



Dept. of Applied Mechanics,
Indian Institute of Technology Madras
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Date: 17.12.2017

Ref. No.: APM/AARO/2017/ENQ5
1700°C Bench-Top Muffle Furnace with Temperature Controller

Dear Sirs,

DUE DATE: 09.01.2018

1. Quotations are invited in a two bid system for the items shown overleaf (in Annexure I). The offers / bids should be submitted as Technical bid and Financial bid separately. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover.
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, warranty terms etc. should also be clearly indicated. A minimum of one year warranty required.
4. Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
5. Compliancy certificate is to be provided indicating conformity to the technical specifications.
6. If the item is under DGS&D Rate contract No. 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 (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
7. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges, and collected back at the supplier's expenses.
8. Packing and delivery charges must be clearly indicated.
9. The rate 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 Certificate will be issued at the time of final settlement of the bill.
10. Goods should be supplied carriage paid and insured.
11. Goods shall not be supplied without an official supply order.
12. 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.
13. In case of LC. payment, 90% of the payment will be made after completion of the supply. The balance 10% of the payment will be made after satisfactory installation of the software.
14. IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
15. **Acceptance and Rejection:-** I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Yours faithfully

Arockiarajan, Department of Applied Mechanics.

ANNEXURE – I

Ref.. No.: APM/AARO/2017/ENQ5

Date: 17.12.17

DUE DATE: 09.01.18

SL. NO.	DESCRIPTION	QUANTITY
1	<p>1700°C Bench-Top Muffle Furnace with Temperature Controller</p> <p>Standard Working Temperature - 1600° C continuous</p> <p>Maximum Working Temperature - 1700° C continuous for atleast 3 hours</p> <p>Heating Rate - 0 ~15 °C/min</p> <p>Temperature Accuracy - +/- 1° C</p> <p>Heating elements : MoSi₂ heating elements</p> <p>Temperature Uniformity – +/- 5°C over 110 mm @ 1700°C, +/- 2°C over 75 mm (3") @ 1700°C</p> <p>Thermocouple - B-Type</p> <p>Furnace Weight: Maximum 125 Kg. However, lower weight is desired.</p> <p>Inside Chamber Size: 3.5 Litres</p> <p>Temperature controller: PID automatic controller through silicon controlled rectifier power control (standard make such as Eurotherm, Honeywell, Yokogawa.)</p> <p>30 segments programmed with ramping, cooling and dwelling steps, Built-in over-temperature alarm and thermocouple failure alarm</p> <p>During maximum load surface temperature of the furnace must be less than 60° C.</p> <p>High fibrous alumina must be given for insulation</p> <p>Optional: Upgrade the temperature controller with fully compatible with LabVIEW.</p>	1

Note:

The sealed quotation to be sent to

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