



Indian Institute of Technology, Kanpur
Department of Biological Sciences & Bioengineering

Tender Documents

Sub: ENQUIRY LETTER FOR CO2 Incubator shaker

Tender Enquiry Number: IITK/BSBE/DKD/2022-23/NC-01 _ Enquiry Date: 29.03.2022

Closing Date: 07.04.2022 (16:00PM) and Opening Date: 08.04.2022 (11:00am)

Quotations are invited for the above mentioned Subject as per the technical specifications given below:

- Shaker should have **triple heavy-duty, triple eccentric shaker drive mechanism** optimized for stable, uniform, and vibration-free motion.
- Should have **Shaking speeds between 25 - 400 rpm (25 - 250 rpm when stacked) with shaking Orbit 2.5 cm (1 in)**
- Should have **Six-sided direct heating** for gentle temperature circulation design to eliminate all common sources of repeated contamination;
- Should have **Fanless design eliminating the requirement Chamber HEPA Filters**; this also saves recurring cost due to periodical HEPA filter replacement.
- Should have **Temperature range from 4°C above ambient up to 50 °C**
- Should have **Temperature control ± 0.1 °C**
- Should have **Temperature stability at 37 °C ± 0.1 °C**
- Should have **InfraRed (IR) CO2 sensor** to offer specific measurement and accurate control of CO2 levels; sensors should withstand High temperatures of up to 120°C of the Sterilization/ Disinfection cycle
- Should have **auto zero function**, to conveniently recalibrate the chamber CO2 level
- Should have **CO2 range of 0.2–20 % ; with control step size: 0.1 %**
- Should have **CO2 accuracy: ± 0.2 % (at 5 % CO2)**
- Should have **CO2 uniformity ± 0.1 %**
- Should have **CO2 homogeneity: ± 0.1 %**
- **High Temperature Disinfection (HTD)** protects against bacterial contamination – 120°C for four hours; entire cycle including warm up and cool down should not be more than 9 hrs. – ensures minimal downtime of the system due to HTD.
- Should have **2 doors; an outer metal door and a Sealed glass inner door** through which it should be possible to view the inner chamber; advanced electronic control to maintain temperature accuracy and uniformity while minimizing gas consumption

- Should have **deep drawn & Seamless Inner chamber without any joints, or any welds and have rounded/ coved corners without edges** to further reduce contamination; increases convenience and Ease-
- Should have at least one **removable stationary shelf for incubation of adherent cells** while shaking of suspension cell cultures under the same conditions; should have **option to add another stationary shelf (Maximum of 02 Nos. stationary shelves for adherent cell culture)**. It should be perforated SS shelves.
- Should have a **water tray-based humidification to 95% relative humidity at 37°C** for effective protection of medium from evaporation
- Should have option for **Dedicated platforms (with pre-installed with clamps) of hard coated, anodized black aluminium and High Temperature resistant up to HTD temperature of 120°C (no peeling of coating after HTD) to accommodate Cell Culture flasks from 125 ml all the way upto 4 L volume capacities i.e., 125 mL, 250 mL, 500 mL, 1.0 L, 2.0 L, 2.8 L, 4.0 L volume capacities respectively); Platform dimension (W x D): 24" inches [612 mm] x 14" inches [356 mm]**
- Should have option for **Universal platform of hard coated, anodized black aluminium and High Temperature resistant up to HTD temperature of 120°C (no peeling of coating after HTD) to accommodate different varieties and diverse assortment of Cell Culture Consumables on the same Platform;** including Cell Culture flasks from 125 ml all the way upto 4 L volume capacities;
- Should have cognate **Sticky pads** of requisite dimension mats (20 x 20 cm; 8 x 8 in) that can be used to attach flasks, bottles, dishes, and other similar equipment on to **Universal platform**
- Should have the **option to Stack two units one above the other with the appropriate Stacking kit** to provide double the Cell Culture are in the same amount of footprint occupied in the lab.
- Should have **Intuitive touch screen controls provides for precise control with program modes** for constant speed and temperature, with **Audible and visual alarms**.
- Dimensions (W x D x H) 875 x 730 x 850 mm / 34.4" x 28.7" x 33.5 in.
- Should have **25 mm access port** to introduce instrumentation/probes and **USB port** for communication/data logging.

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Terms and Conditions:

1. Quotation have must be offered in two bid with sealed envelopes through speed post/ courier
2. Maximum discount should be offered.

3. Quotations should be valid for minimum 90 days
4. Delivery period will be 3-4 weeks after receipt of purchase order.
5. IIT Kanpur is fully exempted from payment of GST on imported Goods against our DSIR certificate.
6. IIT Kanpur is partially exempted from payment of Customs Duty (We will provide Custom Duty Exemption Certificate, CD applicable is 5.5%).
7. Manufacturer authorization certificate from principal company is required if you are a local supplier.
8. Include Preparatory item certificate if applicable.
9. The Institute reserves the right of accepting or rejecting any quotation without assigning any reason thereof.
10. All prices should be mentioned F.O.B/CIP/ CIF New Delhi or Destination at IIT Kanpur.
11. Payment Terms: 100% after supply and installation of the equipment.
12. Bidder Clearly Mention Contact details with address and email ID.31. Installation by OEM is preferred.

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