

Rapid GranuMATIC™

Designed for **plastics**



**Rapid GranuMATIC™ Compact
Extend
Wide**

From **large volume parts** to **heavy duty lumps**

Until now, shredders have been designed for multi purpose use, mainly for size reduction of garbage and wood. The new Rapid GranuMATIC™ line has been exclusively developed for efficient recycling of polymer materials. The line's unique technology is the result of Rapid's many years of experience of granulators and older types of shredders for polymer materials.

The GranuMATIC™ models are optimized to produce clean plastic by truly cutting even the hardest materials smoothly into uniform pieces.

Rapid's PolyCUT technology also offers energy-saving benefits. A unique design and configuration makes it possible to achieve high capacity even at low motor power – minimizing your running costs.





Easy cleaning/access

Cleaning the machine for new materials or colors is easy. Removing a single plate gives instant access to the machine's interior.

Screenless operation

As the material is cut into uniform pieces, the GranuMATIC™ operates without a screen, although screen can be installed as an option when smaller chip sizes are required.

Easy maintenance

All knives, rotating and fixed, are easy accessible. The rotating knives are reversible and are of cassette type, which simplifies maintenance. The front opening makes it possible to access the heart of the machine fast and easily.

Easy material evacuation

The high-built stand is standard and simplifies the connection of material evacuation, either by a band or screw conveyor, depending on your requirements.

Total responsibility – one partner

In a single process, the GranuMATIC™ and a Rapid granulator convert even the toughest solid lumps and bulky containers into recyclable regrind of the size you require.

Rapid

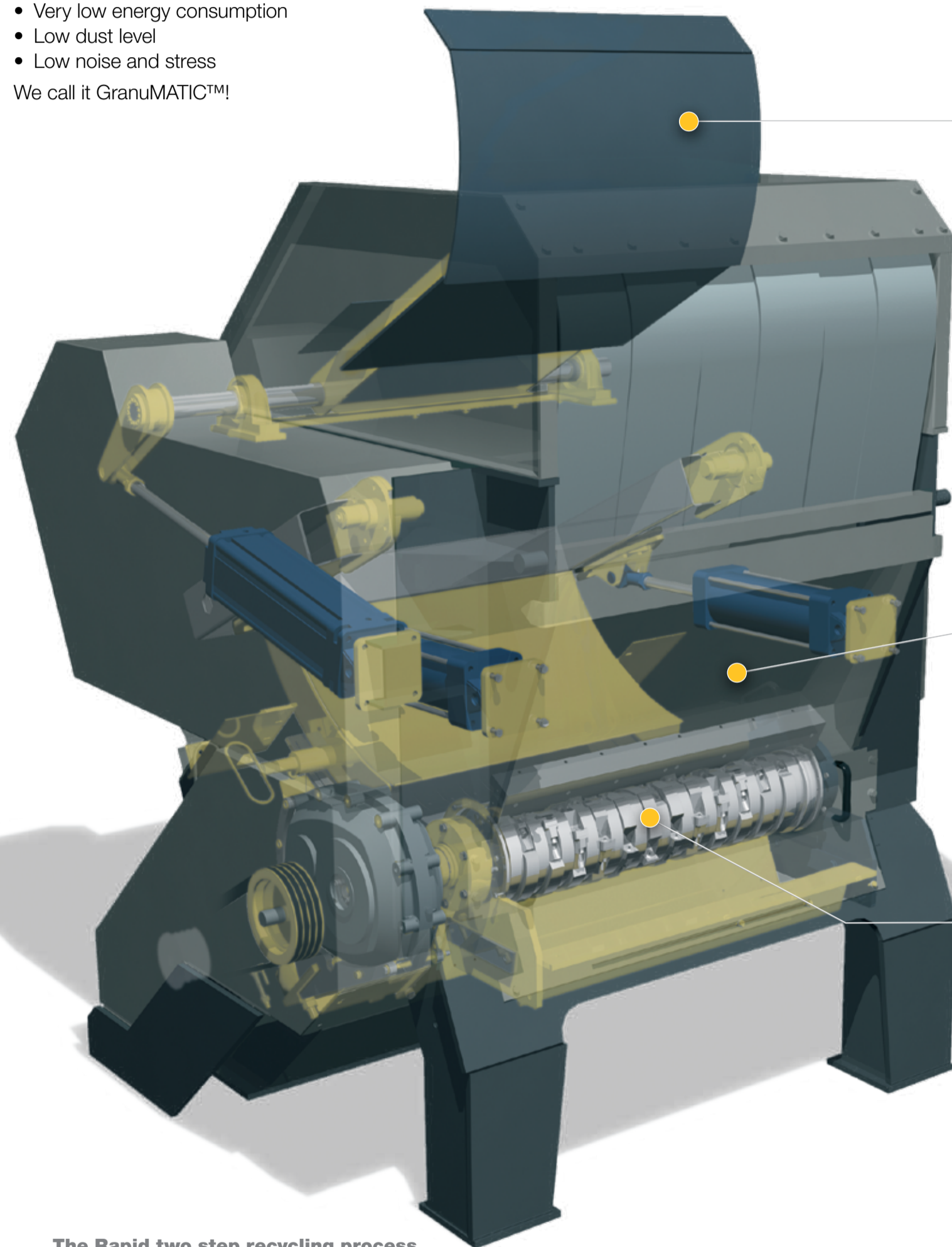
GranuMATIC™

Dedicated to plastics

Rapid has developed the first shredder dedicated 100% for plastic materials. The benefits we now can provide with the three models in the Rapid GranuMATIC™ line are:

- Heavy duty downsizing machine design
- Very low energy consumption
- Low dust level
- Low noise and stress

We call it GranuMATIC™!



FlexiPUSH



The pneumatic FlexiPUSH-system is self-regulating, efficiently absorbing vibrations and mechanical stress that occur in tough applications.

The special hopper design allows material to be transported automatically into the rotor.

PolyCUT



The unique Rapid PolyCUT technology is a combination of knife cutting angle, cutting speed and sequential cutting supported by FlexiPUSH. It provides a superior shredding solution for plastic materials. PolyCUT provides a sheer and smooth cut with low stress and therefore requires less motor power. This results in:

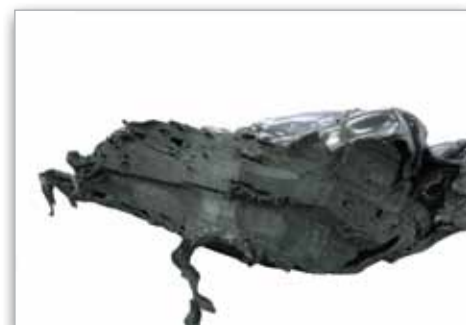
- Uniformly granulated chips
- Low energy consumption
- A long lasting, high performance solution

Heavy duty



The GranuMATIC™ design contains no compromises. Its unique cutting technology together with a robust gearbox requires lower motor power for the job, minimizing energy consumption.

The Rapid two step recycling process



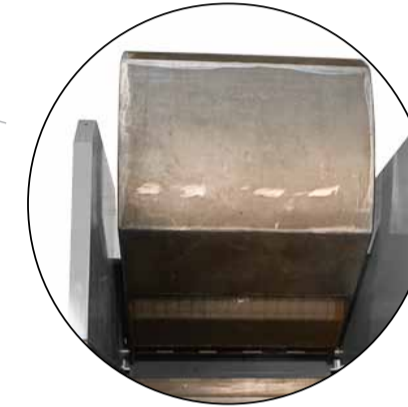
Heavy lumps turn into...



...uniformly sized chips in the Rapid GranuMATIC™ and then...



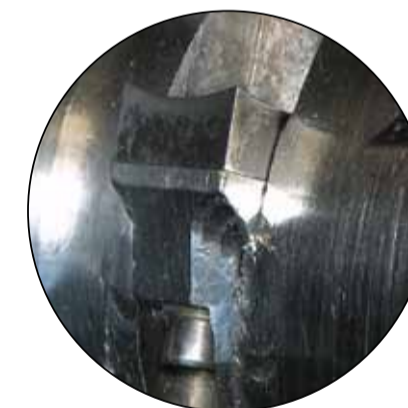
... fed into a Rapid granulator to produce high quality regrind.



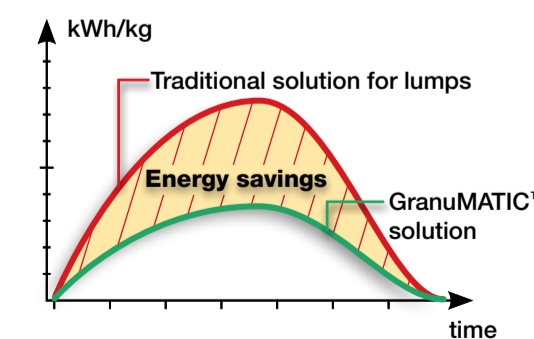
Light volume parts
– No problem! The optional top pusher press the material to the rotor knives.



Easy access for maintenance
Within a few steps, without any tools, the machine interior is opened up for cleaning and maintenance.



Knives designed for plastics
Cutting instead of tearing – is one of the key features that minimize dust and vibrations.



Low energy consumption
The new design of the safety interlock system allows quicker opening of a granulator. It is also safer because its speed-related sensor ensures that the rotor is standing still before the granulator can be opened.

Injection moulding

Injection moulding applications involves three main areas:

- Large lumps
- Central granulation of large volume defects
- Central granulation of sprues

The GranuMATIC™ models offer solutions for the special demands needed in these applications from the line's standard configuration.



Reject application

- **Rapid GranuMATIC™ Wide**
 - Belt conveyor infeed
- **Rapid 500-Series granulator**
 - Belt conveyor infeed
 - Cyclone AX-16
 - Rapid dust separation system for outgoing air.

Blow moulding

Blow moulding applications include both large bulky items and smaller products like containers, bottles, etc. To avoid the material floating above the rotor and not being cut, the GranuMATIC™ is equipped with a optional top pusher to force the material into the rotor knives.



Container application

- **Rapid GranuMATIC™ Extend**
 - Top pusher
 - Belt conveyor infeed with tunnel metal detection
- **Rapid 400-Series granulator**
 - Belt conveyor infeed

Extrusion

The GranuMATIC™ Series processes all types of extrusion applications: loose film, rolls of film, big lumps, extruded profiles and pipes.

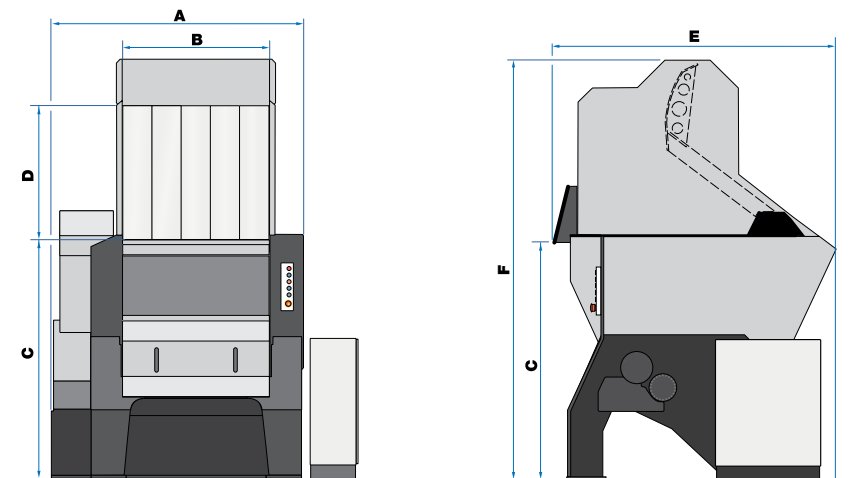
Rotor cooling is available when processing exceptionally temperature sensitive materials.

Typical configuration – Lump granulation

- **Rapid GranuMATIC™ Compact**
 - Belt conveyor infeed
- **Rapid 300-Series granulator**
 - Cyclone AX-7.5
 - Belt conveyor infeed
 - Rapid dust separation system for outgoing air



General specifications



All dimensions in mm.

GranuMATIC™	A	B	C	D	E	F
COMPACT	1320	540	1870	740	2210	2760
EXTEND	1930	1080	1870	740	2210	2760
EXTEND, TOP PUSHER	1930	1080	2020	1120	2210	3540
WIDE	2730	1620	2070	810	2330	3080
WIDE, TOP PUSHER	2940	1620	2100	1350	2540	3700

GranuMATIC™	Compact	Extend	Wide
Power supply (kW)	11	22	55
Knives (pcs)	14	28	42
Rotor speed (rpm)	58	58	58
Weight (kg)	2800	4800	6500
FlexiPUSH	yes	yes	yes
PolyCUT	yes	yes	yes
Rotor diam. (mm)	282	282	434
Cutterhouse (mm)	540×740	1080×740	1620×1020
Throughput* (kg/h)	450	900	1500

Optionals

Top pusher	N.A.	yes	yes
Rotor cooling	N.A.	N.A.	yes
Screen (hole diam., mm)	50	50	50
Double knife rows	N.A.	N.A.	yes

* Depending on application, material, feeding rate etc. (N.A.= not available)



Rapid Granulator AB

Box 9, Industrivägen 4
SE-330 10 Bredaryd, Sweden
Phone: +46 370 86500
Email: info@rapidgranulator.se

Rapid worldwide:

USA info@rapidgranulator.com
Germany info@rapidgranulator.de
France info@rapidgranulator.fr
Italy info@rapidgranulator.it
China info@rapidgranulator.cn
Singapore info@rapidgranulator.asia

www.rapidgranulator.com