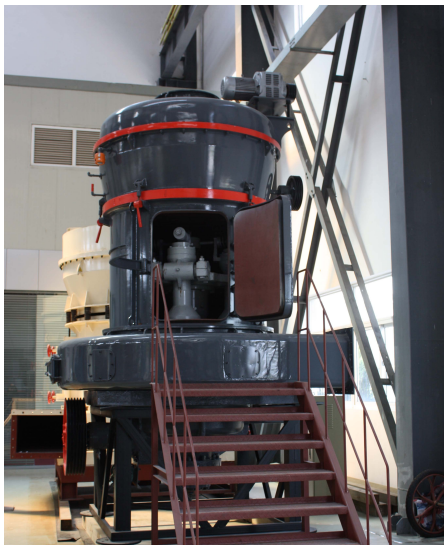
MTM

Trapezium Mill

SBM

Shanghai Shibang Machinery Co., Ltd

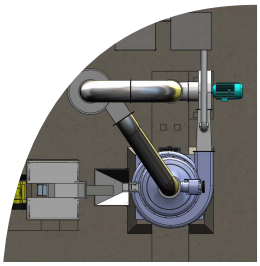


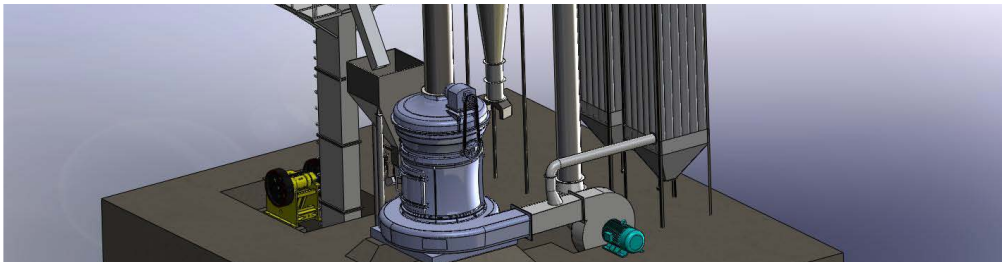
Overview

MTW european trapezium grinding mill has arrived the grinding mill machine top technical level in the world with many patented technologies. According to the experiences and suggestions from 9518 customers, SBM ---professional grinding mill manufacturer, has made great efforts to bring MTW european trapezium grinding mill into the world.

Application

MTW european trapezium grinding mill is mainly applied to the powder processing of mineral products in industries of metallurgy, construction, chemistry, and mining etc. The grinding mill machine can produce powder from non-flammable and non-explosive mineral materials, such as barite, limestone, quartz, calcite, granite, porcelain clay, basalt, gypsum etc.





Main Features & Benefits

This new type mill adopts bevel gear overall drive, inner automatic Thin-Oil lubricating system, arc air channel and several latest patent technology.

1. Bevel gear overall drive:

The traditional grinding mill is driven by speed reducer and coupling. It is hard to be installed. And there will be too much noisy, and the efficiency is lower. MTW series mill is driven by bevel gear, so its structure is compacter, easy to be installed and more efficient.

2. Inner automatic Thin-Oil lubricating system:

The traditional mill adopts grease lubrication, so the lubricating resistance is stronger, the temperature will be higher soon, the bearing life is shorter. MTW series mill adopts inner L.O. pumps, so the main shaft bearing and bevel gear can be lubricated without an additional lubrication system.

3. Arc air channel:

All of the air channel of traditional grinding mill is upright board type. In this case, there will be stronger resistance when the air impacts the air channel board, and the energy of collisions of air molecules loss heavily, as a result, the air channel will be jammed easily because of the eddy air flow. MTW series mill adopts a cambered air channel, the tangential air goes into air channel easily because there is small resistance. And the inner outlet is very good for the grinded material to spread around and avoid grinding material jammed.

4. Cambered shovel with renewable edge:

The traditional shove is integral and edge always be worn out quickly, so you have to renew it in short time which affects the working time and wastes too much steel. The shovel edge of MTW series mill adopts high wearable limit alloy, its life will be longer. You only want to change the edge, not the whole shovel. so the steel material is saved. In addition, because the traditional shovel is plane type, the grinded material stacks on the same plane when it is scooped up. So the middle parts of the roller is worn out heavily. But the cambered shovel can scoop up the grinded material in the same vertical plane, that makes the rollers and ring worn equally. At the same, the grinding efficiency is higher and capacity is higher.

5. Separated cyclone:

There is a separated structure between inner piping and mixed air and powder. The efficiency and precision of classifying is promoted highly.

6. No resistance snail shell (small checking door so that there is not an eddy air flow):

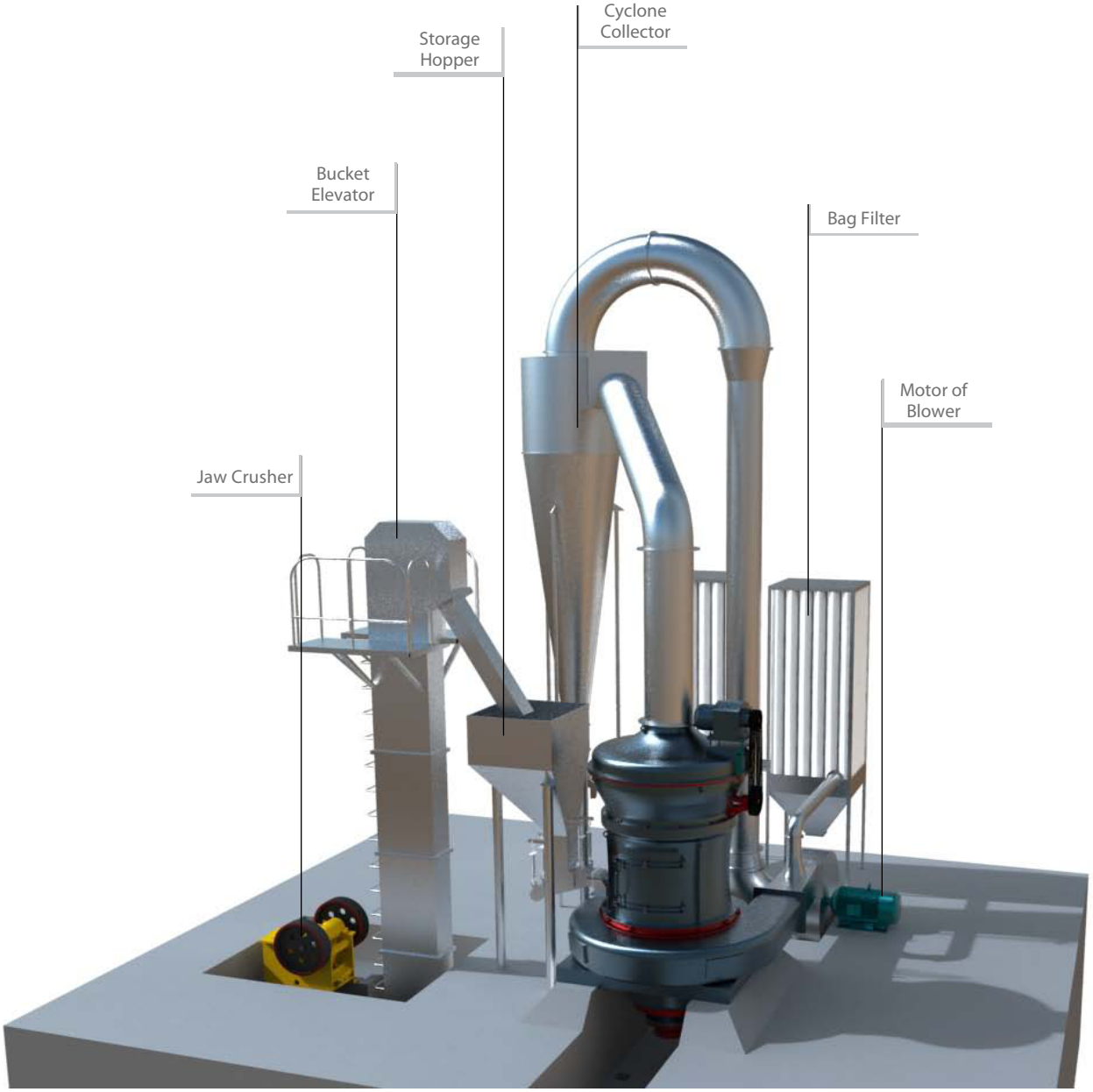
In the traditional grinding mill, the checking door of snail shell is prominent, that mean the checking door and snail shell are not on the same plane. So there will be eddy air flow easily come into being. As a result, the energy waste is bigger. MTW series mill make the inner surface of checking door stay with the inner surface of snail shell on the same plane, so the eddy air flow is avoided efficiently.

7. Perfect outward appearance:

Both of the inner parts and outer part of the MTW series mill adopt advanced structure and beautiful arc structure design. This makes the mill advanced and beautiful.

Main Structure

The standard configuration of MTW series mill consists of main unit, powder classifier, blower, elevator, feeder, hopper, cyclone collector, dust catcher, blower, motor, pipe, electric control box and so on.



Technical Data

Model	Roller Number (pcs)	Inner Diameter of Roller (mm)	Speed (r/min)	Max. Feed Size (mm)	Final size (mm)	Capacity (t/h)	Overall Dimension(mm) (LxWxH)	Weight (t)
MTW110	4	Φ1100	120	< 30	1.6~0.038	7.5	8910 ×6950×9010	18
MTW138	4	Φ1380	96	< 35	1.6~0.038	15	9860×8340×10227	28.5
MTW175	5	Φ1750	75	< 40	1.6~0.038	18.5	13500×11500×9500	46

Note: This specification is just reference, any changes are subject to the mtw european trapezium grinding mill products.

Technical Data

Model		Item	Unit	Specification		
				MTW110	MTW138	MTW175
Main Unit Motor		Model		Y280M-6	Y315M1-6	Y355M1-6
		Power	kw	55	90	160
		Speed	r/min	980	990	990
Motor of Classifier		Model		YCT200-4A (YCT200-4B)	YCT200-4B (YCT225-4A)	YCT225-4A (YCT225-4B)
		Power	kw	5.5 (7.5)	7.5 (11)	11 (15)
		Speed	r/min	125-1250	125-1250	125-1250
Motor of Blower		Model		Y250M-4	Y280M-4	Y315L1-4
		Power	kw	55	90	160
		Speed	r/pm	1480	1480	1490
Auxiliary Parts	Elevator	Model		TH250	TH250	TH315
		Motor		Y100L2-4	Y100L2-4	Y112M-4
		Power	kw	3	3	4
		Speed	r/min	1420	1420	1420
	Jaw Crusher	Model		PE250×400	PE250×400	PE250×750
		Motor		Y180L-6	Y180L-6	Y200L2-6
		Power	kw	15	15	22
		Speed	r/min	970	970	970
	Feeder	Model		GZ2F	GZ3F	GZ4F
		Power	w	150	200	450

Note: Capacity is according to the limestone and passing rate is 80%. All of the specification is just as reference. If there is change of the above specification, it subjects to the newest mtw european trapezium grinding mill's' specifications.

Working Principle

◆ Firstly, raw material should be crushed by the jaw crusher to the size specified, and then the crushed stuff is elevated into a hopper from which the stuff is loaded, through the vibrating feeder, evenly and continuously into the grinding chamber for power-processing. After this, the ground stuff is carried by the air from the blower into the classifier for screening. The fine powers are blow into the cyclone collector and are poured out through the output-powder valve as the final products and the rough stuff after the screening will be recycled back into the grinding chamber for regrinding. The set's airflow system is closely sealed up and circulated under condition of negative and positive pressure.

◆ Because the stuff contain some moisture, and the heat generated during the grinding process makes the moisture evaporated, what's more, the pipeline joints are not airtight and therefore the external air is sucked in, all these will increase air-current in circulation and disturb the circulation balance. To keep the air current balance in circulation can be realized by adjusting the pipeline of extra air-current between the blower and the grinder main from. In this way, the extra air current is channeled into a dust filter which will collect powder carried by the extra air current and then get rid of the extra air current back to the atmosphere after purification.

◆ The grinder is driven by rotation of the central axle through decelerator, with the up end of the axle connecting to a quincunx-rack upon which the grinding equipment is fixed.

◆ The whole set equipment turns together with the axle along the grinding ring while the rollers rotate driven by the fractional force. A set of shovel are installed at the lower end of the quincunx-rack, and positioned at the piece under the lower-end of the rollers. While turning together with the rollers, the shovels shed the stuff onto the gap between the rollers and the ring and the stuff layer is formed there. The rotating rollers, while turning together with the ring, grind the stuff layer into power.

◆ To separate the ground stuff into the fine power-product and the rough stuff is done through vane on the turntable driven by a speed adjustable motor. The turning speed of the vane can be adjusted to the requirement of the fineness of powder products. If more finer powders are needed, the turning speed will be increased so that the rough stuff can be thrown towards the outer wall of the pipeline away from the air current and then back into grinding chamber for redone. Whereas, the powder fine enough will be collected as the final product by the cyclone-collector.

◆ It plays an important role in ensuring the smooth functioning of the grinder. As the highly spinning air current mixed with ground stuff is flown into the cyclone-collector, the ground stuff is separated from the air-current.

Service

Since the establishment, Shanghai Shibang Machinery Co., Ltd has regarded "All is for clients" as its service goal and has provided high-quality, high-taste, high-efficient and all-around-way service for its clients.

Service Promise: from the design process to delivery, we do every step carefully to satisfy clients to the best.

1. Pre-sale services

Act as a good adviser and assistant of clients; enable them to get rich and generous returns on their investments.

- Select equipment model
- Design and manufacture products according to clients' special requirement
- Train technical personnel for clients

2. Services during the sale

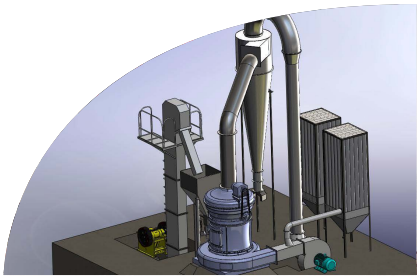
Respect clients; devote ourselves to improving the total value of clients.

- Pre-check and accept products ahead of delivery
- Help clients to draft solving plans

3. After-sale services

Provide considerate services to minimize clients' worries.

- Assist clients to prepare for the first construction scheme
- Install and debug the equipment
- Train the first-line operators on site
- Examine the equipment regularly
- Provide maintenance for big items
- Provide technical exchanging
- Provide perfect service
- Distribute the guarantee fittings door-to-door
- Take initiative to eliminate the troubles rapidly at site



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