LIMING®

MTW EUROPEAN TRAPEZIUM MILL

TOP 1 BRAND OF CHINA'S CRUSHING AND GRINDING INDUSTRY

PRODUCT PRESENTATION

MTW Series European Technology Trapezium Mill is the latest and the largest grinding equipment, with its own knowledge patents, have reached modern advanced level in the world. This series mill absorbing the European advanced technology and many engineer's ripe experience, combining the actual requirement and proposal of our thousands of customers ,have been developed on the basis of our professional engineershard researching .

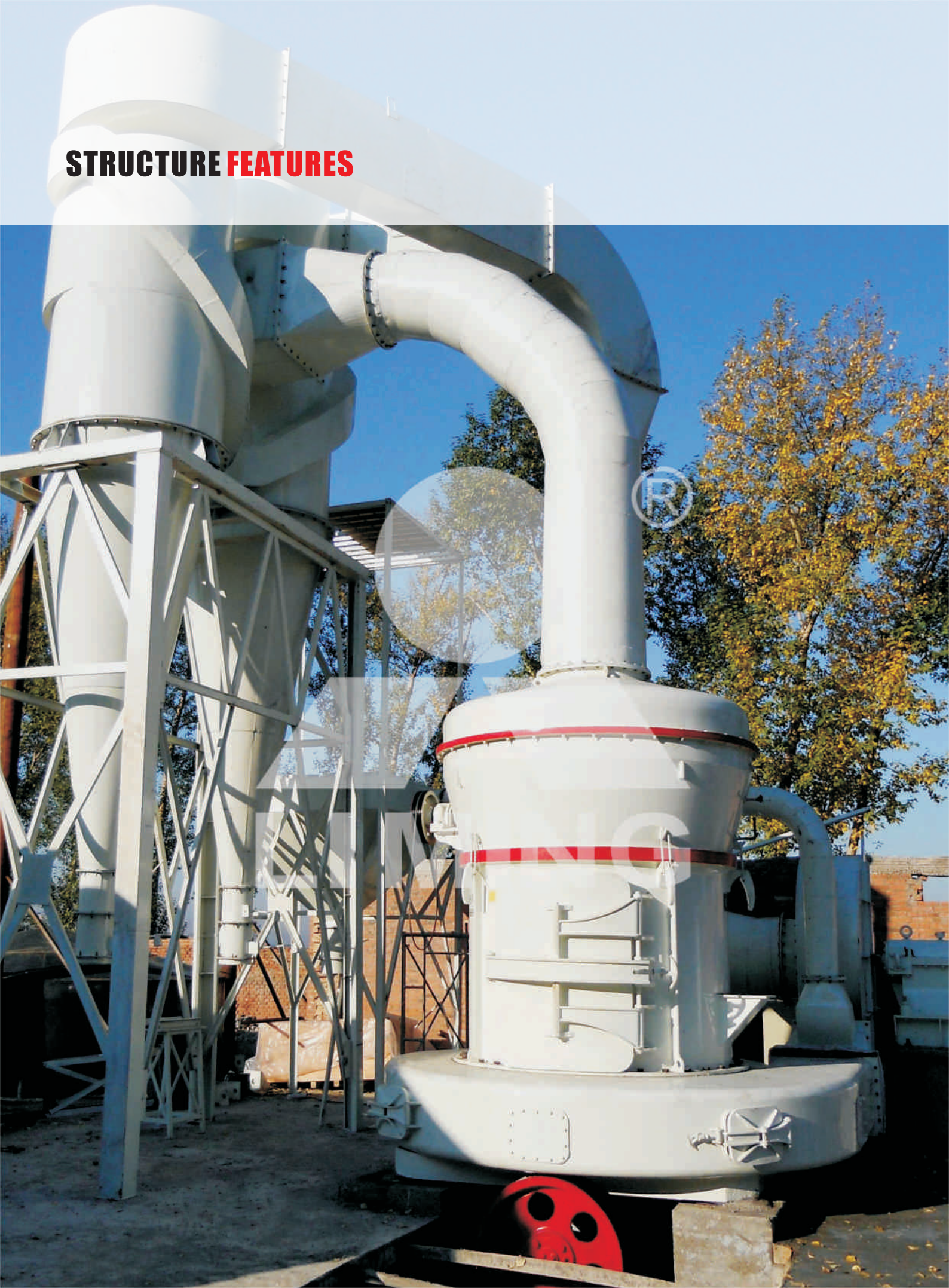
Three Innovative Technologies highlight the value of Liming Brand

1. The linkage pressure of the rollers makes stable operation and advanced capacity.
2. Advanced reliable inner automatic thin-oil lubricating system.
3. Bevel gear overall drive, low energy consumption, high working efficiency.

Purpose and Application Scope

MTW Series European Technology Trapezium Mill can be used for grinding the following non-flammable and non-explosive materials with Moh's hardness and moisture lower than 9.3 and 6% respectively, such as quartz, feldspar, calcite, talc, barite, fluorite, marble, ceramics, bauxite, mineral slag, grain slag, cement clinker, activated carbon, dolomite, granite, , fertilizer, kaolin, coke, bentonite,, pyrophyllite, basalt, gypsum, graphite, etc.

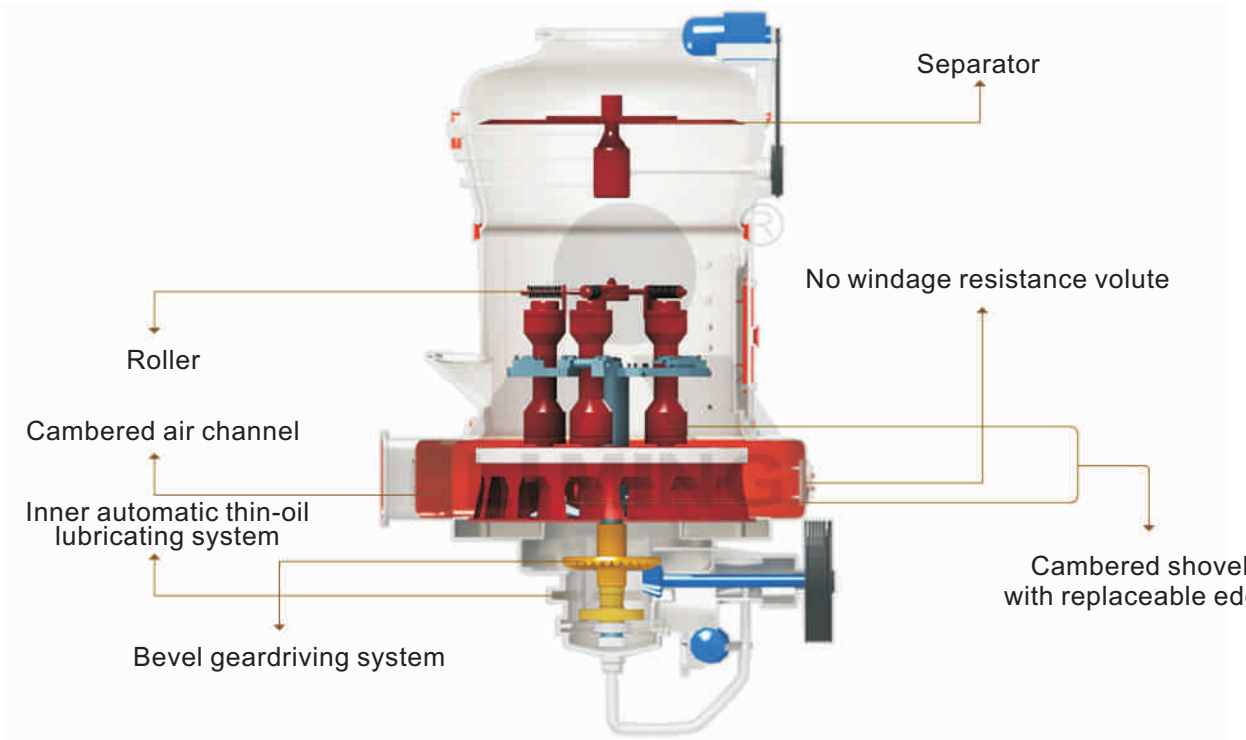
STRUCTURE FEATURES



The working principle of MTW Series European Technology Trapezium Mill

The motor drives the horizontal drive shaft rotating through a V-belt. And the horizontal drive shaft drives the main shaft rotating via the cone gear at the other hand. At the up end of the main shaft there is connected the suspension rack on which the roller assembly is suspended via the horizontal shaft. Owing to such structure, not only the whole set equipment revolves around the central axle, the roller revolves along the inner ring of the ring under the effect of centrifugal force, but also the roller revolves on its own axle. Shovel frame is installed at the bottom end of the suspension rack, inclined shovels are installed at the lower flange of the shovel frame. The front end of the shovel approaches the chassis and the back end situated in a wedge-shaped gap formed by roller and ring. While turning together with the rollers, the shovels scoop up and throw the stuff into the gap between the rollers and the ring and then the stuff layer is extruded and ground there. The airflow coming from the bottom of the ring goes into the grinding chamber and takes the small powders into the separator to get the final products.

The separator makes vane on the turntable rotate via the speed regulating motor, which produces eddying effect to separate the grind stuff into the fine powder-product and the rough stuff. The rotating speed of the vane can be adjusted according to the requirement of the fineness of powder products. If much finer powders are needed the rotating speed will be increased, and the rough stuff can be thrown to the lower part of the grinding chamber and then be regrinded. Whereas, the powder fine enough will be collected as the final product by the cyclone collector.

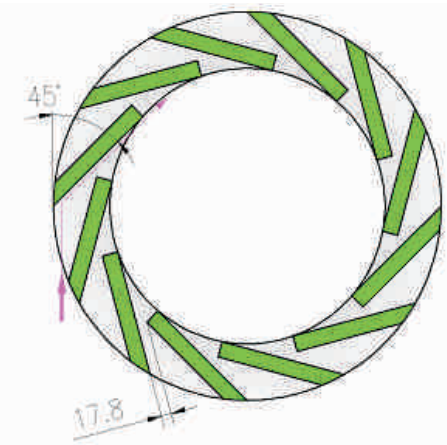


1.The linkage pressure of the rollers
increases single machine processing capacity by 20%

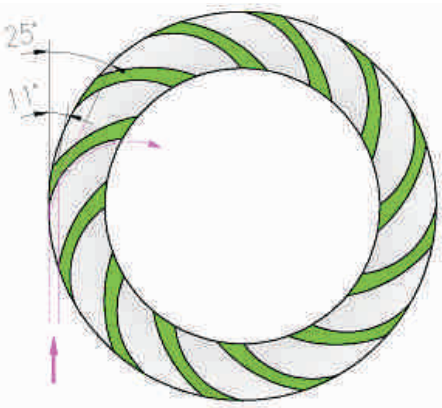
MTW European Tech. Grinding Mill keeps many advantages of TGM grinding mill especially the linkage pressure of the rollers, which greatly prolongs the useful life of the equipment and increases the capacity by 20% under the same power.

2.Cambered air channel with better material flowability
increases the production efficiency by 30%

The curved air channel makes the air flow smoothly and causes low resistance and few blocking, thus increases the production efficiency by 30% ; while the traditional one uses straight-type air channel which often increases eddy vortex and blocking.



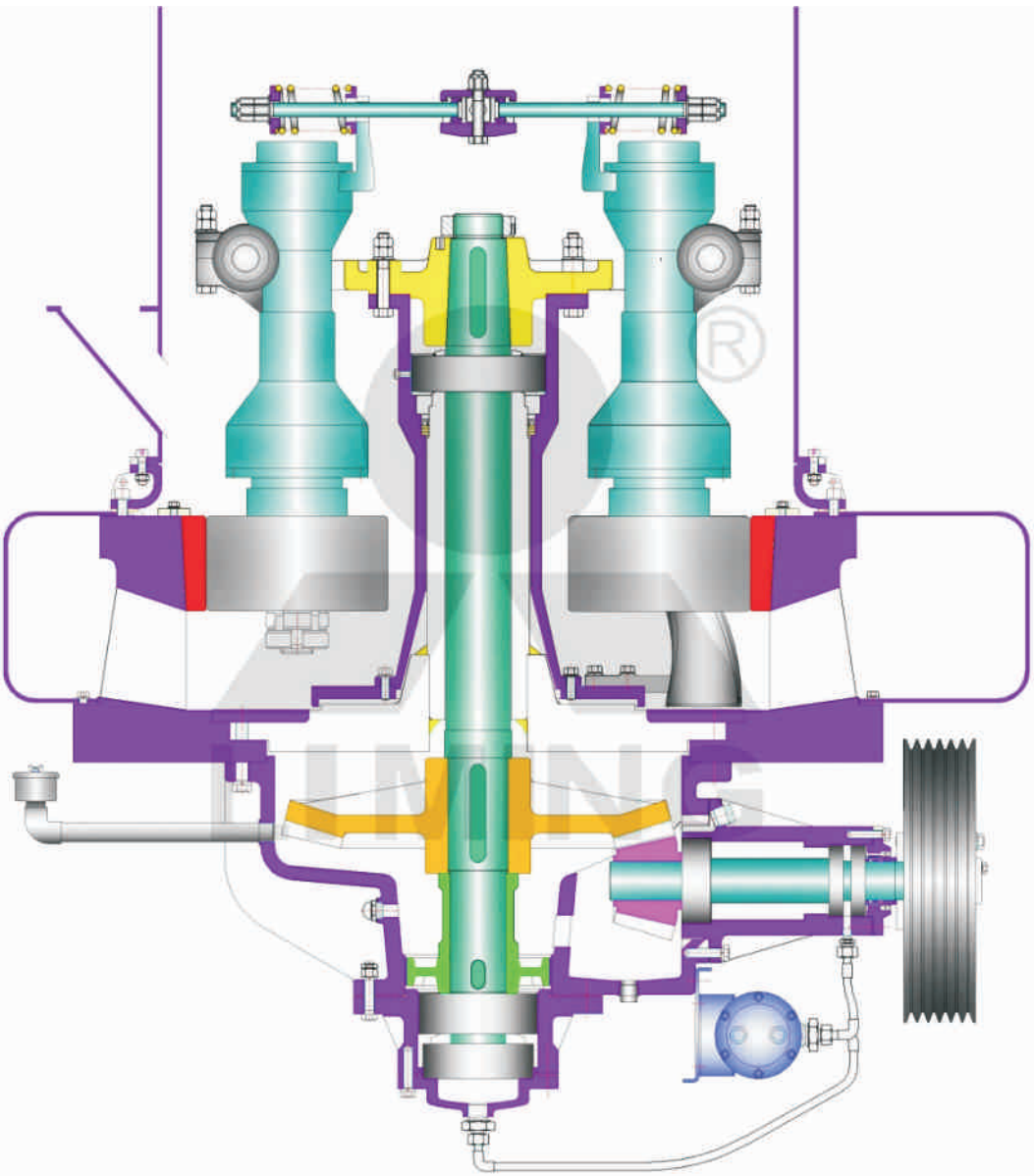
Straight-type air channel



Curved air channel

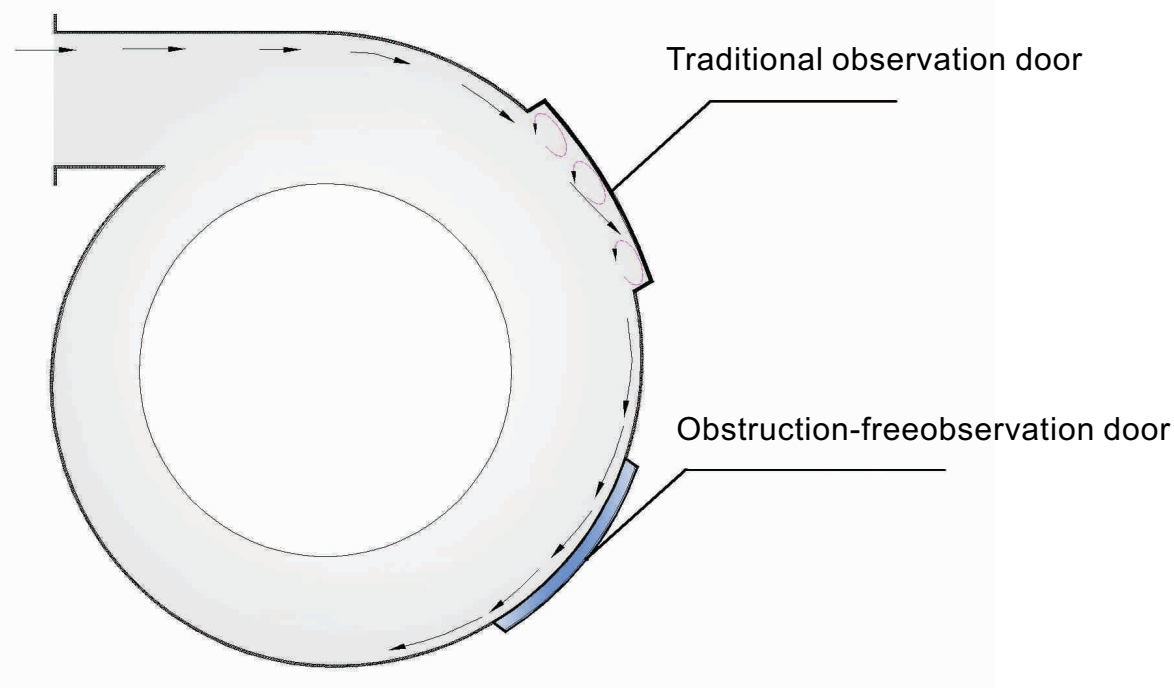
3.Bevel gear overall drive,
low energy consumption, high working efficiency.

The MTW is driven through the bevel gear and compact in its structure, thus it is quite easy to be installed and adjusted; While the traditional mill has to be equipped with a reducer which drives the main axis through coupling, it is rather difficult to be centered while being installed, and it's noise-making and inefficient.



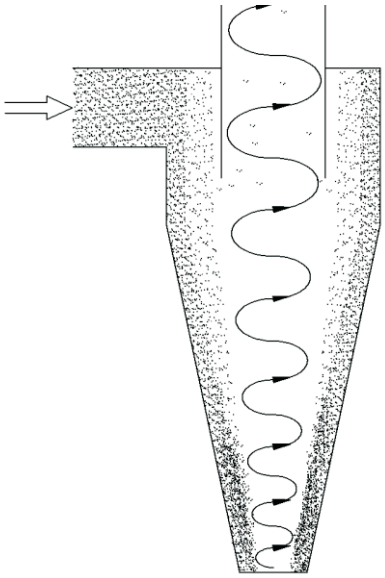
4.No windage resistance volute

The observation window of the air volute of traditional mill is not in the same surface with the volute, causing vortex flow and increasing energy consumption; while the MTW avoids the above problem, and greatly enhances the milling efficiency.

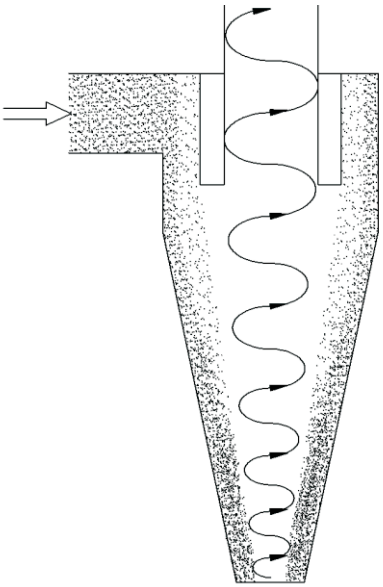


5.Adjustable product fineness and Efficient milling

The frequency control of the classifier and separated cyclone powder collector makes the rotating speed more accurate and the product-classification more efficient.



Common cyclone powder collector



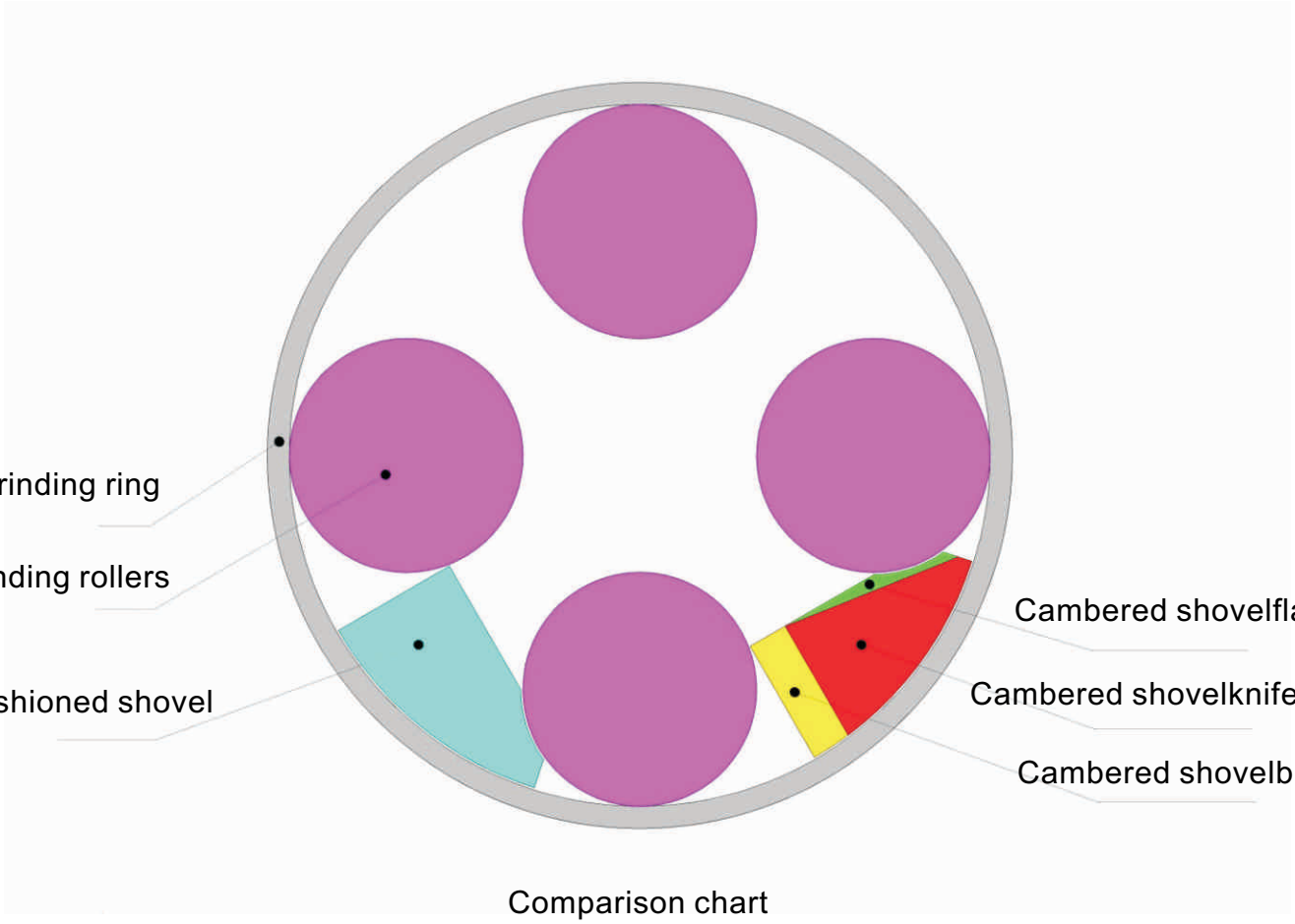
Separated cyclone powder collector

6.Initiate reliable inner automatic thin-oil lubricating system

The traditional mill uses grease lubrication, which makes high resistance and temperature, thus shortening the bearings' life. MTW series mill adopts inner oil pumps, so the main shaft bearing and bevel gear bearing can be lubricated without an additional lubrication system. Meanwhile it has water cooling system which can prolong the equipment's life greatly.

7.Cambered shovel with replaceable edge, which has higher working efficiency and lower cost.

The edge of the blade of traditional mill has faster speed of abrasion. And the blade is a whole plant, if one edge of the blade was abraded, you should change the whole blade, it will waste your material and the working time. But MTW mill will have longer life because of the material of the blade is high wear resistant material. You just need to change the edge of the blade, which increases the material utilization. What's more, The blade of the traditional mill is planar, materials were always accumulated together in one place, which made the central of the roller and ring abraded greatly. But the camber blade do not have this problem, all the upper, middle and lower of the roller and ring can grind evenly, so it will increase capacity.



Comparison chart
between cambered shovel and old-fashioned shovel

Patent Technology:

This new type mill adoptsseveral latestpatent technology, such as arc air channe(Patent Number：ZL 2009 2 0088889.8), cambered shovel(Patent Number：ZL 2009 2 0092361.8) and bevel gear drive inner lubricating system(Patent Number：ZL 2009 2 0089947.9)

Patent Number：ZL 2009 2 0088889.8

Arc air channel

Patent Number：ZL 2009 2 0092361.8

Cambered shovel

Patent Number：ZL 2009 2 0089947.9

Bevel gear drive
inner lubrication system

Technical Parameters

Model	MTW110	MTW138	MTW175	MTW215
Quantity of rollers (pcs)	4	4	5	5
Iinner diameter of ring(mm)	Φ1100	Φ1380	Φ1750	Φ2150
Rotary speed of main frame(r/min)	120	96	75	65
Maximum feed size(mm)	<30	<35	<40	<50
Output fineness μm(mesh)	38-1600 (10-400)	38-1600 (10-400)	38-1600 (10-400)	38-1600 (10-400)
Capacity (tph)	3.5-10	6.5-15	13-20	30-45
Dimension (L×W×H)(mm)	8425x8000x8642	10830x9470x10227	12182x8435x9916	14730x10860x10341
Weight (t)	18	28.5	38	92

Note: the capacity in the above chart refers to that of calcite with a passing-through of 80%. Any change of technical data shall be subject to the instruction attached.

Model		Item	Unit	MTW110	MTW138	MTW175	MTW215
Main mill		Model		Y280M-6	YX3-315M-6	Y2-355M2-8	Y3-355-4-8
		Power	KW	55	90	160	280
		Rotating speed	RPM	980	990	740	740
Blower motor		Model		Y250M-4	YX3-315S-4	YX3-315L2-4	Y355L2-4
		Power	KW	55	110	200	315
		Rotating speed	RPM	980	1480	1480	1480
Classifier		Model		132M-4	YVP200L2-6	YVP250M-6	YVP280M-4
		Power	KW	7.5	22	37	90
		Rotating speed	RPM	1440	990	980	1470
Auxiliary equipments	Bucket elevator	Model	/	TH250	TH250	TH315	TH315
		Motor model		Y100L2-4	Y100L2-4	Y100M2-4	Y355L2-4
		Power	KW	3	3	4	11
		Rotating speed	RPM	1420	1420	1420	1440
	Jaw crusher hammer crusher	Model		PE250x400	PE250x400	PE250x750	PC1010
		Motor model		Y180L-6	Y180L-6	Y200L2-6	Y315M2-6
		Power	KW	15	15	22	110
		Rotating speed	RPM	970	970	970	990
	Feeder	Model		GZ2F	GZ3F	GZ4F	GZ5F
		Power	KW	0.15	0.2	0.45	0.65

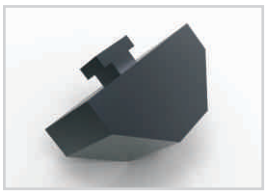
In order to enhance your experience of our equipment during the operation, we strongly recommend spare parts originally manufactured by LIMING Heavy Industry. These high quality spare parts are manufactured using advanced metallurgy techniques, precise machining, and perfect compatibility, ensuring the lowest malfunction operation and creating higher value for our customer.

Crushing Plant

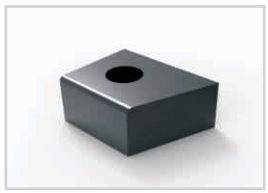
Sine Liner

Spring

Toggle Plate



Guard Liner Plate



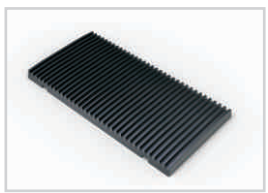
Impact Block

Wearproof Plate

Impact Plate

Tension Rod

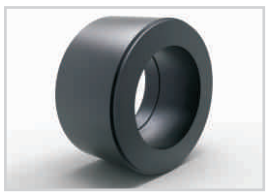
Feed Eye Ring



Movable Jaw Plate

Grinding Plant

Ring



Roller

Shovel Base

Shovel

Gland Arove Roller Sleeve

Roller Sleeve

Roller Shaft

Classifier Impeller

Lining Plate

Air Way Guard Plate

LIMING

PRODUCT LIST

Production Line

Stone Crushing Line
Sand Making Line
Industrial Grinding Line

Grinding Plant

LM Vertical Mill
MTW European Trapezium Mill
LUM Vertical Roller Mill
TGM Trapezium Mill
T130X Superfine Grinding Mill
YGM Series Suspension Mill
HGM Series Micro Powder Mill
Coarse Powder Mill
Raymond Mill

Crushing Plant

HJ Series Jaw Crusher
European Type Jaw Crusher
European Type Impact Crusher
Impact Crusher
Jaw Crusher
HPT Hydraulic Cone Crusher
HST Hydraulic Cone Crusher
CS Series Cone Crusher
Spring Cone Crusher

Sand Making& Screening Plant

VSI5X Vertical Shaft Impact Crusher
VSI Vertical Shaft Impact Crusher
PCL Vertical Shaft Impact Crusher
YKN series vibrating screen
Vibrating Screen
Sand Washing Machine
Belt Conveyer
Vibrating Feeder

Mobile Crushing Plant

Crawler Mobile Crushing Plant
Mobile Primary Jaw Crusher
Mobile Impact Crusher
Secondary Cone Crusher
Multi-Combination Mobile Crusher
Mobile VSI Crusher
Mobile Vibrating Screen

QUALIFICATION

GOST Certificate

Grinding Plant

Crushing Plant

Mobile Crushing Plant

CE Certificate

Grinding Plant

Crushing Plant

Sand Making Plant

ISO9001-2008
Quality Management
System Certification

Environmental management
system certificate

Service – With me, enjoy your pleasant journey.

Liming has the most experienced team of engineers with professional knowledge and spirit of dedication. To serve the clients more conveniently, they scattered all over the world to work all year round. From the site planning to the drawing design, from the technical training to the installation and debugging, from the whole working line that values millions to the small pinion that looks insignificant, they fully understand the influence factors of actual situation on customer business, and create successful solution to improve the production efficiency and the environmental quality for customer operating agency.

LIMING

WORKSHOP

ENTERPRISE PROFILE

Henan Liming Heavy Industry Science & Technology Co., Ltd. , established in 1987, is the leading enterprise of mining machinery in China.

Liming Heavy Industry is chronically committed to the research and develop of manufacturing of large infrastructure projects, such as construction, energy, transportation, etc. and provides various technical solutions and auxiliary products. “Made in Liming” is highly praised by our cooperative partners from more than 130 countries and regions overseas, such as Russia, Kazakhstan, Azerbaijan, Turkey, Kuwait, South Africa, Egypt, Vietnam, Malaysia, India, Australia, Korea, Canada and the European Union,etc. Liming is deserved to be one of the most excellent enterprises with the most industry customers and the most widely sales level service network.

CONTACT US

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