

Ball Mill Machines

Ball Mills are the most effective laboratory mills for rapid batchwise comminution of samples down to the finest particle size. Adeeco offers various types of milling systems, the specifications of which are as follows:

Planetary Ball Mill

The versatile planetary ball mills meet all requirements for fast and reproducible grinding from micrometer scales down to the submicron range.

Blade Ball Mill

Blade Ball Mill is an high energy procedure which provides perfect conditions for effective mechanical alloying or grinding down to the nanometer range within a short time.

Mixer Mill

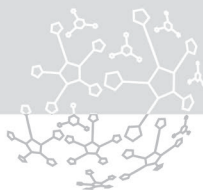
Mixer mill is specifically designed for small sample volumes and cryogenic grinding. High Speed nature of milling jars will result in short grinding time in comparison with other milling methods.

- Small capacity of each jar is suitable for making powder of expensive materials.
- The cryogenic grinding feature of this model makes it an ideal choice when using thermally sensitive, volatile or elastic substances in addition to the bone and genetic laboratories. liquid nitrogen is used to keep the temperature at -196°C .

Bead Mill

These mills use bead/media to grind, impact, or shear down particles in a liquid or slurry.





Specification

Models	Planetary Ball Mill		Blade Ball Mill	Mixer Mill	Bead Mill
	Two-grinding jars	Four grinding-jars			
Power	220 VAC	220 VAC	380 VAC	220 VAC	220 VAC
Grinding jar volume	250 ml ¹	250 ml ¹	8 lit	25 ml	1 lit
Electromotor	0.75 kW	1.5 kW	15 kW	0.37 kW	4 kW
Rotation speed	1-800 RPM	1-600 RPM	1000 RPM	up to 50 cycles/s	1-1400 RPM
Speed ratio of sun wheel to jar	1:2	1:2	---	---	---
Dimension (L×W×H)	70×51×62 cm	90×70×135 cm	130×70×100 cm	45×50×26 cm	90×50×48 cm
Weight	130 kg	180 kg	390 kg	52 kg	145 kg
Protection system	Inert gas purging/ Vacuum		---	---	---
Grinding jar material	Hardened steel ²		---	Hardened steel, Stainless steel	Stainless steel type 316
Ball material	Hardened steel ²		---	Stainless steel	---
Option	Ball Size: 5, 10, 15, 20 mm		---	Cryogenic grinding	---
Operation type	---	---	Batch	---	Batch/ Continuous
Temperature range	---	---	-20 to 100 °C	---	---
Pressure range	---	---	10 ⁻² to 4 bar	---	---

¹Optional Capacity : 25,50,100,500 ml

²Optional Material : Agate, Zirconium oxide, Alumina, Tungsten Carbide, Teflon and Stainless Steel

Application

- Mineralogy
- Metallurgy
- Chemical products
- Pharmaceutical products
- Ceramic
- Glass
- Biology
- Agriculture
- Paint

