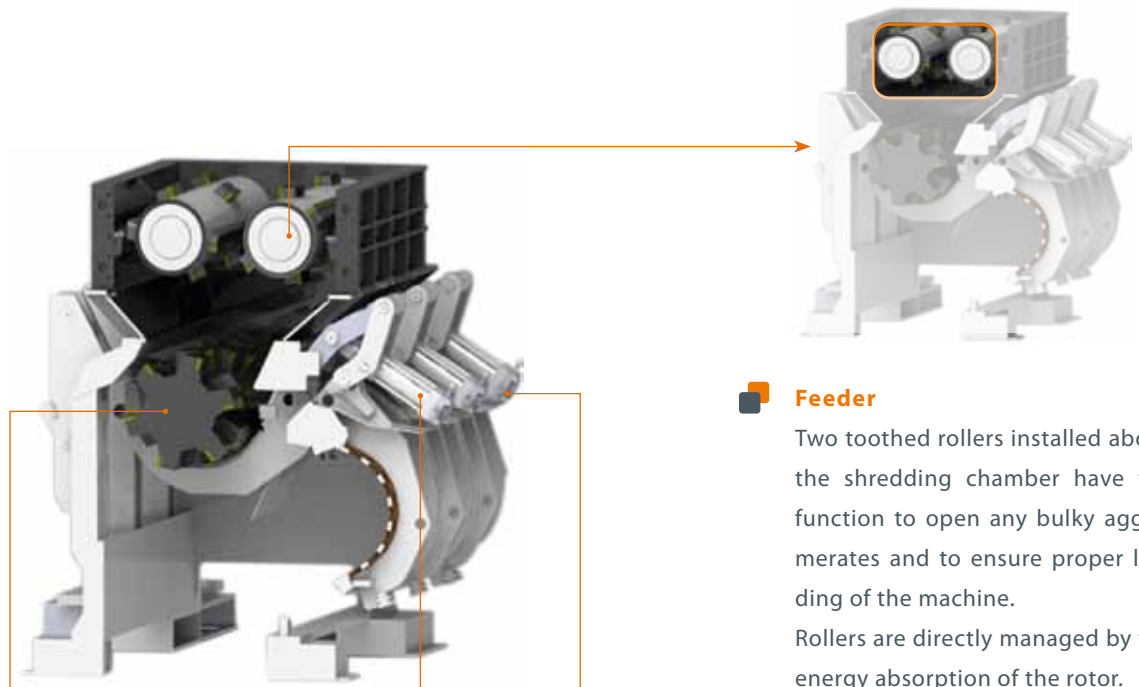


A series of innovative shredders



Feeder

Two toothed rollers installed above the shredding chamber have the function to open any bulky agglomerates and to ensure proper loading of the machine. Rollers are directly managed by the energy absorption of the rotor.



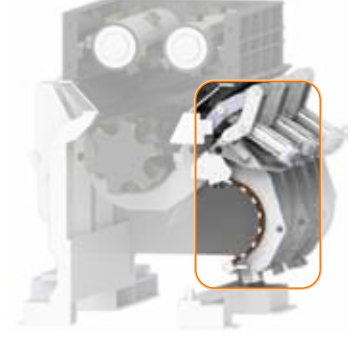
Rotor

The rotor is designed keeping the Molinari design characterized by a hollow rotor with staggered blades, to ensure the energy saving. The blades have four cutting edges and can be sharpened.



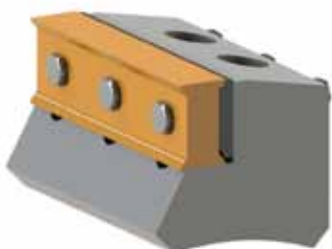
Fixed blades

The fixed blades are mounted on the screen-holder. In case of intervention of the Release System, the fixed blades are moved away from the rotary ones, to limit the damages caused by noncompliant material. The distance between the fixed and the rotating blades can be adjusted without opening the shredding chamber.



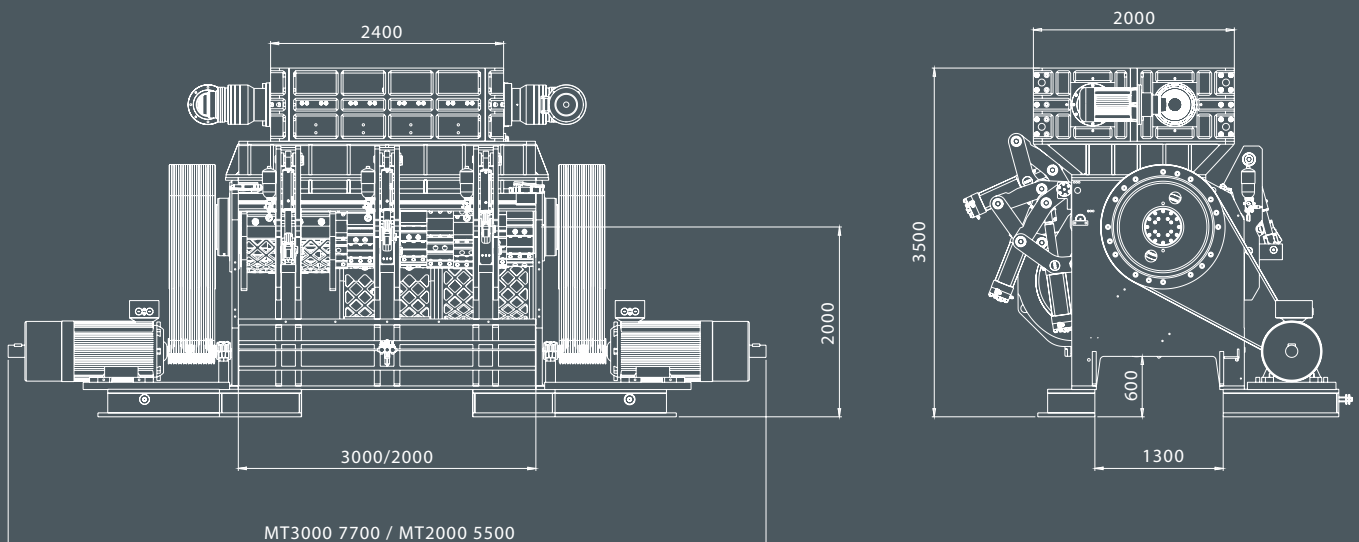
Screen-holder

The screen-holder is divided into three sectors, on each of which are installed two screens, to make them more manageable. The Release System allows to unfasten the screen-holder to avoid damage due to the presence of non-compliant material.



Technical Features

General characteristics	MT3000	MT2000
Weight:	40 ton	30 ton
Loading hopper:	for mechanical loader or for conveyor belt	for mechanical loader or for conveyor belt
Unloading hopper:	for conveyor belt	for conveyor belt
Shredding chamber	MT3000	MT2000
Size:	3000 x 2150 x 1800 h	2000 x 2150 x 1800 h
Rotor:	diam. 850 mm / large 3000 mm	diam. 850mm / large 2000 mm
Rotary blades:	n° 66 usable 4 times before sharpening	n° 42 usable 4 times before sharpening
Fixed blades:	n° 12	n° 8
Power:	n° 2 x 160 – n° 2 x 315	250 kW
Drive:	belts / hydraulic	belts / hydraulic
Forced Feeder		
Size:	4250 x 1600 x 700 mm	
Rollers:	n° 2 - large 2000mm – diameter 700mm	
Tools:	n° 44	
Power:	n° 2 x 30kW	
Bearing protection:	seals / compressed air	
Other components		
Opening and closing of the screen holder by hydraulic unit		
Release System - mechanical release system of the screen holder from the working position		
Filling level indicator on the loading hopper		
Remote assistance		



Contacts

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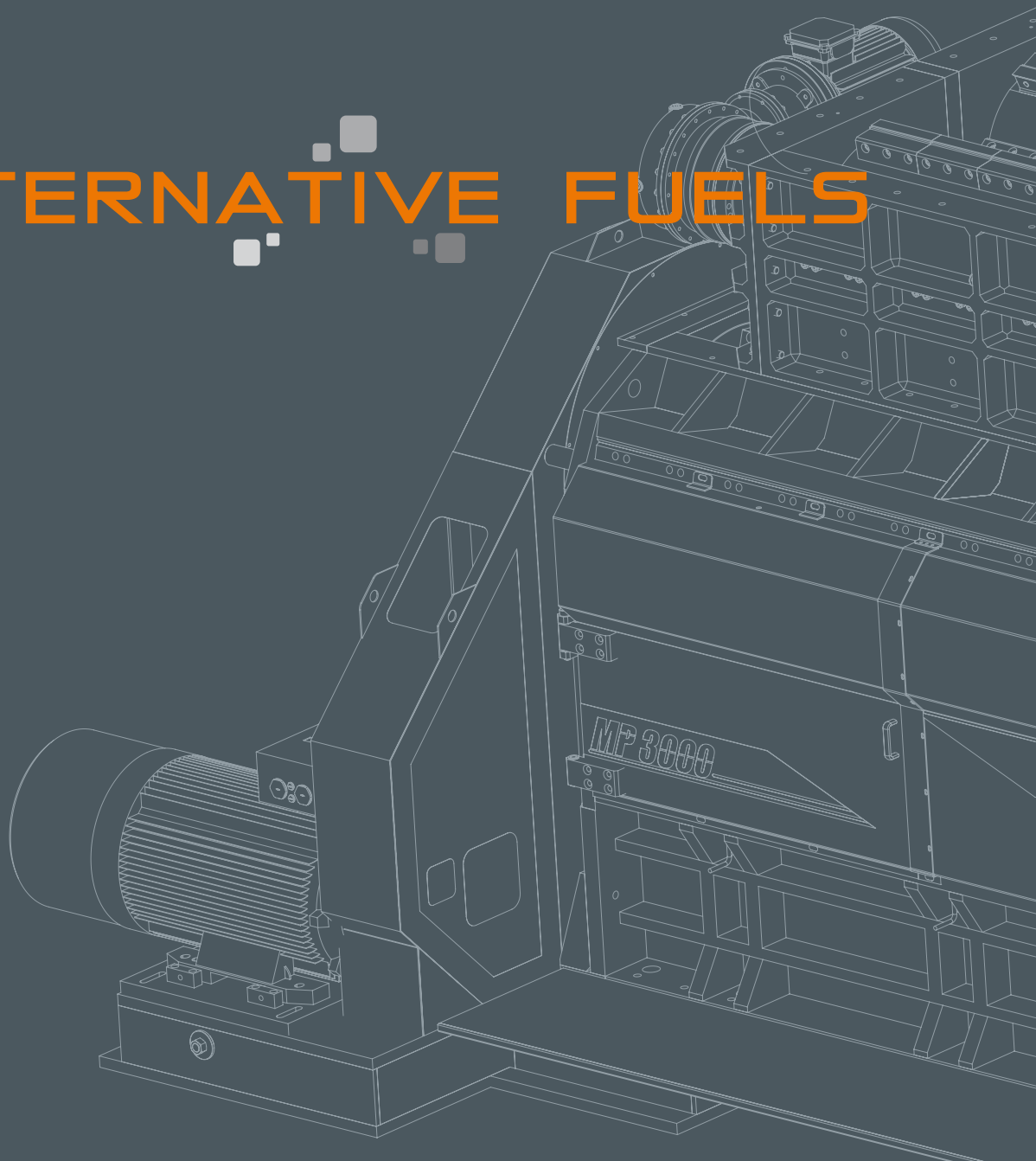
LENNA (BG)





Series MT : single - shaft secondary shredder for RDF

ALTERNATIVE FUELS



Single-shaft secondary shredder for the treatment of waste and biomass

The Molinari single-shaft shredder is an innovative machine in the field of grinding technology. It provides greater productivity than traditional fine shredders with presser, and may reduce energy consumption by up to 30%.

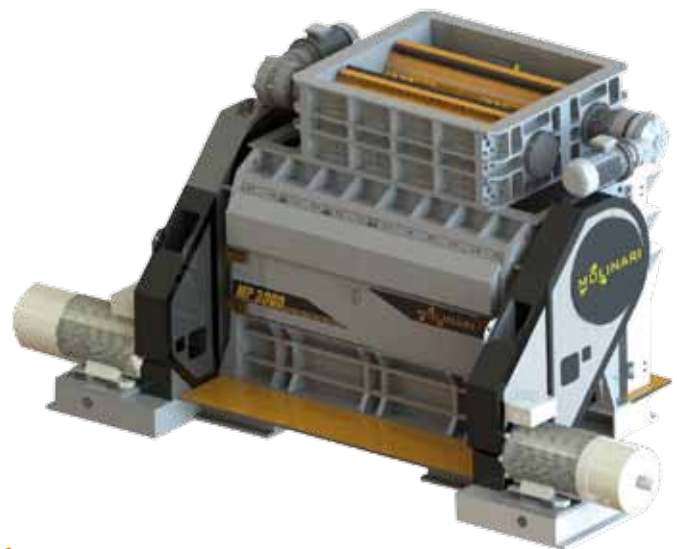
Unlike the other machines on the market, the Molinari single-shaft shredder does not need a presser to push the material against the rotor, thanks to the patented 'hollow rotor'. In fact, it is able to 'grab' the material without the aid of other devices, with the advantage of working in a continuous way and with a constant energy consumption. Speed can be adjusted from 100 to 300 rpm, to use its full potential in terms of productivity and quality.

Above the grinding chamber, a feeding device is mounted, which is composed of two rollers with teeth. They have the function of opening any agglomerate and bulky material, and particularly, of regulating the flow of material in the lower part where the cutting down takes place. On the basis of the energy consumption, the rollers can stop interrupting the supply of the material, allowing the consumption to fall within the optimum parameters.

It is equipped with a safety Release System designed to protect the rotor in case of presence of non-compliant materials.

The screen covers the 50% of the rotor. It is manufactured on Client's requirements.

The model MT3000 is the perfect machinery for the production of RDF and other alternative fuels, because it guarantees the homogeneity and the final size of the treated material.



up to
30%
of energy saving

Safety

All the moving parts are equipped with safety guards and safety switches.



The Release System protects the rotor in case of foreign materials



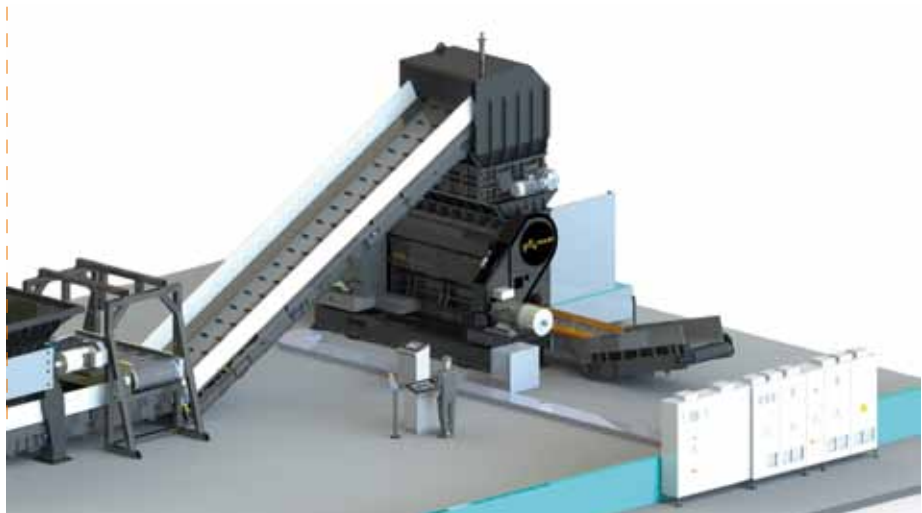
Release System *mechanical protection*



The shredder MT is equipped with a release system that releases the screen in the event of intriturabile material, to protect the rotor from structural damages.

- **Screen in working position**
The screen is divided into 6 sectors to facilitate the replacement procedures.
Holes can be round or diamond-shaped and is also available in wear-resistant material.
- **Screen in Release-System position**
A mechanical release device releases the screen from its working position, thus also moving away the fixed blades by the rotating ones. The Release System prevents to cause structural damage to the rotor, due to the presence of bulky non-compliant material.
- **Screen in maintenance position**
The grid holder is lifted up to allow convenient access to the grinding chamber for maintenance operations.

Example of layout
with the MT3000
secondary shredder
in the final part of
a waste treatment
plant.



Applications

The secondary shredder MT3000 can treat:

- > Production waste
- > RDF
- > Alternative fuels
- > Pallets
- > Biomass
- > Straw bales
- > Plastic bulky products



Industrial Waste
BEFORE ← → AFTER



Case History

5 days with our secondary shredder

We have been monitoring the operation parameters of our secondary shredder for 5 days.

The shredder is installed in a major energy plant located in the North of Italy. Input is a general solid waste, coming from a primary shredder.

The plant works for 16 hours a day. We have recorded all the data, that are resumed in the chart below.

INPUT: MSW processed by a Molinari primary shredder hTP2500

OUTPUT: 80 mm screen

DENSITÀ MEDIA: 0.16 ton/mc

DAY (kWh)	ENERGY CONSUMPTION 16 h/day	TON PROCESSED 16 h/day density 0,16 ton/mc
1	3169	391
2	3639	418
3	3294	364
4	3432	351
5	3351	335



pre-shredded municipal waste



output after MT3000