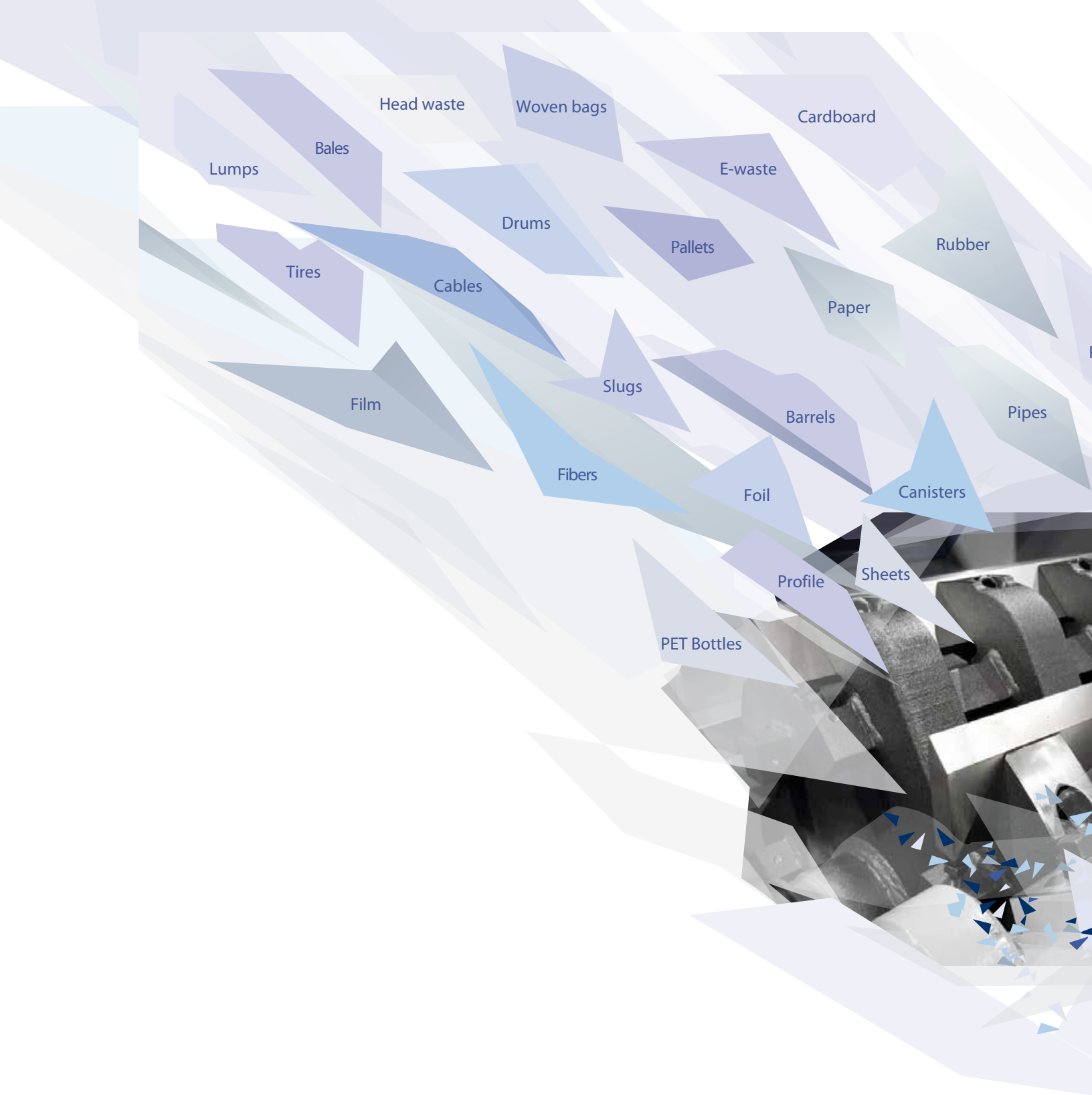




Heavy Duty Granulators

ZERMA

The Home of Size Reduction



ZERMA GSH heavy duty granulators are sturdy machines built for the ever changing demands of modern recycling operations. They can be adapted to process a wide variety of materials.

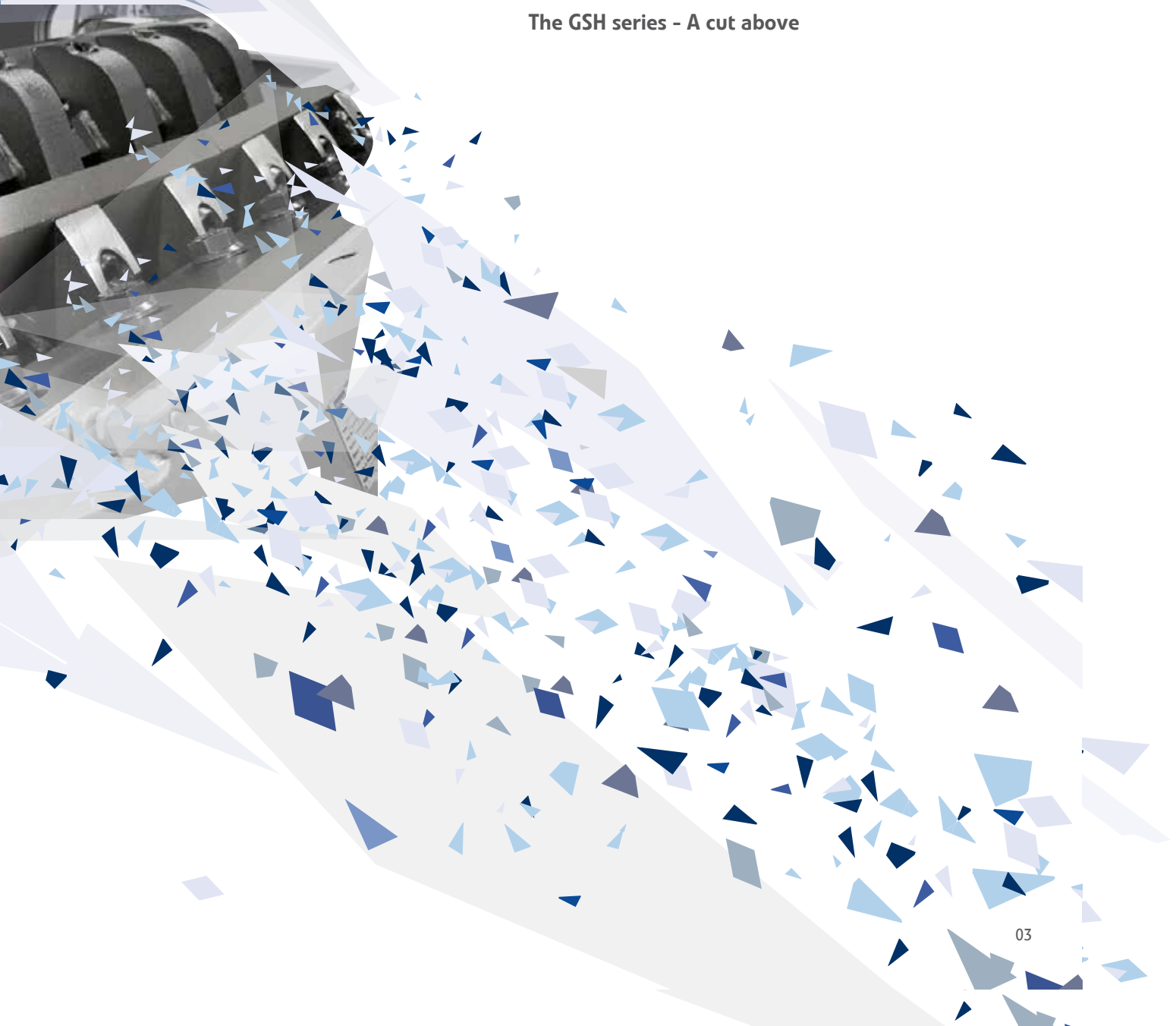
The Home of Size Reduction

ZERMA is a leading supplier to the plastics industry. With a strong focus on post-consumer and postindustrial recycling the GSH series of heavy duty granulators can be adapted to various requirements. They can be customized to withstand high levels of contamination or integrated into washing lines. In combination with **ZERMA** single shaft shredders and accessories we can custom build size reduction systems for high capacities and challenging materials.

The GSH series - A cut above

Purgings

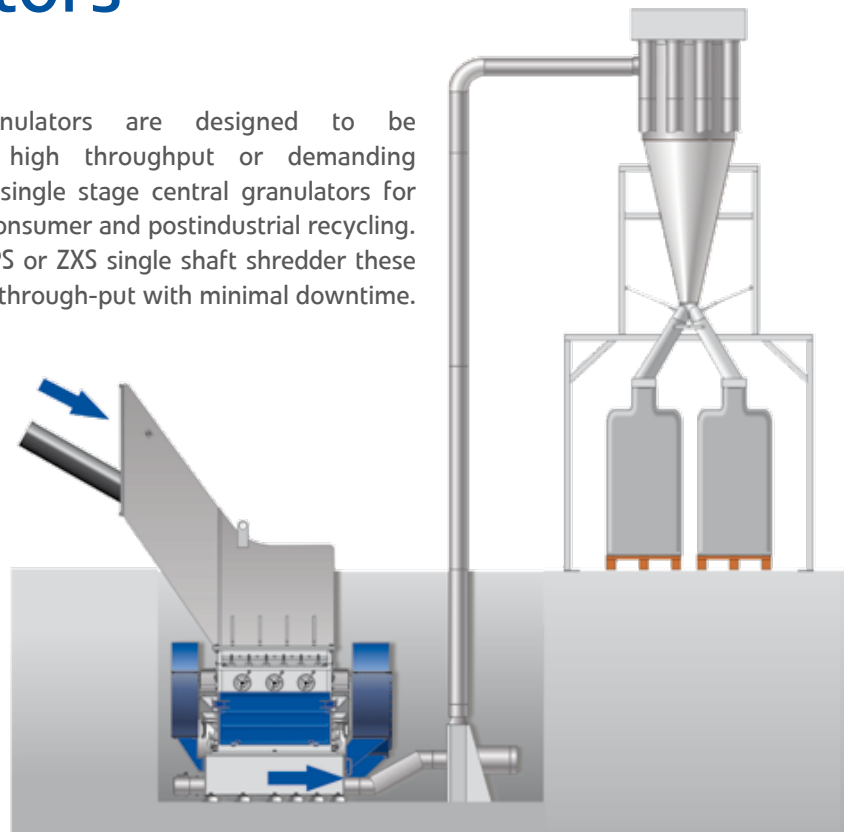
Scrap



Typical applications of GSH granulators

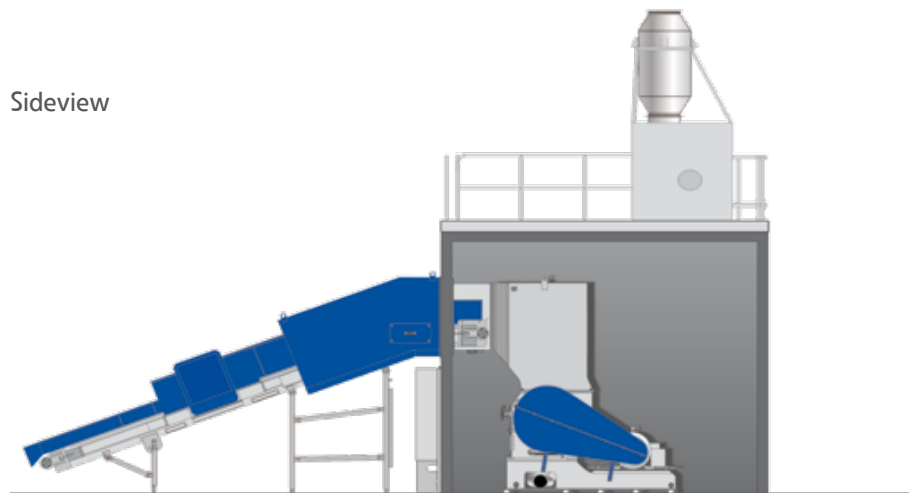
ZERMA GSH Heavy Duty granulators are designed to be dependable, sturdy machines in high throughput or demanding applications. They can be used as single stage central granulators for large in house scrap as well as post-consumer and postindustrial recycling. In combination with a **ZERMA** ZSS/ZPS or ZXS single shaft shredder these granulators will ensure constant high through-put with minimal downtime.

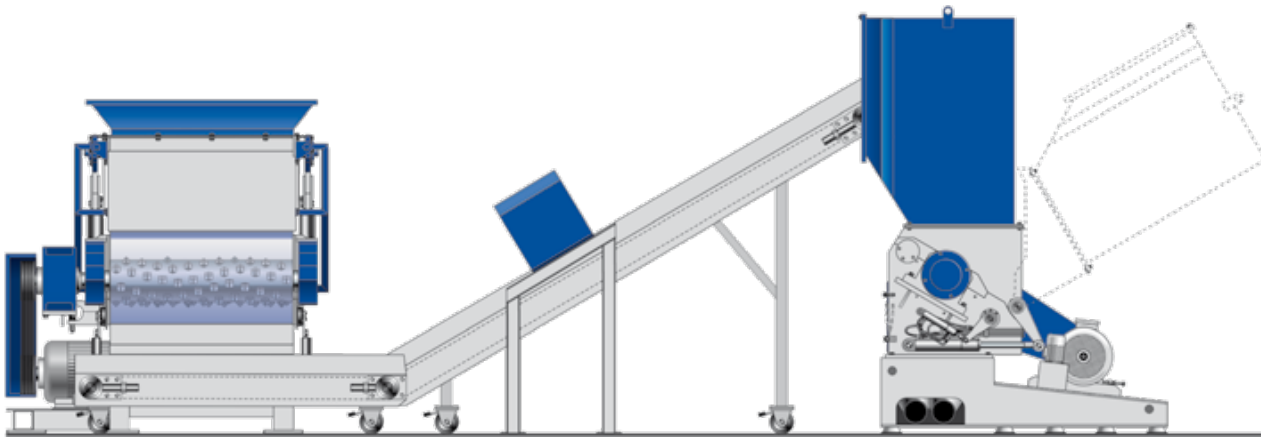
GSH granulator with special hopper for pipes.



Sideview

GSH granulator used for in-house grinding of blow molding scrap and rejected parts. Machine in fully soundproofed cabin with fine separation system and central filter.

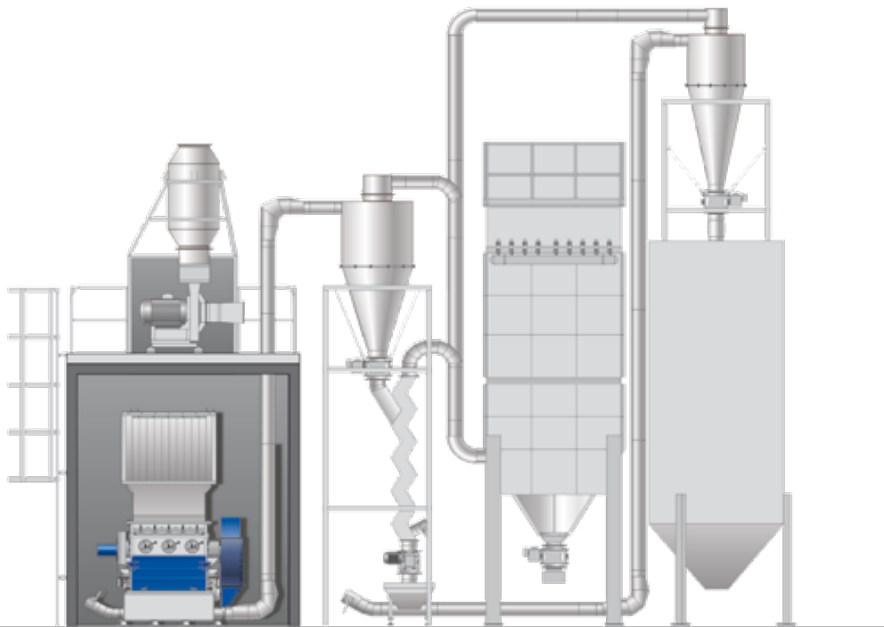




Two stage size reduction system consisting of **ZERMA** single shaft shredder and GSH granulator.



Frontview



**Advanced engineering –
great results**

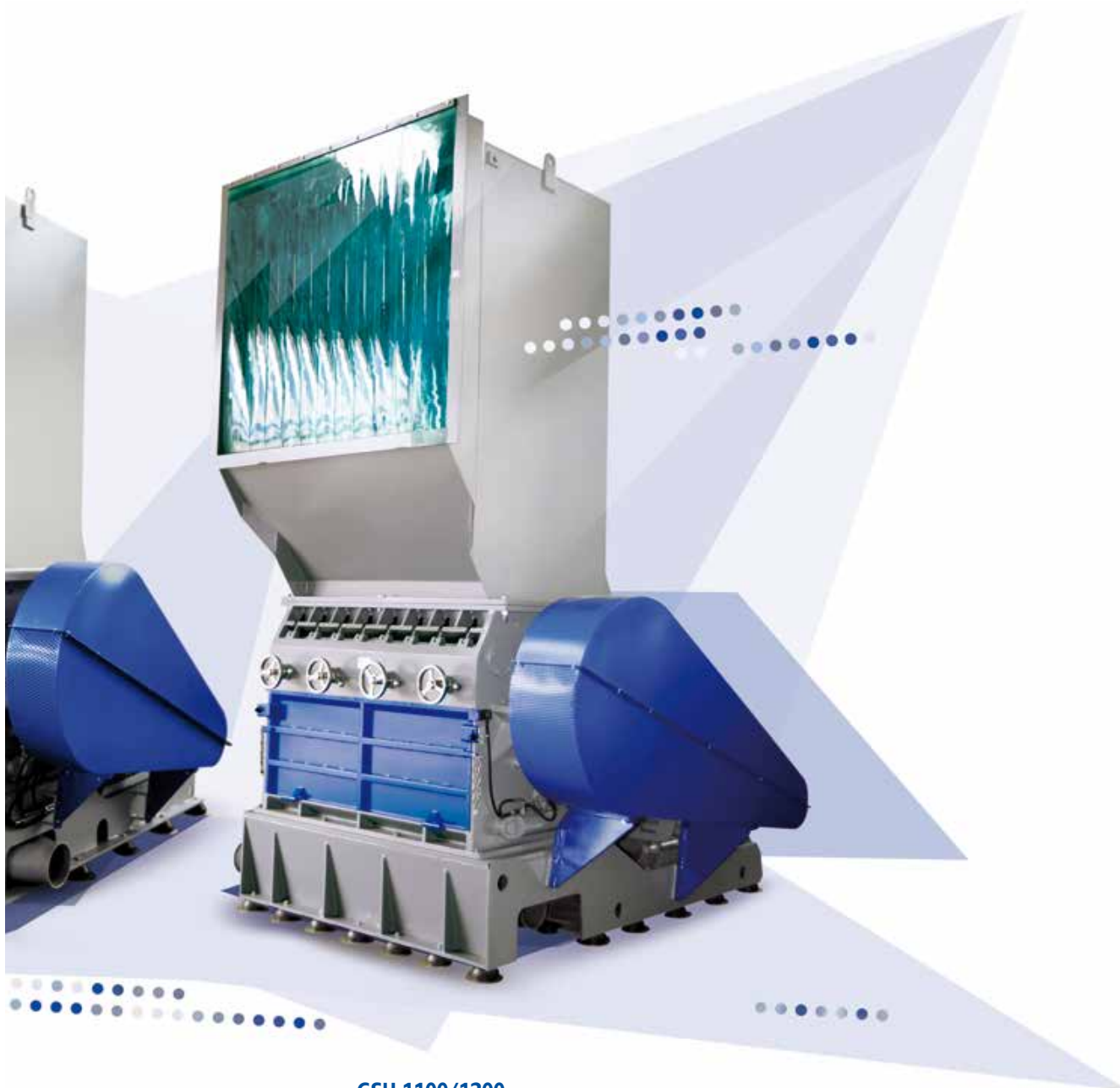
The right machine for today's recycling requirements



GSH 350/500

GSH 700/1000

ZERMA GSH granulators span a wide range of sizes. Starting from 350 mm diameter up to 1100 mm, in widths ranging from 500 to 2400 mm. All sizes are engineered to deliver constant high quality results with minimal downtime for service and maintenance.



GSH 1100/1200

- Sturdy recycling focused design
- Various rotor options
- Replaceable wear plates
- Easy knife change/adjustment

GSH 350 and 500 series – compact and sturdy

The heavy duty granulators of the GSH 350 and 500 series feature rotors in widths ranging from 500 mm to 1000 mm with a diameter of 350 or 500 mm. Different rotor and hopper styles allow the granulators to be tailored to different applications in the plastic recycling field.

The machines in the GSH 350 and 500 series are mainly used as central granulators for in house recycling applications to process thick walled parts in one step or as a second step granulator after a shredder to reach higher throughput rates.





Typical Applications

- Films margins from inline recycling
- Window profiles
- Fibers
- Thin-walled non-ferrous waste as non-ferrous metals
- Copper and aluminum cables

GSH 600 and 700 series – the allrounder

The heavy duty granulators of the GSH 600 and 700 series offer different rotor designs in widths ranging from 800 mm to 1600 mm with diameters of 600 and 700 mm.

These medium sized machines are used as central grinders for heavy applications such as thick walled pipe, injected parts such as crates, in blow molding settings to handle parts as well as cold parisons. As a secondary grinder after a shredder, they can achieve output of more than 1 ton per hour consistently.





Typical applications

- Chunks and lumps
- Foil sheets for Inline-recycling
- Bumpers, door panels, fuel tanks and slugs
- Insulation materials
- Electronic waste
- Bottle crates

GSH 800 and 1100 series – high throughput

The large GSH 800 and 1100 series machines are available with rotors of 800 and 1100 mm diameter ranging in width from 1200 to 2400 mm. These heavy duty machines are designed to withstand the toughest applications and deliver consistent high quality regrind at rates exceeding 5 tons per hour. From light materials like bottles and barrels to pallets and purgings, these GSH granulators can handle almost any application.

For contaminated materials such as post consumer waste the rotor and cutting chamber can be protected with special steel to ensure long service life.

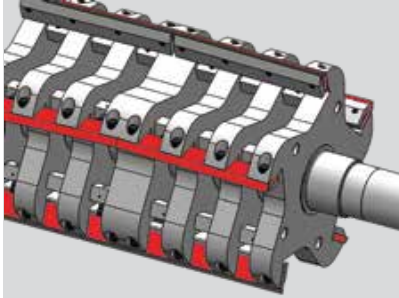




Typical applications

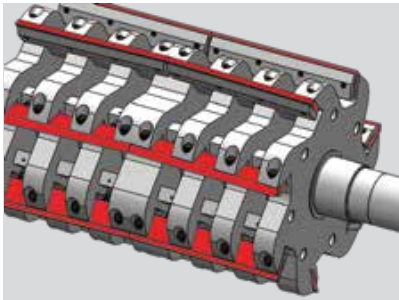
- Large-volume hollow body such as drums, tanks, multi-boxes, buckets
- Natural and synthetic rubber bales
- Fiberglass reinforced plastics
- Vulcanized, technical rubber parts, such as pre-shredded, iron-free car and truck tires
- Pipe sections

Rotor and cutting chamber – details ensure consistent results



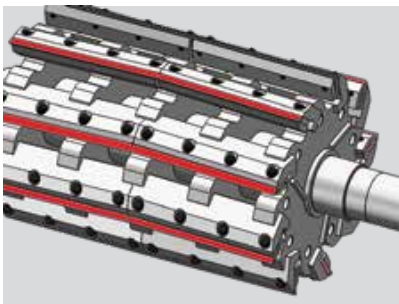
S5-Rotor

This rotor is suitable for light materials as well as thick rigid pieces like tanks or crates. The semi-closed design reduces the aggressivity of the rotor.



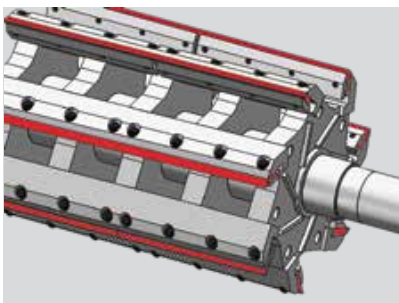
S7-Rotor

The closed 7 blade rotor is used for heavy, thick walled products. It is closed thus will avoid overloading even on heavy materials such as solid lumps or thick walled pipe.



H9-Rotor

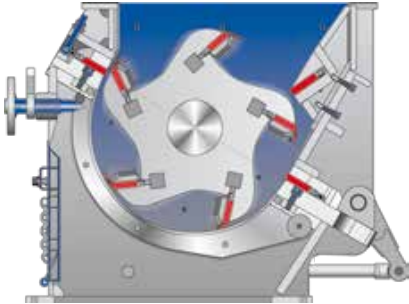
Similar to the S7 rotor the H9 rotor is a closed rotor and mainly used in heavy applications. The design allows for the knife support to be made from highly wear resistant steel when used with contaminated materials.



L7-Rotor

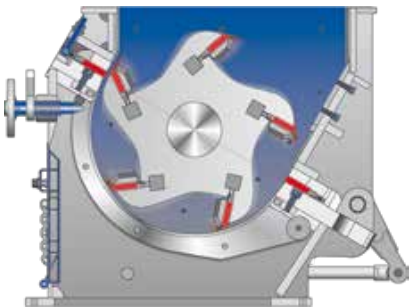
The L7 rotor features a single cross cut design which is used in high temperature applications, such as car tanks.





With Deflection Wedge

The removable deflection wedge houses a third stator knife. It allows easy and fast adjustments of the machines aggressivity.



Without Deflection Wedge

The infeed is very strong and aggressive, the first cut will happen at the 4 o'clock position. Well suited for bulky materials, such as canisters or pales. The deflection wedge alters the infeed of the machine and moves the first cut to the 2 o'clock position. Well suited for heavy thick walled parts such as lumps or pipe. Due to the added stator knife, it increases the number of cuts per revolution the output on light material such as film is increased.



Cutting chamber

The heavy duty bearings are separated from the cutting chamber to avoid lubricants from entering the cutting chamber and failure of the bearings due to material contamination.



Knife adjustment

Rotor and stator knives are preset outside the machine prior to installation in a supplied fixture. This makes awkward adjustment inside the machine unnecessary.

Advanced engineering – great results

Technical specifications – overview

Applies to all models: screen size is > 6 mm or > 8 mm and each machine has 2 or 3 rows of stator blades. The model name is composed of the rotor diameter and rotor width (**A/B**)

- A** = Rotor diameter in mm
- B** = Rotor width in mm
- C** = Drive capacity in kW
- D** = Rotor knives in rows
- E** = Effective working area in mm

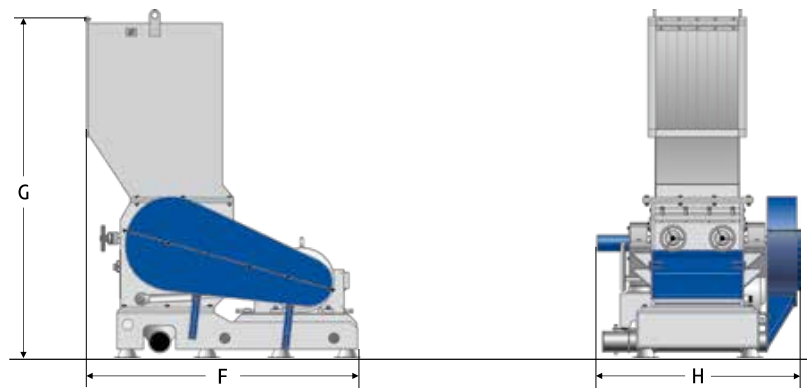
All dimensions are in mm

- F** = length
- G** = height
- H** = width

GSH Series

A / B	350 / 500	500 / 600	500 / 1000	600 / 800	700 / 1000
C	22	55	75	75	90
D	3 or 5	3 or 5	3 or 5	5 or 7	5 or 7 or 9
E	460 x 516	636 x 590	985 x 590	790 x 695	900 x 800
F	1820	2105	2255	2350	2815
G	2390	2565	2740	2940	3350
H	1280	1560	1945	1840	2060

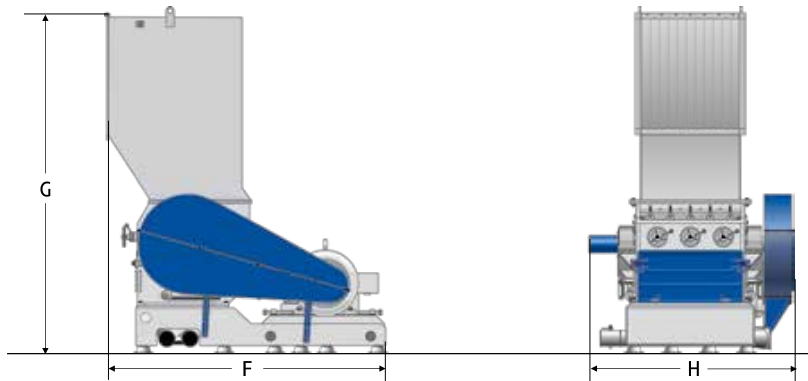
GSH 350 and 500 Series



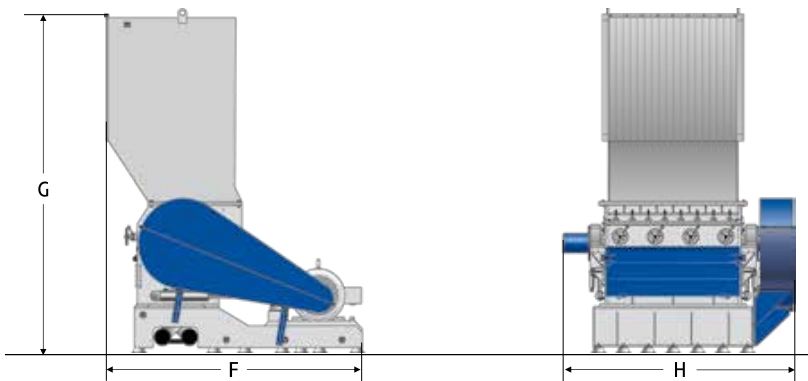
GSH Series

A / B	800 / 1200	800 / 1600	800 / 2000	1100 / 1200	1100 / 2400
C	132	160	2 x 160	200	2 x 200
D	5 or 7 or 9	5 or 7 or 9	7 or 9	7 or 9 or 11	7 or 9 or 11
E	1150 x 915	1570 x 915	1960 x 915	1150 x 1210	1960 x 1210
F	3100	3175	3175	3115	3115
G	3750	4085	4655	4430	4430
H	2430	2860	3465	2440	3830

GSH 600 and 700 series



GSH 800 and 1100 series



Wide range – great results

The product range – the right solution for any application



GSL - Slow speed granulators

GSE - Economical granulators

GSC/GST- Compact soundproofed granulators

ZSS/ZPS - General purpose shredders

With more than 70 years of experience, **ZERMA** is one of the leading manufacturers of high quality size reduction machinery. With the wide range of machines **ZERMA** covers the whole spectrum of plastic size reduction applications.



ZTS - Heavy duty shredders

PM - Pulverizer

ZERMA – The Home of Size Reduction



Close to our customers

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