



Department of Metallurgy and Materials Engineering

**COEP Technological University**

(A Unitary public University of Govt. of Maharashtra)  
Shivajinagar Pune - 411005, India

020 25507800

Fax : 020-25507299

COEP/MET/2025-26/803

Date: 23/07/2025

To,  
Vendors

List enclosed

**Subject: Enquiry for supply of resistance heating system.**

Dear Sir/Madam,  
Please quote for the following item with detail bifurcation of basic cost, taxes and other charges if any-

lease quote for the following items  
charges if any-

Sr. No.	Description of Item (s)	Qty. Reqd.																								
1	<p><b><u>Resistance heating system.</u></b></p> <p>Specifications as follows</p> <table><tr><th>Parameter</th><th>Details / Specification</th></tr><tr><td>Purpose of Furnace</td><td>Fused salt electrolysis for rare earth oxide reduction</td></tr><tr><td>Material to be heated</td><td>Graphite crucible with salt bath</td></tr><tr><td>Type of furnace heating</td><td>Resistance heating</td></tr><tr><td>Inner Chamber Diameter</td><td>300 mm</td></tr><tr><td>Inner Chamber Height/Depth</td><td>452 mm</td></tr><tr><td>Chamber Shape</td><td>Cylindrical (Top and Bottom open)</td></tr><tr><td>Target Operating Temp.</td><td>1050°-1100° C</td></tr><tr><td>Maximum Temp. Rating</td><td>1200°C</td></tr><tr><td>Heating Element Type</td><td>silicon carbide</td></tr><tr><td>No. of Heating Zones</td><td>Single zone / multi-zone (any)</td></tr><tr><td>Covering to heating coil</td><td>high-purity alumina ceramic fibre (Like muffle furnace)</td></tr></table>	Parameter	Details / Specification	Purpose of Furnace	Fused salt electrolysis for rare earth oxide reduction	Material to be heated	Graphite crucible with salt bath	Type of furnace heating	Resistance heating	Inner Chamber Diameter	300 mm	Inner Chamber Height/Depth	452 mm	Chamber Shape	Cylindrical (Top and Bottom open)	Target Operating Temp.	1050°-1100° C	Maximum Temp. Rating	1200°C	Heating Element Type	silicon carbide	No. of Heating Zones	Single zone / multi-zone (any)	Covering to heating coil	high-purity alumina ceramic fibre (Like muffle furnace)	01
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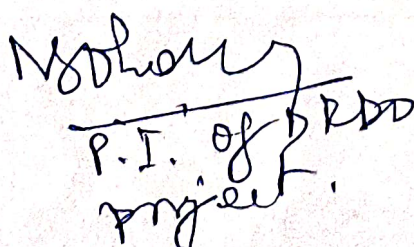
<b>Power Supply Requirement</b>	Voltage: 230 V		
<b>Insulation Material</b>	Ceramic fibre / Firebrick (any suitable)		
<b>Outer Body Material</b>	Mild steel / Stainless steel (any suitable)		
<b>Outer Dimensions (approx.)</b>	650 × 650 × 452 mm (Length × Width × Height)		
<b>Access Type</b>	Top loading		
<b>Lid/Door Mechanism</b>	Hinged / Lift-off		
<b>Temperature Controller</b>	PID / Programmable (regulated)		
<b>Temperature Display</b>	Yes (digital)		
<b>Atmosphere Requirement</b>	Open air		
<b>Mounting Base/Stand</b>	Fixed height stand (600 mm height)		
<b>Observation Port Needed</b>	Yes (sliding window of glass (any suitable material))		
<b>Special Requirements</b>	Fluoride atmosphere resistance, corrosion-proof lining (fibre glass)		
<b>Safety Features</b>	Over-temp cutoff / Emergency stop / Alarms (any)		
<b>Instructions to suppliers:</b> *Design heating system for power load less than 5 KW. *Supplier to ensure of 1050° C / 1100° C for consistently heating minimum 5 hrs holding *Minimum guarantee of satisfactory performance for at least 2 years *Installation and commissioning is the responsibility of supplier.			

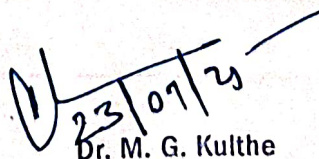
You are requested to quote a competitive rate within 7 days from the date of issue of quotation. Sealed envelope quotation shall superscribe quotation no. and posted to HOD, Metallurgy and Materials Engineering, COEP Technological University Pune, Shivajinagar, Pune-5.

Thanking you

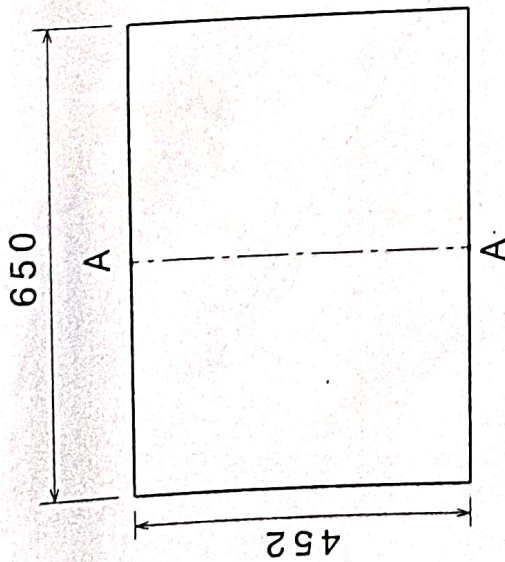
  
Registrar

COEP Technological University

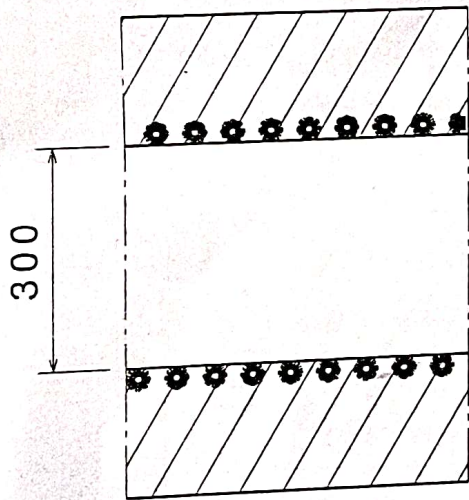
  
P.I. of R&D project.

  
Dr. M. G. Kulthe  
HOD  
Dept. of Metallurgy and Materials Engineering  
COEP Technological University,  
(A Unitary Public University of Govt. of Maharashtra)  
(Formerly College of Engineering Pune)

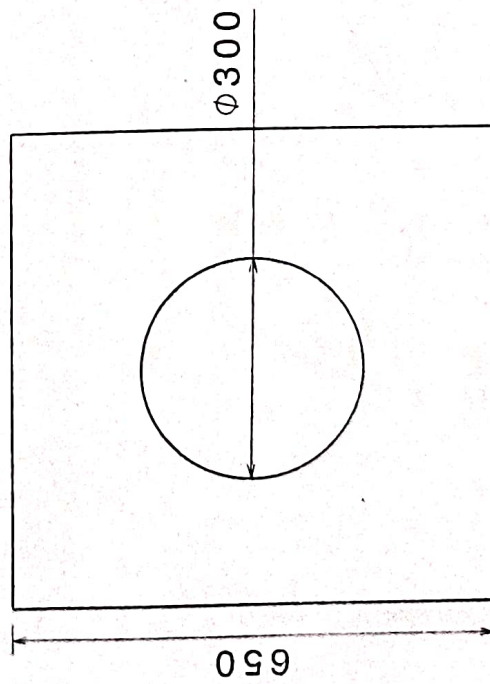




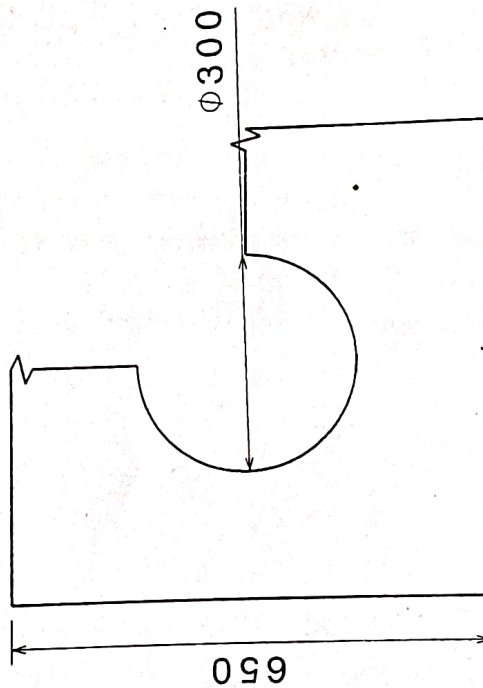
Front view  
Scale: 1:10



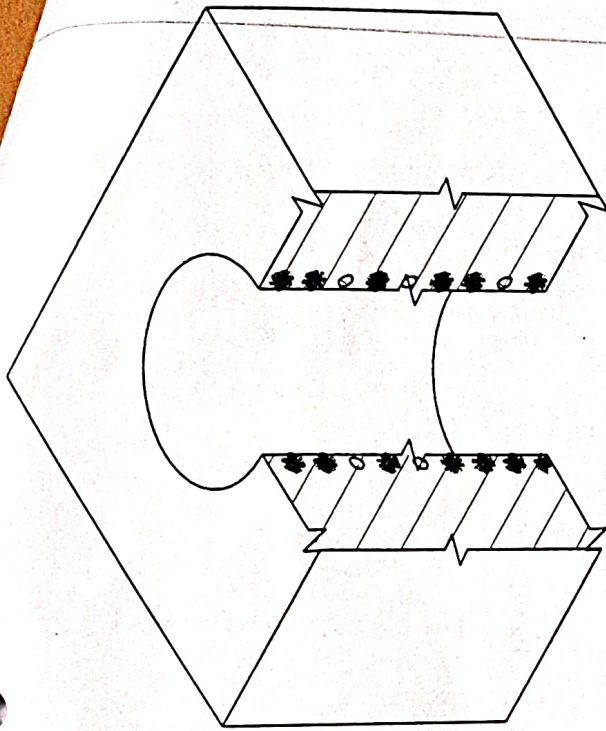
Section view A-A  
Scale: 1:10



Top view  
Scale: 1:10



Top view for  
Break out view  
Scale: 1:10



Isometric view  
Scale: 1:10

REQUIREMENTS

ATTACHED WITH SEPARATE SHEET

CHECKED BY  
NITESH SONAWANE

DATE-20/06/2025

ALL DIMENSIONS ARE IN MM

SALT BATH FURNACE

COEP TECH , PUNE

