thickness, dust filter, 2 Teflon based glove ports of 220mm diameter (O-ring sealed) and glove thickness of 0.4 mm, 3 shelves (height adjustable) of approximate depth 200 mm, stand including castors and leveling feet, fluorescent lamp as box light.
- 2) Chemical and scratch resistance coating
- 3) Box gauge pressure range from -15mbar to +15 mbar with pressure sensor.
- 4) Foot pedal for box pressure manipulations, should be water proof
- 5) One manually operated antechamber made of SS, with minimum diameter of 375 mm, length 550 mm (inner dimensions). Should also have SS sliding tray, and aluminum doors (anodized) with thickness of 10 mm, easy lock door, pressure gauge, analog manometer display.
- 6) One mini-antechamber of minimum diameter of 150 mm and length 400 mm with hinged cover (both inside and outside) and manual operation. Should include a sliding tray and be mounted on right end panel.
- 7) PLC control system control with clearly displayed functions on touch panel for monitoring of box parameters.
- 8) Attainable gas purity level: <1 ppm of moisture and oxygen.
- 9) One sensor set that includes solid state oxygen and moisture sensor measurable upto atleast 500 ppm (all cables included).
- 10) Inline solvent Charcoal filter as solvent trap.
- 11) PLC controlled Purifier
- 12) Circulation unit, capacity of at least 20 m<sup>3</sup>/h
- 13) Vacuum pump, oil mist filter, oil re-circulation, automatic gas ballast control, 12m<sup>3</sup>/h, dual stage.
- 14) Stainless steel piping.
- 15) Automatic regeneration with non manual intervention.
- 16) Working gas should be nitrogen or argon.
- 17) Maximum permissible leak rate of 10<sup>-5</sup> mbar/s
- 18) Compatible with 220V power supply.
- 19) Online UPS (atleast 10 kVA) with atleast one year onsite warranty.
- 20) Filled gas cylinders with regulators needed for operation of the glovebox.
- 21) Atleast one year of on-site warranty.

## Terms & Conditions

1. Separate Technical and Commercial bids are required to be submitted in separate sealed envelopes.
2. Compliance chart should be clearly attached along with technical Bid. (Note: The Compliance chart should match the Technical Datasheet)
3. The Model number must be mentioned with the technical datasheet.
4. The bidder must be a reputed OEM or an authorized local agent.
5. If there is any Indian agent associated with the foreign supplier, then an appropriate “Letter of Authorization” certificate has to be provided with the quotation.
6. Validity of the quotation should be at least 90 days from the date of submission.
7. Quotation must indicate a delivery schedule, which in no case should exceed 6 weeks from the date of placement of order.
8. AMC and recurring costs should be clearly mentioned.
9. Please indicate the cost as FOB, IIT Delhi.
10. Payment will be made after satisfactory installation as per IIT norms.
11. Installation, commissioning and staff training expenses are to be borne by the supplier.
12. The Institute reserves the right to accept/reject any or all quotation without assigning any reason.
13. Taxes as applicable should be indicated clearly.
14. No advance payment will be possible.
15. Country of origin should be mention.
16. Some information on manufacturing facilities
17. Reference of last 5 installations in India.

Sealed quotations should reach the undersigned on or before February 7, 2013 by 3:00 p.m.

Please quote best prices with appropriate discounts for academic institutions. The quotations can be sent to the undersigned:

Dr. Amit Gupta  
Department of Mechanical Engineering  
Indian Institute of Technology  
Hauz Khas, New Delhi-110016