



Technical resources

Soil grinder and sieve machine

Model: XQM

<https://www.tencanballmills.com/en/products/grinding-series/planetary-ball-mill/soil-grinder-and-sieve-machine.html>

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Soil grinder and sieve for heavy metal analysis. 4 sealed agate jars, adjustable pressure. Planetary motion ensures efficient grinding via collision. Supports dry, wet, and vacuum grinding. Handles 2-4 jars simultaneously.

Technical specifications

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Number of grinding jars	4 pieces
Grinding jar specification	50ml~4L
Speed control	Variable frequency control

These specifications describe the series. Confirm the selected model, power supply and configuration before ordering.



For soil heavy metal analysis, four agate grinding jars are required. The pressure of the sealed agate grinding jar is set through a scale. While revolving around the turntable axis, it also rotates in the opposite direction around its own axis. The samples in the jars collide and rub with each other in high-speed motion to achieve the purpose of crushing, grinding, mixing and dispersing the samples. Can be used for dry grinding, wet grinding or vacuum grinding. Two or four grinding jars can be operated simultaneously.



Technical parameters

serial number	model	shape	Grinding tank rotation speed (mm)	Inner diameter of grinding pot seat (mm)	Motor power	Grinding jar revolution diameter (mm)	Overall dimensions (mm)	Net weight(kg)
1	XQM-0.2	Miniature	0~1160	50	90W	F111	420×260×310	25
2	XQM-0.2S	Mini glove box	0~1160	50	90W	F111	Equipment: 390×220×270 Control box: 200×180×240	29
3	XQM-0.4A	semicircle style	0~870	80	250W	Φ140	530×300×360	34
4	XQM-6		0~670	134	0.75KW	F234	760×470×580	100
5	XQM-4A	semicircle style	0~670	134	0.75KW	F234	760×470×600	85
6	XQM-(8-12)		0~580	162	1.5KW	Φ275	900×600×640	168
7	XQM-(8-12)A	semicircle style	0~580	162	1.5KW	Φ275	880×560×642	150
8	XQM-16A	semicircle style	0~510	182	3KW	Φ320	950×600×710	205
9	XQM-20		0~430	222	4KW	F385	1200×790×930	392
10	XQM-40		0~390	250	5.5KW	Φ430	1400×880×1070	656
11	XQM-60		0~260(1:1.5)	275	7.5KW	Φ490	1600×1070×1250	950
12	XQM-100		0~240(1:1.5)	326	11KW	F578	1750×1140×1330	1300
13	XQM-200		0~215	460	22KW	Φ738	2670×1600×2804	2725

Soil grinder and sifter technical specifications

- (1) Voltage: 220V AC.
- (2) Feed particle size: soil material $\leq 10\text{MM}$, other materials $\leq 3\text{MM}$. Discharge particle size: the minimum can be $0.1\text{ }\mu\text{m}$.
- (3) Speed (R/MIN): revolution: 35-335, rotation: 70-670.
- (4) Three-phase motor frequency conversion controller power: 0.75KW (with power display electronic monitoring device, continuous operation timing time (MIN): forward and reverse commutation operation cycle (MIN).
- (5) Speed regulation mode: stepless speed regulation, automatic timing forward and reverse, automatic stop.
- (6) Continuous working time (full load): 48 hours.
- (7) Electric screening machine: It can hold seven layers of sieves with a diameter of 200MM. ;Screening range: 20-200 mesh (20 microns) digital display, screening vibration frequency 1400 rpm.

Soil grinder and sifter standard configuration

- (1) Grinding host
- (2) 4 250ml agate jars, 700 agate balls
- (3) Electric screening machine
- (4) A set of 20, 40, 60, 80, 100, 120, 140, 160, 180, 200 mesh round frame sieves and bases.

For soil heavy metal analysis, four agate grinding jars are required. The pressure of the sealed agate grinding jar is set through a scale. While revolving around the turntable axis, it also rotates in the opposite direction around its own axis. The samples in the jars collide and rub with each other in high-speed motion to achieve the purpose of crushing, grinding, mixing and dispersing the samples. Can be used for dry grinding, wet grinding or vacuum grinding. Two or four grinding jars can be operated simultaneously.

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Before operation, review the selected model's instructions and the material requirements.