

DEPARTMENT OF METALLURGY AND MATERIALS ENGINEERING
Indian Institute of Engineering Science and Technology, Shibpur
Howrah-711 103

Enquiry No. 4/MET/IEST/2018-19

Date: December 18, 2018

To,
All the Enlisted Suppliers/Dealers/Manufacturers

Sealed quotations are invited for supply of the following Equipment for the Dept. of Metallurgy and Materials Engineering. The sealed quotations should be addressed to the Head of the Department indicating enquiry no. with date on the top of the sealed envelope. The sealed quotations should be submitted at the office of the department on any of the working day up to 28/12/2018 till 5.00 P.M.

Hot Air Oven

Electrically heated Hot Air Oven (Mechanical type). Working temperature range RT to 300⁰C with accuracy of $\pm 1^{\circ}$ C. Using microprocessor based digital temperature PID programmer controller with KANTHAL make Nichrome heating element. Hot zone cavity size details below:

<u>Working Chamber size</u>	<u>Power</u>	<u>Load</u>
15" X 15" X 18" or 18"x18"x24"	220 V AC	1.5 KW

Name of Equipment:

Electrically heated Hot Air Oven. Working temperature range RT to 200⁰C with accuracy of $\pm 2^{\circ}$ C. Using KANTHAL Nichrome make heating elements (Wire type).

Oven Inner & Outer Chamber:

Inner chamber stainless steel made heavy gauge, grade .304, Size of working chamber is 15"X15"X18"

Oven Door:

Double-walled door for proper gasket sealing fitted for minimum heat lose with heavy duty hinges and door handle.

Details of Heating Elements:

KANTHAL make Nicrom heating wire, Coil type. 18 SWG.

Temperature Controller:

Microprocessor based digital PID temperature programmer controller, Single program 8 segments touch panel type.

Thermocouple

'PT 100' type with SS tube and connecting holder.

Thermal Insulation: (No Glass Wool)

For best thermal efficiency shall be used 3" thickness 129 density blanket and finally air insulation.

Temperature Range & Rate of Rise:

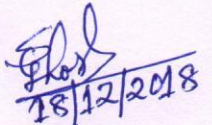
Temperature range Rt to 300⁰C and reach this temperature within 30 minutes.

Temperature Uniformity:

$\pm 2^{\circ}\text{C}$ at set temperature above 50⁰C and suitable element placement, System to ENSURE better uniform temperature.

Construction :

Heavy gauge CRC sheet construction of triple walled with powder coating finish.


18/12/2018

(Prof. Sumit Ghosh)
Head

Prof. Sumit Ghosh
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Copy forwarded for information to:

Institute Website, IEST, Shibpur, Howrah-711103

For details the vendors may contact Dr. Manojit Ghosh (Mobile No. 9874865163) during working hours.