



RMX/Q

STAINLESS STEEL DOUBLE DECK ROLLERMILL



The RMX/Q roller mill is a machine with an innovative design, built with special attention to hygiene. This is confirmed by the choice of materials used.

Stainless steel

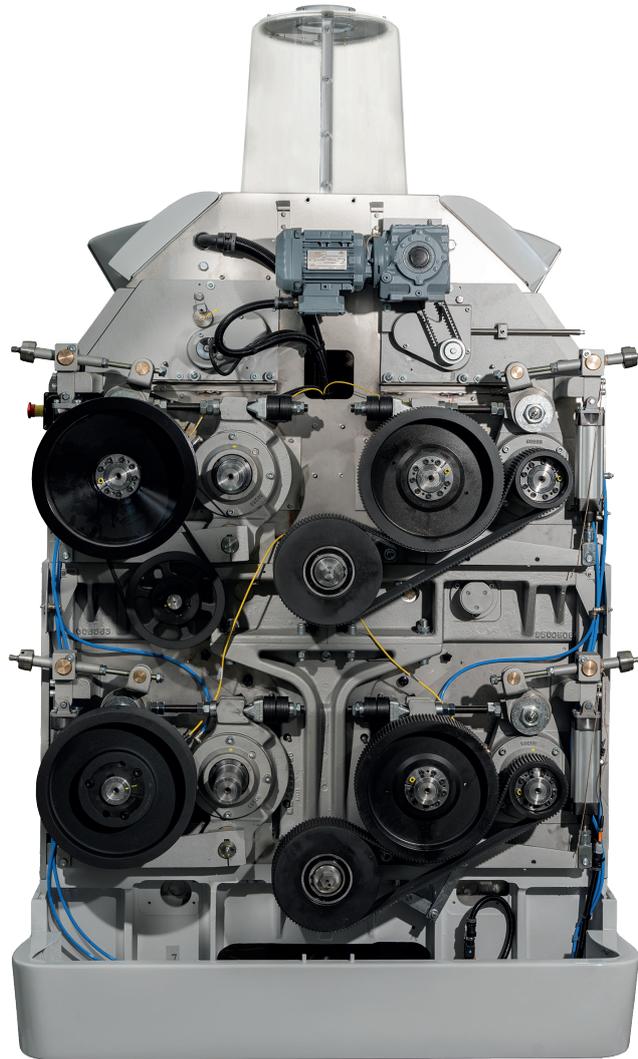
Stainless steel is the material dominating the entire structure. The surface finishing is obtained by the “microsphere polishing” technique assuring easy cleaning and maintenance as well as absence of molds and bacteria. Stainless steel unloading hoppers are integral parts of the machine.

Acciaio

Carbon steel base. With the support of modern CAD 3D design technology it was possible to convey all structural forces onto the basement. Thus guaranteeing a good sturdiness and resistance of Ocrim roller mills. Unmatched is the level of mechanical sturdiness and vibration absorption compared to other materials or modular bases. This translates into an exceptional grinding force, low noise level and durability.

Composite materials

The protection covers are made of composite non-deformable material (sandwich process) and are granting, at the same time, high result of soundproofing.



The 4 grinding roll assemblies rest on the upper and lower iron basements. The assemblies are compact, independent and can be removed quickly using simple operations thanks to the extraction system on rolling guides placed on an eccentric. These modules, identical to the ones already used with success on the RMX roller mill, allow easy maintenance, which would otherwise be difficult due to the size of the RMX/Q.

The connecting column structure between the upper and lower pair of rolls was designed following the “lines of force”, thus favoring the direction of stress flow generated during grinding. The geometrical and dimensional constraints, imposed by the presence of superimposed roll assemblies, were overcome thanks to three-dimensional software and the invaluable experience of our production department. This combined effort has produced unique grinding roll coverage, capable of guaranteeing perfect tightness and avoiding unsanitary deposit of product.

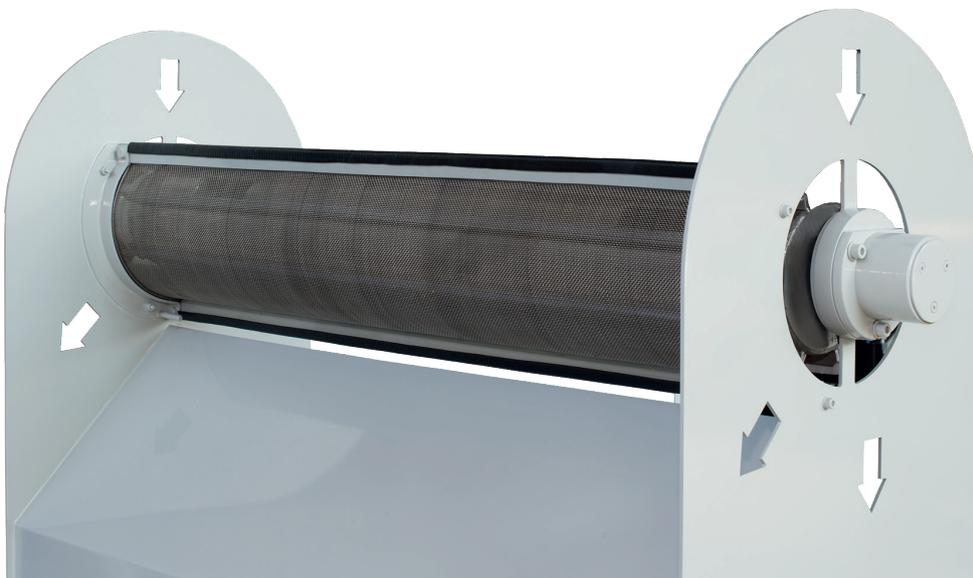
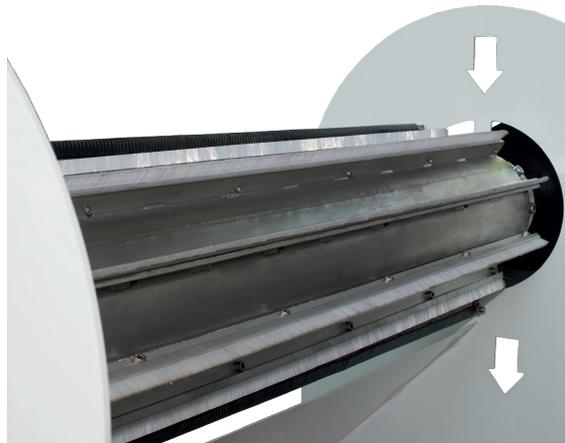
The feeding group is another independent module, easy to assemble and disassemble. The polycarbonate feed tube has a large capacity and the corners are designed to allow a smooth flow of the stock thus avoiding “bridging” and unsanitary accumulation on the walls.



Basic functions

The feed rolls revolutions are regulated by an inverter. The level in the feed tube is detected by a capacitive probe. Automatic adjustment maintains product level at set value. It is always possible to choose type of operation at fixed revolutions by disabling the adjustment. In this case it is possible to manually regulate the feed valve in order to reach the best milling conditions. A patented system allows setting of automatic cleaning cycle of the feed tube. The electronic system is remarkably simple to use: initial calibrations as well as adjustment settings are made by means of the built-in control panel without intervening on the single components such as the inverter and adjustment probe.

The special feature of the OCRIM RMX/Q double deck rollermill lies in the intermediate sieving system. A centrifugal sieving unit is placed between the first and second pair of milling rolls to optimise the product load on the lower milling rolls and to prevent the product, which does not need the grinding passage below, from bypassing it. The gasket that is placed on this sieving is defined and chosen on the basis of the relative grinding passage.



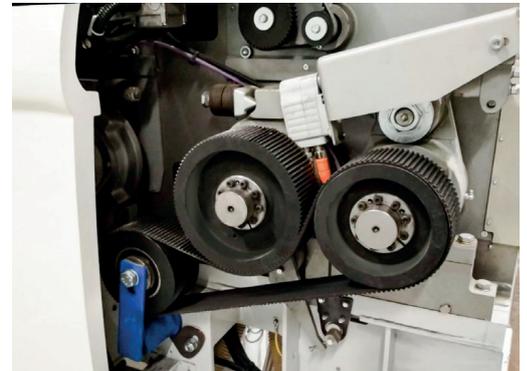
Optional functions/equipment

1. Automatic roll gap adjustment

The roll gap is automatically adjusted by means of a servo assisted movement system operated by step motors. The position is in turn controlled by a micrometric precision potentiometer. The roll gap adjustment system does not depend on the roll engagement and disengagement pneumatic cylinder. In case of emergency, the adjustment mechanism may always be manually operated by means of handwheels. The servo assisted system allows grinding roll position to be controlled remotely by means of standard Profibus communication bus. This translates into simultaneous adjustment of all roller mills in the milling section based on preset recipes, transmitted by the plant's central control system at the beginning of every production cycle.

2. Automatic tensioning system

The belt drive system is complete with an idler wheel for belt tensioning. In this case, automatic tensioning ensures a safe and reliable hold over time, resulting in maintenance and energy savings.



3. Revolutions electronic control

The revolutions of the grinding rolls are controlled by an inductive sensor. Any possible discrepancies in the transmission system are immediately reported to the central control system.

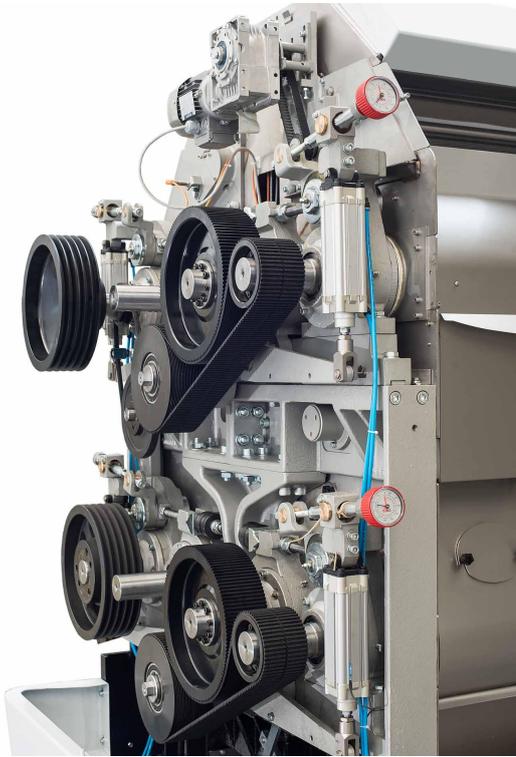
4. Control panel "touch screen"

The careful attention to sanitation determined the choice of the control panel "touch screen". This innovation resulted in the elimination of all selectors, push buttons and signalling lamps on which dust deposits. Thanks to a special cleaning function, the screen can be easily cleaned also during operation.

5. Electrical safety - easy installation

The RMX electrical installation guarantees maximum safety. In fact the isolating switch, which can also be activated in case of emergency, blocks off access to electrical chamber equipment and interrupts all on-board circuits. This procedure eliminates the risk of dangerous contacts with power circuits and injuries due to unexpected mechanical movements. All equipment necessary for voltage transformation is built-in. The electrical installation simply requires a single-phase feeding and a driving signal. There are no hidden costs for external equipment and circuits in the electrical panel.





6. Compressed air elimination

The version of the automatic roller mill includes the option of having the roller mill free of compressed air. The connection to compressed air is no longer required as the pistons for engaging and disengaging the rolls are controlled by the servo-driven movement of the automatic roller mill. This guarantees savings in terms of air consumption and especially in terms of maintenance.



7. @mobile - centralised PLC

The @mobile is the interactive management system for the automatic roller mill. It is a multifunctional system that makes the roller mill a smart machine. The @mobile involves the removal of touch panels from all equipment in the roller mill room and the addition of 2 tablets for the management and control of these machines. By placing the tablet on the roller mill, it automatically detects the passage of the machine and can operate with numerous functions available. Furthermore, for an entire roller mill room, one centralised command and management PLC can be provided, eliminating all individual PLCs from each machine.

This guarantees:

- simple and quick control of the roller mills
- lower maintenance costs and times
- significantly lower roller mill replacement parts costs

Other options

- Automatic greasing of bearings
- Grinding roller temperature detection
- Bearing temperature detection

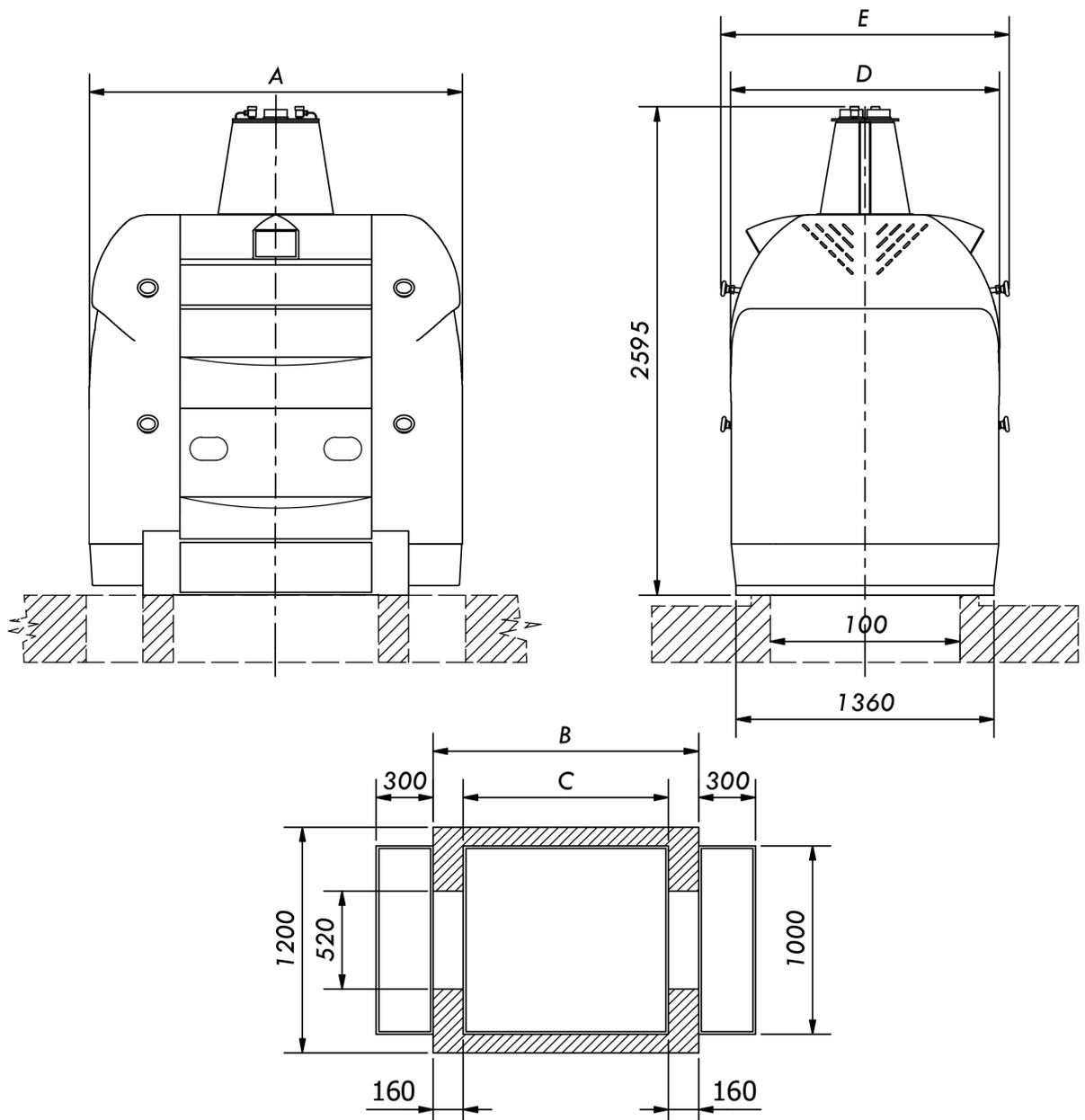


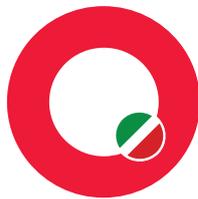
Technical information

Model	Dimensions (mm)					Roll dimensions (mm)		Maximum capacity* (t/h)	Maximum installed power (kW)			Net weight (kg)	Shipping volume (m ³)
	A	B	C	D	E	Ø	Lunghezza		Motore		Gear motor		
									50 Hz	60 Hz			
RMX 080Q	1780	1200	880	1420	1520	250	800	6	30	36	0,55	5340	8,8
				1520	1660	300						6100	
RMX 100Q	1980	1400	1080	1420	1520	250	1000	7,5	37	45	0,55	5970	9,8
				1520	1660	300						6930	
				1420	1520	250						6750	
RMX 125Q	2230	1630	1330	1520	1660	300	1250	9,5	37	45	0,55	7950	10,8
				1520	1660	300						7950	

*Referred to B1 passage - Type of product: wheat

Technical features of the equipment can be modified without any obligation of notice. Data may be not fully in accordance with the market versions.





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