

Professional
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Milling
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TENCAN

Product Brochure



PLANETARY BALL MILL SERIES

Dual Planetary Ball Mill

SXQM

Dual planetary structure amplifies rotation speed, increasing centrifugal force for enhanced grinding efficiency. Capable of grinding materials to nanoscale.

<https://www.labballmill.com/products/grinding-series/planetary-ball-mill/dual-planetary-ball-mill.html>

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Product Overview

Dual planetary structure amplifies rotation speed, increasing centrifugal force for enhanced grinding efficiency. Capable of grinding materials to nanoscale.



Product Introduction

The double planetary structure enables the large planetary disk to drive the movement of the asteroid disk. Compared with ordinary planetary ball mills of the same specifications, the revolution radius and grinding tank rotation speed are enlarged. The centrifugal force on the grinding balls is doubled, and the collision, shearing and friction between the grinding balls are significantly increased. The grinding effect and grinding efficiency are improved, and some materials can be ground to the nanometer level. Double planetary ball mill is a typical high-efficiency and high-energy ball mill.

Function Introduction

III Dedicated to Excellence, Defined by Professionalism

Dual Planetary Mechanism

The dual planetary structure enables the large planetary disk to drive the small planetary disks. Collision, shear, and friction among the grinding balls are significantly increased, improving grinding performance and grinding efficiency.



Viewing Window

Convenient for observing the operating status of the planetary mechanism. Tempered glass, safe and reliable.



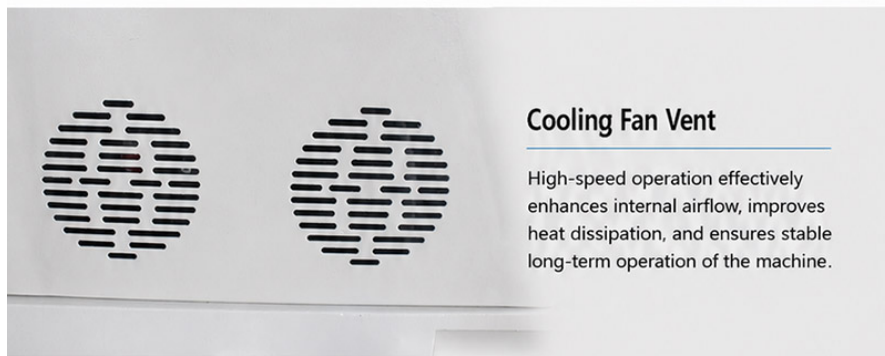
Variable Frequency Control

The speed can be adjusted according to the ideal experimental speed, with high speed accuracy. The inverter provides undervoltage and overcurrent protection, offering necessary protection for the motor.



Cooling Fan Vent

High-speed operation effectively enhances internal airflow, improves heat dissipation, and ensures stable long-term operation of the machine.



Double planetary ball mill is a powder device for laboratory, mixing, fine grinding and small batch production of high-tech materials. This machine is beautiful and novel, has a compact structure, is easy to operate, has high working efficiency, and has uniform grinding size. It is the preferred equipment for scientific research, teaching, testing, and production. Widely used in electronics, magnetism, medicine, ceramics, geology, minerals, metallurgy, building materials, chemical industry, light industry, beauty, environmental protection and other industries.

Technical parameters

model	Specification	Can be equipped with ball mill tank specifications	quantity	Remark
SXQM-0.4	0.4L	50-100ml	4	Can be equipped with 50ml vacuum ball mill tank
SXQM-1	1L	250ml	4	Can be equipped with 50-100ml vacuum ball mill tank
SXQM-2	2L	500ml	4	Can be equipped with 50-250ml vacuum ball mill tank
SXQM-4	4L	1000ml	4	Can be equipped with 50-1000ml vacuum ball mill tank
SXQM-6	6L	1500ml	4	Can be equipped with 50-1000ml vacuum ball mill tank

model	Device power supply	Motor power (kW)	Total running time (min)	Alternating forward and reverse running time (min)	Revolution (rpm)	Rotation(rpm)	Noise(dB)
SXQM-0.4	220V-50Hz	0.75	1-9999	1-999	70-560	140-1120	58±5
SXQM-1	220V-50Hz	0.75	1-9999	1-999	70-560	140-1120	60±5
SXQM-2	220V-50Hz	0.75	1-9999	1-999	70-560	140-1120	60±5
SXQM-4	220V-50Hz	0.75	1-9999	1-999	70-560	140-1120	60±5
SXQM-6	220V-50Hz	0.75	1-9999	1-999	70-560	140-1120	60±5

model	Motor power (kW)	Speed regulation method	Equipment weight (kg)	Equipment volume (mm)
SXQM-0.4	0.75	Frequency conversion speed regulation	250	1150×800×760
SXQM-1	0.75	Frequency conversion speed regulation	250	1150×800×760
SXQM-2	0.75	Frequency conversion speed regulation	250	1150×800×760
SXQM-4	0.75	Frequency conversion speed regulation	250	1150×800×760
SXQM-6	0.75	Frequency conversion speed regulation	250	1150×800×760

Product Features

The equipment shell has a professional appearance design and industrial shape, using thickened steel plate welding and forming processing technology. It has high strength, impact resistance, deformation resistance, and a stable atmosphere.; The materials of the machined parts undergo strict heat treatment procedures and adopt CNC machining technology. The transmission gears are made of special materials and precision gears to ensure smooth, safe and low-noise operation of the equipment at high speeds.

Accessories & Customization

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Accessories

Grinding jars, heating elements, sample holders, control modules and other matching accessories can be selected according to the product configuration.

Customization

For voltage, capacity, chamber size, process temperature or application requirements, please contact TENCAN for a suitable configuration.