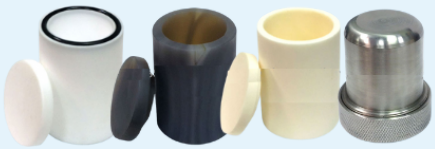
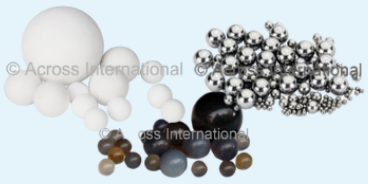
ACROSS INTERNATIONAL | Material Processing Equipment

ISO 9001:2015

BALL MILLS

Across International ball mills reduce particle size to as small as 0.1 micron, and are compatible with a wide variety of different materials of jars and media, including vacuum jars and jar jackets.



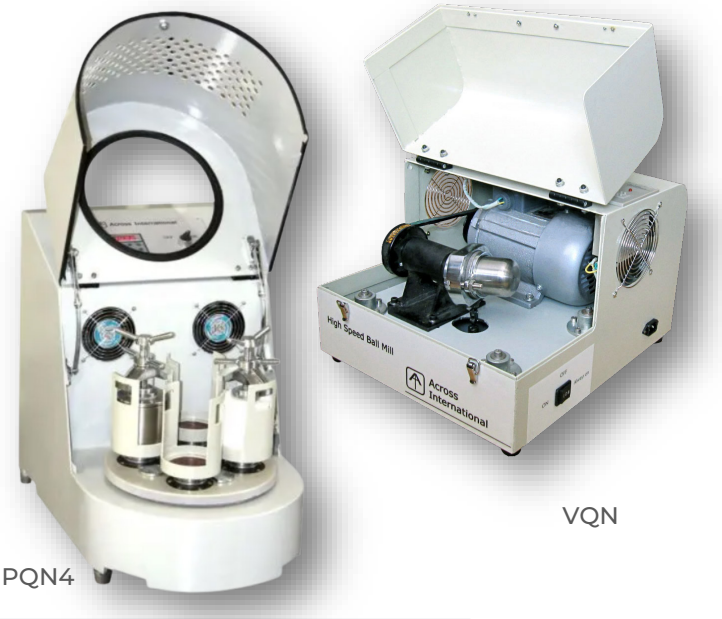


888-988-0899

quotes@acrossinternational.com

HIGH-ENERGY & PLANETARY BALL MILLS

Ball mills may be used for mixing, homogenizing, fine grinding, mechanical alloying, cell disruption, small volume high-tech material production, and even colloidal grinding. They are the ideal wet/dry milling tools for acquiring research samples with high efficiency and low noise.



PQN4

VQN

FEATURES

- **Quick, efficient pulverization and homogenization**
- **Short grinding time and high sample throughput**
- **Large range of materials available for grinding media**
- **Across International grinding jars include a leak-proof seal, ideal for wet grinding**

BENEFITS AT A GLANCE

USER FRIENDLY

- Our Planetary Ball Mills feature a programmable controller allowing for timing, paused intervals, rotational speed, and direction to be easily set, stored, and run
- Store and execute multiple cycle programs on one planetary ball mill
- Easily switch between a wide range of grinding jars and media
- 1-year warranty and technical support 9am-9pm EST from our award-winning team

FAST, RELIABLE, SAFE

- Optimized for high throughput and quick milling times
- Our planetary ball mills feature durable gear driven designs that resolve many of the common wear issues as seen in competing belt driven configurations
- Safety switch ensures automatic shut down if the cover is opened during operation
- Oscillation Speeds up to 1,200 rpm

SPECIFICATIONS

MODEL	VQN	PQN04	PQN2	PQN4
Electrical Requirements	110V or 220V 50/60Hz single phase, 180 watts	110V or 220V 50/60Hz single phase, 370 watts	110V or 220V 50/60Hz single phase, 750 watts	110V or 220V 50/60Hz single phase, 2200 watts
Jar Capacity	50ml or 80ml	Non-vacuum: 100ml x 4 Vacuum: 50ml x 4	Non-vacuum: 500ml x 4 Vacuum: 250ml x 4	Non-vacuum: 1000ml x 4 Vacuum: 500ml x 4
Oscillation Speed	1,200 rpm	350 rpm	290 rpm	320 rpm
Noise	~78 dB	~70 dB	~74 dB	~77 dB
Timing Range	1-999 seconds	72 hours	72 hours	72 hours
Discharging Granularity	Down to 0.1 micron			
Shipping Weight	110 Lb	170 Lb	300 Lb	360 Lb
Unit Dimensions	18 x 15 x 12" (DxWxH)	24 x 14 x 17.5" (DxWxH) height is 32" with cover open	30 x 18 x 25" (DxWxH) height is 44" with cover open	31 x 18 x 27" (DxWxH)
Shipping Dimensions	24 x 19 x 17" (LxWxH)	27 x 17 x 23" (LxWxH)	36 x 25 x 33" (LxWxH)	41 x 23 x 32" (LxWxH)
Grinding Jar Included	80mL stainless steel jar included (other options sold separately)	None (two or four required to operate)		
Compliance	CE			

ACCESSORIES

GRINDING JARS

MTE.50

MAG.50

MNL.50

MAC.50

MZO.50

SS

TC

Materials	PTFE	Natural Brazilian Agate	Nylon	Alumina Ceramic	Yttrium Stabilized Zirconium Oxide	Grade 304 Stainless Steel	Highly Polished Tungsten Carbide
Size	50/100/250/ 500ml/1L	50/100/ 500ml/1L	100/ 500ml/1L	50/100/ 500ml/1L	50/100/ 500ml/1L	50/80/100/ 500ml/1L	100/ 500ml/1L
Feeding Granularity	Soil materials ≤ 10mm, others materials ≤ 3mm (If the sample feed is larger than these then it must first undergo preliminary size reduction)						

GRINDING BALLS

ACB

Alumina

AGB

Natural Brazilian Agate

STB

Stainless Steel

TCGB

Highly Polished Tungsten Carbide

ZOB

Yttrium Stabilized Zirconium Oxide

JAR JACKETS

MSSC.50

Stainless Steel Jacket

MVSSC.50

Stainless Steel Vacuum Jacket

MVSS.80

Stainless Steel Vacuum Grinding Jar

VSSC

Stainless Steel Vacuum Jar Jacket

CLAMPS

CLP.PQN04

Jar Clamping Device For PQ-N04 (4x100ml) Planetary Ball Mills

CLP.PQN2

Jar Clamping Device For PQ-N2 (4x500ml) Planetary Ball Mills

CLP.PQN4

Jar Clamping Device For PQ-N4 (4x1L) Planetary Ball Mills