

### Details of Vertical Planetary Ball Mill (Semi-circle Round Model)



### Introduction of Tencan Vertical Planetary Ball mill (Semi-circle Model)

Shell of the machine is designed to be in semi-circle round shape that is stamped and formed by precise molding with delicate, generous and stable outlook. Planetary disc is made by whole casting and machine parts are made by NC machining process, drive gears are made precisely from special materials. All these factors ensure stability and low noise of machine when running at high speed. Tightening device of mill jars is convenient to operate, safe and reliable.

### Performance of Machine

Transmission Mode	Gear Drive
Working Mode	2 or 4 jars can be used for each batch
Max Load Volume For Materials	One-third of each jar
Volume of Grinding Jar	50ml-25L/jar
Feed Size	Soft and Crispy material ≤ 10mm, Other materials ≤ 3mm
Out-put Granularity	Finest Granularity can be reached to 0.1 μm
Ratio of Rotate ( Revolution vs Rotation)	1:2
Rotate Speed	Details stated in parameter table
Adjusting Mode of Rotate Speed	Frequency converter with stepless speed regulation



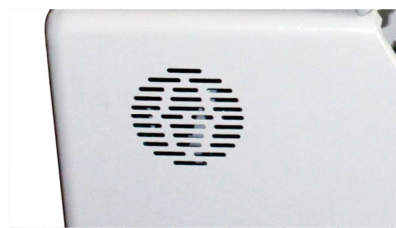
Visual Window



**Planetary Mechanism**  
Planetary disc by whole casting, New pressure pole, delicate and good appearance, Stable rotate speed, High efficiency, ultrafine grinding



**Frequency Converter Control**  
Expected rotate speed can be selected according to experiment need, minimum scale of rotate speed is 0.2 rpm. Frequency converter owns protection device of under voltage and over voltage which provides necessary protection for motor.



**Hole of Cooling Fan**  
Running of machine at high speed enhances speed of air flow inside the machine effectively and improving of cooling speed ensures the stable operation for long time.

### Features of Machine



- 1 Fashion Design**  
3D curve shape design, elegance and fashion
- 2 Exquisite workmanship**  
Delicate and Precise
- 3 Special Drive Gear**  
Special gear with low noise, lower about 15-20db compared with common gear,
- 4 Convenient Operation**  
Humanization design, Convenient operation.

Technical Parameter Table ( I ) of Vertical Planetary Ball Mill (Semi-circle Round Type)

Type No	Specification	Volume of Each Matched Pot	Quantity	Remarks
XQM-0.2S	0.2L	50ml	4pcs	Matched with 25ml vacuum pot
XQM-0.4A	0.4L	50-100ml	4pcs	Can be Matched with 50ml Vacuum Pot
XQM-1A	1L	50-250ml	4pcs	Can be Matched with 100ml Vacuum Pot
XQM-2A	2L	50-500ml	4pcs	Matched with vacuum mill pots from 50ml to 250ml
XQM-4A	4L	250-1000ml	4pcs	Matched with vacuum mill pots from 50ml to 500ml
XQM-8A	8L	1-2L	4pcs	Matched with vacuum mill pots from 50ml to 1500ml
XQM-10A	10L	1-2.5L	4pcs	Matched with vacuum mill pots from 1000ml to 2000ml
XQM-12A	12L	1-3L	4pcs	Matched with vacuum mill pots from 1000ml to 2000ml
XQM-16A	16L	2-4L	4pcs	Matched with vacuum mill pots from 1000ml to 3000ml

Technical Parameter Table ( II ) of Vertical Planetary Ball Mill (Semi-circle Round Type)

Type No	Power Supply	Motor Power(KW)	Total Run Time of Setting ( min )	Reciprocal Running Time ( min )	Adjustable Speed Revolution ( rpm )	Rotation ( rpm )	Noise±db
XQM-0.2S	220V-50HZ	0.25	1-9999	1-999	60-580	120-1160	58±5
XQM-0.4A	220V-50HZ	0.25	1-9999	1-999	45-435	90-870	58±5
XQM-1A	220V-50HZ	0.75	1-9999	1-999	35-335	70-670	60±5
XQM-2A	220V-50HZ	0.75	1-9999	1-999	35-335	70-670	60±5
XQM-4A	220V-50HZ	0.75	1-9999	1-999	35-335	70-670	60±5
XQM-8A	380V-50HZ	1.5	1-9999	1-999	35-290	70-580	60±5
XQM-10A	380V-50HZ	1.5	1-9999	1-999	35-290	70-580	60±5
XQM-12A	380V-50HZ	1.5	1-9999	1-999	35-290	70-580	60±5
XQM-16A	380V-50HZ	3	1-9999	1-999	30-255	60-510	65±5

Pemark:Above models can be customized to be 110V-60Hz

Technical Parameter Table (III) of Vertical Planetary Ball Mill (Semi-circle Round Type)

Type No	Motor Power	Speed Control Mode	Net Weight ( kg )	Dimension ( mm )
XQM-0.2S	0.25	Frequency Control	24	250×425×280
XQM-0.4A	0.25	Frequency Control	29	530×300×340
XQM-1A	0.75	Frequency Control	80	750×470×564
XQM-2A	0.75	Frequency Control	80	750×470×564
XQM-4A	0.75	Frequency Control	80	750×470×564
XQM-8A	1.5	Frequency Control	132	880×560×670
XQM-10A	1.5	Frequency Control	132	880×560×670
XQM-12A	1.5	Frequency Control	132	880×560×670
XQM-16A	3	Frequency Control	203	950×600×710

Details of Vertical Planetary Ball Mill (Square Type)



**Frequency Converter Control**  
Expected rotate speed can be selected according to experiment need, minimum scale of rotate speed is 0.2 rpm. Frequency converter owns protection device of under voltage and over voltage which provides necessary protection for motor.



**Planetary Mechanism**  
Planetary disc by whole casting, Newpressure pole, delicate and good appearance, Stable rotate speed, High efficiency, ultrafine grinding



**Hole of Cooling Fan**  
Running of machine at high speed enhances speed of air flow inside the machine effectively and improving of cooling speed ensures the stable operation for long time.



**Pneumatic Rod**  
Support force is constant in process of running with appropriate damping, safe and convenient to operate.

**Introduction of Tencan Vertical Planetary Ball mill (Square Type)**

Shell of the machine is designed to be in square style that is stamped and formed by precise molding with delicate, generous and stable outlook. Planetary disc is made by whole casting and machined parts are made by NC machining process, drive gears are made precisely from special materials. All these factors ensure stability and low noise of machine when running at high speed. Pressing devise of pots is convenient to operate, safe and reliable.

**Performance of Machine**

Transmission Mode	Gear Drive
Working Mode	2 or 4 jars can be used each time
Max Load Volume For Materials	1/3 of jar's volume
Volume of Grinding Pot	500ml/pot-50L/pot Total Volume:0.2L-200L
Feed Size	Soft and Crispy material≤10mm, Other materials≤3mm
Out-put Granularity	Finest Granularity can be reached to 0.1μm
Ratio of Rotate ( Revolution vs Rotation)	1:2
Rotate Speed	Details as stated in parameter table
Adjusting Mode of Rotate Speed	Frequency converter with stepless speed regulation

**Features of Machine**



**1 Fashion Design**

3D curve shape design, elegance and fashion



**2 Delicate workmanship**

Delicate and Precise



**3 Special Drive Gear**

Special gear with low noise, lower about 15-20db compared with common gear,



**4 Convenient Operation**

Humanization design, Convenient operation.

**Technical Parameters Table ( I ) For Vertical Planetary Ball Mill (Square Type)**

Type No	Specification	Volume of Each Matched Pot	Quantity	Remarks
XQM-1	1L	50-250ML	4pcs	Matched with vacuum mill pots from 50ml to 100ml
XQM-2	2L	50-500ml	4pcs	Matched with vacuum mill pots from 50ml to 250ml
XQM-4	4L	250-1000ml	4pcs	Matched with vacuum mill pots from 50ml to 750ml
XQM-6	6L	1-1.5L	4pcs	Matched with vacuum mill pots from 50ml to 1000ml
XQM-8	8L	1-2L	4pcs	Matched with vacuum mill pots from 50ml to 1500ml
XQM-10	10L	1-2.5L	4pcs	Matched with vacuum mill pots from 1L to 2L
XQM-12	12L	1-3L	4pcs	Matched with vacuum mill pots from 1L to 2L
XQM-20	20L	2-5L	4pcs	Matched with vacuum mill pots from 2L to 4L
XQM-40	40L	5-10L	4pcs	Can be Matched with 5L Vacuum Pot
XQM-60	60L	10-15L	4pcs	Can be Matched with 10L Vacuum Pot
XQM-100	100L	20-25L	4pcs	Can be Matched with 20L Vacuum Pot

**Technical Parameters Table ( II ) For Vertical Planetary Ball Mill (Square Type)**

Type No	Power Supply	Motor Power(KW)	Total Run Time of Setting ( min)	Reciprocal Running Time ( min)	Adjustable Speed Revolution ( rpm) Rotation ( rpm)		Noise±db
XQM-1	220V-50HZ	0.75	1-9999	1-999	35-335	70-670	60±5
XQM-2	220V-50HZ	0.75	1-9999	1-999	35-335	70-670	60±5
XQM-4	220V-50HZ	0.75	1-9999	1-999	35-335	70-670	60±5
XQM-6	220V-50HZ	0.75	1-9999	1-999	35-335	70-670	60±5
XQM-8	220V-50HZ	1.5	1-9999	1-999	35-290	70-580	60±5
XQM-10	220V-50HZ	1.5	1-9999	1-999	35-290	70-580	60±5
XQM-12	220V-50HZ	1.5	1-9999	1-999	35-290	70-580	65±5
XQM-20	380V-50HZ	4	1-9999	1-999	25-215	50-430	65±5
XQM-40	380V-50HZ	5.5	1-9999	1-999	20-195	40-390	68±5
XQM-60	380V-50HZ	7.5	1-9999	1-999	27~174	40~260	68±5
XQM-100	380V-50HZ	11	1-9999	1-999	27~160	40-240	68±5

**Technical Parameters Table (III) For Vertical Planetary Ball Mill (Square Type)**

Type No	Motor Power	Speed Control Mode	Net Weight ( kg)	Dimension ( mm)
XQM-1	0.75	Frequency Control	93	750×470×564
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
XQM-20	4	Frequency Control	330	1200×750×920
XQM-40	5.5	Frequency Control	468	1400×850×1160
XQM-60	7.5	Frequency Control	900	1600×990×1250
XQM-100	11		1250	1750×1140×1330