Overview

Vertical Laboratory Planetary Ball Mill (Square Model) is a necessary device of high-tech materials mixing, fine grinding, sample making, new product development and small batch production. Tencan planetary ball mill owns small volume, high efficiency, low noise and functional features which is a ideal equipment for R&D institution, university, enterprises laboratory to get samples (each experiment can get four samples at the same time). It gets powder samples under the vacuum state when equipped with vacuum ball mill tank.

Vertical Laboratory Planetary Ball Mill
(Square Model)

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Working Principle

Vertical Laboratory Planetary Ball Mill (Square Model) has four ball grinding tanks installed on one turntable. When the turntable rotates, the tank axis makes planetary movements, the balls and samples inside the tanks are impacted strongly in high speed movement, and samples are eventually ground into powder. Various kinds of different materials can be ground by the mill with dry or wet method. Minimum granularity of ground powder can be as small as $0.1\,\mu$m.

Applications

Vertical Laboratory Planetary Ball Mill (Square Model) is widely used in many fields of geology, mine, metallurgy, electric industry, construction, ceramics, chemicals, light industry, medicine, environmental protection etc.

Application Parameters

Drive Mode	Gear drive or belt drive
Working Mode	Two or four grinding jars working together
Max Load Volume (Material+Balls)	No more than 2/3 of mill jar volume
Feed Size	Soil & crispy materials≤10mm,Other materials≤3mm
Output Granularity	Minimum up to 0.1um (different materials and grinding process will be different)
Rotation Speed Ratio(Revolution/Rotation)	1:2
Max.Continuous Operating Time	72 Hours
Materials of Jar	stainless steel.agate,nylon,corundum, zirconia,etc

Main Parameters of Vertical Planetary Ball Mill (Square Type)

Model No	Power (KW)	Voltage	Revolution Speed(rpm)	Rotation Speed(rpm)	Total Timing(min)	Alternating Run Time of Forward & Reversal Rotation(min)	Noise<db
XQM-2	0.75	220V-50Hz	35-335	70-670	1-9999	1-999	60db
XQM-4	0.75	220V-50Hz	35-335	70-670	1-9999	1-999	60db
XQM-6	0.75	220V-50Hz	35-335	70-670	1-9999	1-999	60db
XQM-8	1.5	220V-50Hz	35-290	70-580	1-9999	1-999	60db
XQM-10	1.5	220V-50Hz	35-290	70-580	1-9999	1-999	60db
XQM-12	1.5	220V-50Hz	35-290	70-580	1-9999	1-999	65db

Measurement of Vertical Planetary Ball Mill (Square Type)

Model No	Power (KW)	Speed Control Mode	Net Weight (kg)	Dimensions (MM)
XQM-2	0.75	Frequency Control	93	750*470*564
XQM-4	0.75	Frequency Control	93	750*470*564
XQM-6	0.75	Frequency Control	93	750*470*564
XQM-8	1.5	Frequency Control	150	900*600*640
XQM-10	1.5	Frequency Control	150	900*600*640
XQM-12	1.5	Frequency Control	150	900*600*640

Available Sizes of Mill Jar for Vertical Planetary Ball Mill (Square Type)

Model No	Specifications	Volume of Each Matched Pot	Quantity	Remarks
XQM-2	2L	50-500ml	4 pcs	Matched with vacuum mill pots from 50ml to 250ml
XQM-4	4L	250-1000ml	4 pcs	Matched with vacuum mill pots from 50ml to 1000ml
XQM-6	6L	1-1.5L	4 pcs	Matched with vacuum mill pots from 50ml to 1000ml
XQM-8	8L	1-2L	4 pcs	Matched with vacuum mill pots from 50ml to 1500ml
XQM-10	10L	1-2.5L	4 pcs	Matched with vacuum mill pots from 1L to 2L
XQM-12	12L	1-3L	4 pcs	Matched with vacuum mill pots from 1L to 2L