

066 Technical bid - tubular furnace - PhysicsProcurementmanager - <procurementmanager@bmsce.ac.in>
Draft

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BMS COLLEGE OF ENGINEERING

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PO Box: 1908, Bull Temple Road, Bengaluru - 560019, Karnataka India. Tel: 080-26622130 - 135 (Extn 5021), Email ID: storessection@bmsce.ac.in**INVITATION FOR TECHNICAL BID / TENDER****Reference Number:** ST/Phy-20/2026-27/016/066**Date:** 20.08.2026**Enquiry Number:** 066**Department:** Physics Department**Last date for submission of Technical Bid – submission of technical compliance report on or before 27.08.2026 – 5 PM by return email.****Subject: Procurement of Tube Furnace along with N2 cylinder (1000 °C) with Quartz Tube (60 mm Dia, 200 mm Hot Zone) as per the specifications and quantity mentioned below on or before 27.08.2026 – 5 PM by return email (Item code No.: 26PHYE01)**

To,

THE VENDOR,

Dear Sir/Madam,

You are requested to provide the Technical Bid – Specification **Tube Furnace along with N2 cylinder (1000 °C) with Quartz Tube (60 mm Dia, 200 mm Hot Zone)** intended to quote Technical compliance report for our tender specifications **by return email on/or before 27.08.2026.**

Sl. No.	Description	Quantity
1.	- Type: Single-zone horizontal tube furnace - Maximum operating temperature: 1000 °C - Heating zone length: 200 mm - Quartz tube: High-purity quartz, 60 mm inner diameter - Quartz tube length: 800–1000 mm - Heating elements: Kanthal/Ni-Cr resistance wire - Temperature controller: Digital PID programmable controller - Temperature accuracy: ± 1 °C - Temperature uniformity: $\pm 2-5$ °C - Thermocouple: K-type - Heating rate: Up to $10-20$ °C min⁻¹	1 No.

- Insulation: High-density ceramic fiber
- Atmosphere capability: N₂/Ar gas inlet and outlet provision
- Sample holders: Quartz/Alumina boats
- Safety features: Over-temperature protection and thermocouple break alarm
- Power supply: 220–240 V AC, Single Phase, 50 Hz
- Power consumption: 2–4 kW
- Accessories included:
- One quartz tube
- Tube end caps/supports
- Quartz/Alumina sample boats

N₂ cylinder

- Type: High-purity Nitrogen (N₂) gas cylinder
- Purity: ≥ 99.99%
- Cylinder Capacity: 47 L water capacity (~7 m³ gas volume)
- Working Pressure: 150–200 bar
- Regulator: Double-stage pressure regulator with flow meter
- Accessories: Gas hose, connectors, and safety mounting arrangement
- Application: Provides an inert atmosphere for tube furnace operations such as annealing, carbonization, calcination, pyrolysis, and synthesis of nanomaterials, conducting polymers, carbon materials, and energy storage electrode materials.
- Compatibility: Suitable for use with tube furnaces having quartz tube diameters of 60 mm and operating temperatures up to 1000 °C.

SPECIAL NOTE: PLEASE DO NOT SEND ANY PRICE BID / DETAILS technical bid and compliance statement submission is mandatory as a pre-requisite for participation in the commercial bid.

Terms & Conditions for the Technical Bids:

1. Technical Bid (mandatorily **along with Sole Dealer Authorisation / Dealership Certificate from OEM - Brand quoted**) as per the format provided in Link:
[https://bmsce.ac.in/assets/files/Tenders/BMSCE%20Technical%20Compliance%20Statement%20for%20Vendors%202025%20\(Format\).pdf](https://bmsce.ac.in/assets/files/Tenders/BMSCE%20Technical%20Compliance%20Statement%20for%20Vendors%202025%20(Format).pdf)
 and should be sent to the email id storessection@bmsce.ac.in, storessection1@bmsce.ac.in
2. Quote our Enquiry Ref No & Your reference No./Quotation No. with date in all your correspondence
3. Warranty/Validity: Two years/Standard
4. Product details with Brand/Manufacturer/other details should be included.
5. Details of the current customers to whom similar/same equipment is supplied with contact name and numbers should be provided.

6. For any clarification regarding the Specifications, commercial terms and such, email/contact the above contact details.

7. For all the other detailed Terms & Conditions; refer to the Link: [https://bmsce.ac.in/assets/files/Tenders/BMSCE%20General%20TERMS%20&%20CONDITIONS%202025%20\(%20for%20Commercial%20Tenders%20&%20Enquiries\).pdf](https://bmsce.ac.in/assets/files/Tenders/BMSCE%20General%20TERMS%20&%20CONDITIONS%202025%20(%20for%20Commercial%20Tenders%20&%20Enquiries).pdf)

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