

# MSG

Dry Milling Line

MSG CENTRIFUGAL MILL





#### FGG + ACG + MSG Dry Milling Line



Dry milling line consists of three elements: FGG - Feeding Group, ACG - Air Cleaner and finally the Centrifugal Mill MSG.

### FGG Feeding Group





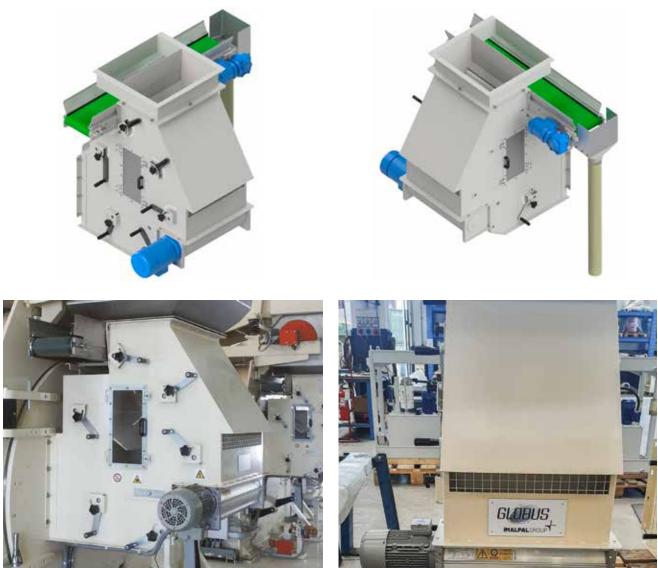




FGG is a vibrating channel for constant wood chips feeding and magnetic removal with possibility to setup different angle according to chips moisture and size.

#### ACG Air Cleaner

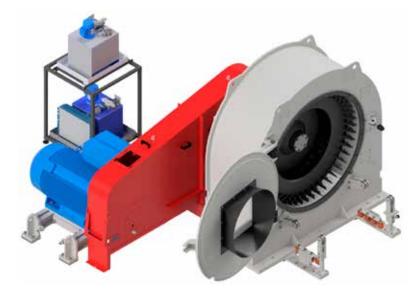




ACG is an air cleaner able to eliminate foreign bodies from the material (stones, glass, etc.). Turbulence generated by "S" channels allow to eliminate bigger and heavier foreign bodies.



## MSG Centrifugal Mill



MSG is a refining mill, ideal for the production of dry flakes suitable for surfaces and core layers in particleboard production or multilayer LSB product. The innovative MSG can be equipped with standard screen support ring for Conidur screen and with support ring for special "slotted hole" screen, which has four cutting edges.

Furthermore, the special design of the Mill, allows the replacement of the ring in only few minutes thanks to a special hydraulic changing system.







Vibrating feeder with magnetic drum

Air cleaner for stones and heavy contaminants

#### **Technical features**

#### **Benefits**





The best combination on the dry area is Centrifugal Mill **MSG 1500.760** & Knife Ring Flaker **SRC 14.690** 

- Dry flake refining mills designed for surface and core layer processing in particleboard production
- Dual screen support system, compatible with Conidur screens and slottedhole screens featuring four cutting edges for enhanced performance
- Quick screen replacement in just 8 minutes, thanks to a special hydraulic changing system
- Automated oil lubrication system for main bearing longevity and reduced maintenance
- Adaptable for dry processing with a special ring configuration
- Reduces fines compared to standard Conidur refiner mills
- Achieves up to 50% energy savings for greater efficiency



+0.25

#### **Material** distribution



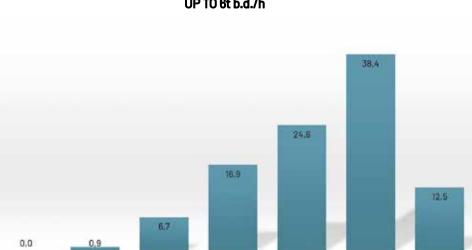
• Example distribution with Conidur Ring 3 mm

• Example distribution with Slotted Hole Ring 14 x 100 mm



3.0

2.0



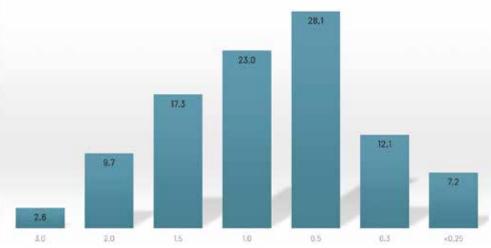
UP TO 10t b.d./h

1.0

0.5

0.3

1.5



UP TO 6t b.d./h



## Hydraulic extraction

- With the hydraulic extraction it is possible to switch from Conidur to Slotted hole ring according to production needs in just a couple of minutes
- Ring replacement is extremely easy compared to other machines available on the market that need forklift, several operators and more time to carry out the same operation

• Thanks to this additional benefit it is possible to manage as well the rotor extraction without using forklift but simply using the trolley supplied as option

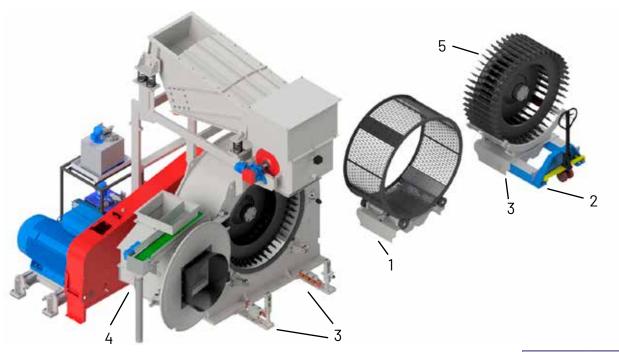




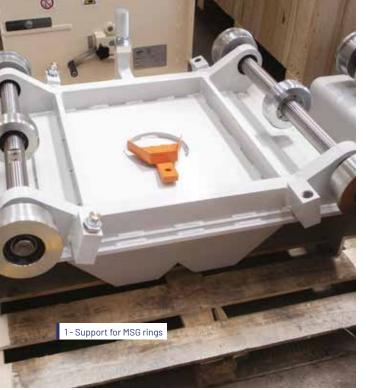




## **Additional equipment**



			GLOBUS		CUSTOMER	
	SCOPE OF SUPPLY			EXCLUDED	OPTION	SUPPLY
1	SRG 760	No. 2 Support for MSG rings complete with rotating eccentric shafts with safety blockage	<b></b>			
2	HTG 3T	No. 1 Hydraulic trolley for ring transport	7			
3	EXR 760.45	No. 1 Extraction device for rotor (including support guide on the machine	<b>\</b>			
4	NTL 02.1	No . 1 Belt NTL 02.1 for magnetic part collection complete with: motorized drum, scraper, discharge chute for heavy pieces			√	
5	RTR 760.45	No. 1 Additional spare rotor			$\checkmark$	







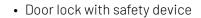






#### **Technical details**

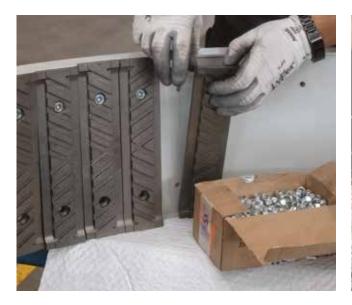




• Driving group









• Easy replacement of wear parts

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### **Technical details**

#### **HYDRAULIC GROUP**

#### HYDRAULIC POWER PACK FOR RING EXTRACTION AND FORCED LUBRICATION:

- Bearing forced lubrication
- Oil level sensor
- Temperature control of the bearing and on the tank
- Cooling fan for lubrication unit





## **Typical installation**







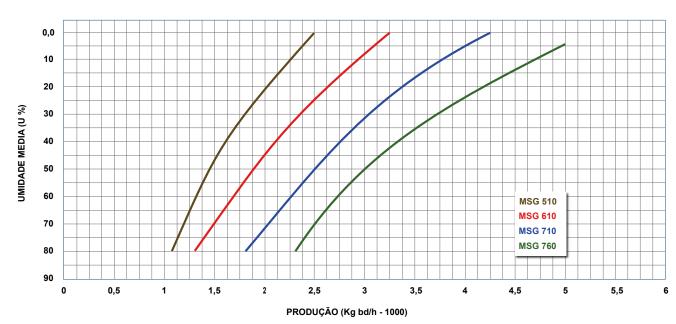




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## MSG Centrifugal mill

FACTORS FOR PRODUCTION CALCULATION						
SCREEN	К					
CONIDUR 4,0 mm	1,8 - 2,0					
CONIDUR 3,5 mm	1,3 - 1,5					
CONIDUR 3,0 mm	1,0					
CONIDUR 2,5 mm	0,9					
CONIDUR 2,0 mm	0,8					
CONIDUR 1,5 mm	0,7					
CONIDUR 1,0 mm	0,6					
WOOD						
POPLAR	0,7					
ALDER-PINE	0,8					
FIR - CHESTNUT	1,0					
BEECH - BIRCH - OAK	1,2					
SHAPE						
FLAKES	1,0					
SAWDUST	1,1					
PLANING	0,8-0,9					
SPLINTERS	0,7-0,8					
CHIPS	0,5-0,6					



#### EXAMPLE:

Moisture: U = 5% / SCREENS: CONIDUR 3,0 / WOOD: FIR / SHAPE: SAWDUST CAPACITY CALCULATION MSG 760: 5000 Kg bd/h (U = 5%) x SCREENS K1 x WOOD K1 x SHAPE K 1,1 = 5500 Kg bd/h

MODEL	MSG 510	MSG 610	MSG 710	MSG 760
ROTOR DIAMETER	1000 mm	1200 mm	1400 mm	1500 mm
GRINDING SECTOR WIDTH	225 mm	225 mm	265 mm	265 mm
SCREEN WIDTH	2 x 145 mm	2 x 180 mm	2 x 200 mm	2 x 225 mm
RECOMMENDED MOTOR	132/160 kW	160/200 kW	200/250 kW	250/315 kW
WEIGHT WITHOUT MAIN MOTOR	1900 kg	3000 kg	4200 kg	4850 kg



#### Different configuration according to needs



Recovering and recycling wood is not only economically profitable but it is also an extremely useful way of protecting the environment.

With our centrifugal mills it is possible to convert waste wood into good flakes suitable for PB/SPB, OSB/LSB/FOSB.



# MSG for recycled wood







#### Prodotto in Italia



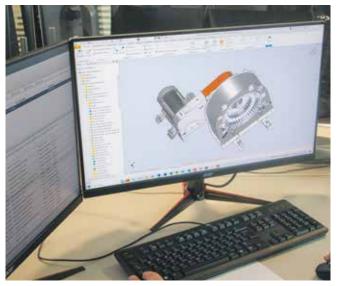
Our design and construction idea is based on the customer's needs and the material we need to grind. Providing valid technological solutions is an integral part of our daily life.

Each component is designed and manufactured in Italy in our headquarters in Galliate, just 20 minutes from Milan.

Italy is a nation of great excellence in the field of technology and innovation. The spirit of research and the continuous pursuit for innovation are factors that have always characterized our growth and that have allowed us to become a reference in the world of woodworking machines.







## IMALPAL Group







The IMALPAL Group is formed from the union of three major corporations, IMAL, PAL and GLOBUS, three well familiar names in engineering machinery and plants for the wood-based panel and recycling industries for over 50 years, and renowned worldwide for their long experience in the design and construction of complete plants and machinery to convert and transform raw wood-based materials and all kinds of waste in general into new ecological and eco-sustainable finished products. PSP and ITALSORT joined the group respectively in 2015 and 2020, completing the range of products. Today the IMALPAL Group has further expanded its specialization and leadership into broader fields through new acquisitions and the continual research and development of new technologies, many of which have been patented.

The Group is able to offer tailor-made and turnkey solutions for the manufacture of machinery or complete plants for the production of PB\SPB, MDF\HDF, OSB\ LSB\FOSB panels, insulation board, pellets, pressed pallets, pallet blocks, biomass energy plants, drying systems and power generation, as well as the treatment of industrial and municipal waste such as plastic, sludge and wood to maximize material recovery for the production of energy and minimize the waste to landfill sites. The systems and equipment manufactured by



the IMAL-PAL Group are renowned worldwide for their top-quality construction and design, advanced software and process control and continual innovations to improve product quality and cut production costs. Over the last ten years however, in their constant endeavour to evolve and progress, the Group has adapted and applied their long experience, know-how and innovative solutions to design and develop technical solutions that are the Best Available Technologies acknowledged on a worldwide scale.

IMAL, PAL and GLOBUS: three well familiar names in engineering machinery and plants for the wood-based panel and recycling industries for over 50 years



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