

Specification for Vibratory Cup Mill

Should be capable of dry and wet grinding of brittle and hard solids in short duration of time.

Max Feed Particle Size	:	12 mm
Useful Capacity	:	50, 100 or 250 ml. (selectable)
Final Fineness	:	Approx. 10 to 20 microns
Motor Speed	:	600 - 1150 rpm in steps of 50 rpm
Electrical details	:	for 100-240 V, 50-60 Hz,
Minimum sample quantity	:	10 – 20 ml

Other specifications and required features:

- Motor Speed should be 600 - 1150 rpm in steps of 50 rpm
- The average operational noise level should be less than or equal to 81 dB (A)
- While using the Agate grinding set speed should be automatically limited to 750 rpm, hence grinding effect should be customized to the particular requirement.
- Grinding set (100 ml & 250 ml – set each) of Tempered Steel, Agate, Hard metal tungsten carbide and Zirconium Oxide should be included.
- Speed should be varied by means of frequency converter and microprocessor.
- Reverse operation should be possible.
- Latest PC to be integrated with Vibratory Cup Mill with 8 GB RAM, 500 GB hard disk configuration, CD/DVD writer, 19” LED monitor, Windows 7 OS, a suitable UPS (2.0 kVA)

Grinding Sets

- Grinding sets made of hard metal tungsten carbide with useful volume of 250 ml, 100 ml and 50 ml capacity – 1 set each.
- Grinding sets made of agate with useful volume of 100 ml and 50 ml capacity – 1 set each.
- Grinding sets made of zirconium oxide with useful volume of 50 ml capacity – 1 set each.
- Grinding sets made of tempered steel with useful volume of 100 ml and 50 ml capacity – 1 set each.

Operating & instruction manuals and maintenance & service manuals – 3 copies each

Installation & commissioning and demonstration of its functioning in BHEL laboratory to be arranged.

Address of the Indian agent along with appropriate certificate from the Principal Supplier should be provided.

The suppliers should mandatorily provide the list of various organizations (including in India) with their contact addresses, where similar equipment has been supplied.

Photographs and catalogues related to every item of the mill should be enclosed.

The supplier should ensure that the spares are made available for the next 10 years. Essential spares required for trouble free operation for 5 years should be quoted.

The supplier shall provide 12 months warranty from the date of commissioning.

Only reputed manufacturers with ISO 9001 certificate need to quote.

After the delivery to BHEL R & D, if the Vario Planetary Mill is installed in existing R & D building it has to be shifted to the new building (Center for Nanotechnology and Applications) within 9 months from the supply of the equipment. This has to be done by the supplier and related expenses should be specified.

For any Technical Clarification, please contact :

Shri K Venugopal, AGM(CNT) at E-mail ID : venugopal@bhelrnd.co.in