

Indian Institute of Technology Kanpur  
Department of Materials Science & Engineering



Enquiry no.: IITK/MSE/KB/2012-2013/10

Enquiry date: April 16, 2013

Last Date: April 22, 2013

**Enquiry for Vibratory Micro Mill**

We would like to purchase a Vibratory Micro Mill facility for our laboratory scale experimentation. Offered product should take into account specifications given below.

**Specifications for the facility:-**

Sl. No.	Article	Qty
1.	Vibratory Micro Mill Instrument incl. grinding head, without mortar and grinding ball	01
2.	Mortars Hardmetal tungsten carbide	01
3.	Grinding balls Hardmetal tungsten carbide 50 mm dia	01
4.	Cryo -box (device for grinding in liquid nitrogen)	01
5.	Sound absorption hood Plexiglas	01

**Additional Technical Specification**

Maximum feed particle size	:	upto 5 $\mu$ m
Maximum sample quantity	:	10 ml
Final fineness	:	< 10 $\mu$ m
Electrical details	:	240 V/1~, 50-60 Hz
Grinding bowl oscillations / Min	:	3000-3600 at 1-3 mm amplitude

### **Other specification and required features**

- There must be provision for Cryogenic grinding and sample embrittling in the cryo-box.
- The instrument should have the provision to a vibratory sieve shaker for quantitative particle size analysis of solids and suspensions to be added in future and recording.
- The instrument should have the window for observing the grinding progress.
- The instrument should have digital timer.
- Dry and wet grinding should be possible.
- Time down to analytical fineness should be approximately 10 minutes.

### **Term and conditions**

1. Quotation valid 45 days
2. Delivery period 10 weeks valid of P.O
3. Excise exemption certificate to be provided
4. Instrument is guaranteed for 24 months from the date of installation.
5. The commissioning and installation at the site free of cost.

*Address the quotations to:*

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