

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
Department of Earth Sciences

Enquiry No: ES/RS/2015-2016/11

Date: 20.07.2015

Subject: Quotation for supply of Orbital shaker as mentioned below.

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover in order to reach us by July 29, 2015 in the form of a hard copy to the address mentioned below. If you have any question please call Dr. Rajiv Sinha at 0512-2597317, email: rsinha@iitk.ac.in

The prospective suppliers are required to send quotation in two parts in sealed envelopes, as "Technical Bid" and "Financial Bid". The Technical Bid should contain detailed technical specification of the product being offered and should not mention any prices. The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges if any, shipping and handling charges. **The two separate and sealed envelopes should be clearly marked appropriately as "Technical Bid" and "Financial Bid". Kindly write the inquiry no on the top of envelop.**

Terms and Conditions:-

1. Maximum education discount, if any should be offered
2. Validity of quotation should be at least for 60 days
3. Prices should be on CIF and FOB separately (if imported)
4. Prices should include the installation and training cost
5. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/ inspection).
6. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.

Technical specifications of Orbital Shaker:

Electrical 230 v/ 2.5 amps/ 75watts
Speed Range 20 to 500rpm
Speed Accuracy +/-1% of set speed
Orbit 1.0" (25mm)
Timer Range Above 100rpm +/-1% of set speed below 100rpm +/-1 rpm
Maximum Weight capacity 50 lbs. (22.7 kg)
Tray material Aluminium
Tray Dimensions (L x W) 18 x 24" (45.7 x 61cm)
Overall dimensions (L x W x H) 23.6 x 26.7 x 6" (59.9 x 67.8 x 15.2cm)
Ship Weight 109 lbs. (49.5kg)

Features:-

LED display for speed and time
Exclusive Accu-Drive Shaking System 50lb weight capacity
5 year warranty on motor and drive mechanism
Orbital Shaker should be designed for a wide range of applications with larger or heavier loads that require accurate and repeatable results.
Operating features:
Accu-Drive Shaking System: The exclusive Accu-Drive Shaking System should deliver exceptional speed control, accuracy, and durability.
The system should continuously monitor shaking speed and maintains set point even under changing loads. When unit is set to a speed above 100rpm, the speed accuracy should $\pm 1\%$ of set speed. When set under 100rpm, speed accuracy ± 1 rpm.

Microprocessor control: The variable speed microprocessor control Provide consistent uniform shaking action.

Triple eccentric drive: Permanently lubricated ball bearings and maintenance free, brushless DC motor provide reliable service and continuous duty

Operation.

LED display: Touch pad control with easy to read, independent LED Display for temperature, speed, and time allow operator to view all

Settings at once while providing repeatable and accurate results every time. The timer should display elapsed time or when programmed to user defined limit, will shut off unit when time reaches zero. Display show last settings, even after power has been turned off.

RS-232 Interface: Provide two-way communication for data logging and unit control.

Speed calibration mode: Allow user to automatically recalibrate speed display.

Safety features:

Load sensor: A built in load sensor detect unbalanced conditions and Automatically reduces rpm to a safe speed or stops unit to protect samples.

Overload protection: Audible and visual signals should activate when system 1 detects an obstruction or overload of the tray.

Speed Ramping: Ramping feature slowly increase speed to desired set-point to avoid splashing.

Audible alarm: In timed mode, alarm will sound when the time reaches zero.

Alarm has optional mute function which can be set from the touch pad control.

Spill resistant design: Channels fluids away from internal components.

Applications include: Cell cultures, solubility

UNIVERSAL PLATFORM 18 X 18" I S/S:- which should give freedom to attach any flask up to 6 liter

Allow for mounting of flask clamps, test tube racks , and bottle clamps

- Platform slides over top of included tray and can be tightened with adjustment screws
- Optional accessories screw directly into mounting point openings
- Constructed of type 304 stainless steel

Dr. Rajiv Sinha

Professor

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