



THE HOME OF SIZE REDUCTION

COMPANY PROFILE

ZERMA
AFRICA

GRANULATORS



SHREDDERS



PULVERISERS



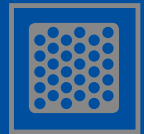
SPECIALISED MACHINES



ACCESSORIES



SPARE PARTS



THE NAME ZERMA COMES FROM THE GERMAN WORD ZERKLEINERUNGSMASCHINEN, TRANSLATING TO “SIZE REDUCTION MACHINE”. SINCE THE COMPANY WAS FOUNDED IN 1943, THIS HAS REMAINED OUR MISSION.

With more than 70 years of experience ZERMA is a leading manufacturer of size reduction machinery. ZERMA has traditionally focused on the development and production of size reduction machinery for the plastics industry. However, today ZERMA has expanded into the related

industries of tyre, wood, e-waste and MSW/RDF recycling. Our core strength is as a machinery and component producer. As such we are an ideal partner for systems integrators and OEM projects. We remain committed to the improvement and development of size reduction machinery.

ZERMA
AFRICA



PRODUCT OVERVIEW

GRANULATORS



GSL

GSL 180
GSL 200
GSL 300

The slow speed granulators in the GSL range are mainly used in injection and blow moulding processes as beside the press machines to grind runners and sprues. The machines can be used for rejected products in the inline recycling process as well. Different hopper and base frame designs make it possible to integrate the machine with most types of injection moulding machines and robots.



GSE

GSE 300
GSE 500
GSE 700

The GSE series of machines are designed as economical granulators for in-house recycling. The aggressive tangential infeed and advanced cutting geometry of the GSE series allows bulky hollow parts to be ground. The GSE granulator series achieves a high quality regrind independent of the material type or form such as injection moulded parts, blow moulded parts, profiles, sheets, film, etc.



GSC / GST

GSC 300
GSC 500
GSC 700

GST 250
GST 400

The GSC series compact soundproofed machines are mainly used in inline operations or central granulators for processing of thin-walled products, or runners and sprues. With different rotor designs and a wide variety of options the machines can be tailored for many different applications. The GST series with extremely tangential cutterhouse and aggressive rotor design is purpose-built to accept and reduce large volume containers without "bouncing" or bridging.



GSH

GSH 350
GSH 500
GSH 600
GSH 700
GSH 800
GSH 1100

The wide range of rotors and hopper styles allow the GSH machines to be tailored to almost every application in the plastic recycling field. The GSH heavy duty granulators 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.



GSP

Conventional granulators have substantial problems handling long pipes and profiles. Therefore Zerma developed the GSP range. Thanks to the almost level feeding hopper, long pieces can be fed easily. While the machine is operating there is no risk of blocking, in case of congestion no more material will be accepted by the machine. Once the grinding chamber is empty the machine will accept material again.



PRODUCT OVERVIEW

SHREDDERS



ZBS

ZBS 600
ZBS 850

The ZBS shredders have been designed for in-house recycling of small lumps and purges from injection and blow moulding processes. The typical input materials are small and medium sized lumps such as head waste. The material can be shred to reduce the volume or processed further in a granulator to be reintroduced into the production process immediately.



ZSS

ZSS 850
ZSS 850+
ZSS 1200
ZSS 1500
ZSS 2000

The ZSS shredders have been designed for a wide array of applications and industries such as in-house and general recycling, electronic waste and post-consumer waste handling with a wide variety of input materials. Depending on input material and the following process the shredded material can be used directly or go into the next step of size reduction for example in a GSH granulator.



ZIS

ZIS 1200
ZIS 1500
ZIS 2000

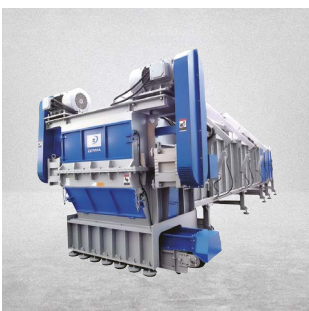
The ZIS shredders have been designed with big volume parts such as IBCs, pallets and big barrels in mind. While it can be used for in-house recycling in big volume blow moulding operations it is also versatile enough to be used for general recycling in the plastic and wood industry. Like all ZERMA shredders the ZIS can be equipped with a wear package for processing of highly abrasive or filled materials.



ZXS

ZXS 1500
ZXS 2000
ZXS 3000

The ZXS shredders have been designed for the most demanding and high throughput applications in recycling industries. The input materials can be all kinds of plastics, wood, paper, cardboard, e-waste, post-consumer waste, rubber, etc. in various shapes and sizes. Typical input materials are: fridges, purges, tyres, pallets, bales, drums and barrels, pipes, film and so on...



ZRS

ZRS 800
ZRS 1000
ZRS 1500

The main focus of the ZRS shredders is the shredding of large diameter pipes or bundles of smaller pipes and profiles made from HDPE, PP and all kinds of PVC. Further the machines can be used for recycling of other plastic parts, such as large lumps, stacked wheelie bins and pallets. In combination with other ZERMA size reduction equipment such as granulators and pulverisers we are able to provide a complete turn key recycling solution.

SPECIALISED MACHINES



ZTS / ZTTS

ZTS 1500
ZTS 2000
ZTS 3000

The ZTS with its single row of stator knives is used to pre shred complete car tyres or large chunks of pre processed tyres down to a size of about 150 mm. The twin rows of stator knives and screen in the ZTTS enable it to take the tyre shreds down to any required size > 20 mm. The unique machine design combined with the variable cutting gap create an optimal separation of rubber and steel fractions.



ZWS

ZWS 600
ZWS 850
ZWS 1100
ZWS 1400
ZWS 1700
ZWS 2000
ZWS 2600

The ZWS light duty wood shredders are single shaft shredders specifically designed for the wood industry. They can be used to grind small quantities of off-cuts in a joinery or to create sawdust from all kinds of waste wood to be used as fuel directly or further processed in a briquetting press to create heating pellets.



ZHM

ZHM 600/800
ZHM 800/1200

The main purpose for the ZERMA ZHM hammer mill is the processing of electronic waste, such as whole computers, white goods and ICBs. The main advantage in these processes lies in its insensitivity to contamination and abrasive materials while being able to achieve a rather small output material. Through the high degree of disintegration it is possible to achieve good separation results in the following processes.



PM

PM 300
PM 500
PM 800
PM 500H
PM 800H

One of the main fields of use for the ZERMA PM Pulverisers is the pulverization of PVC regrind in pipe and profile recycling. Working in line with a shredder and granulator to have a balanced and efficient system to handle in-house production waste. Another application is the grinding of PE for Rotational moulding applications, here the PM Pulveriser is used in the production process to create the powder needed in the process.



PRODUCT OVERVIEW

APPLICATIONS

INJECTION MOULDING

BLOW MOULDING

EXTRUSION

THERMOFORMING

FILM

ROTATIONAL MOULDING

GENERAL RECYCLING

POST-CONSUMER RECYCLING

RUBBER

WOOD

E-WASTE

MSW / RDF



ACCESSORIES

CONVEYORS

ZERMA offers a large variety of conveyor belts, either as feeding belts for shredders and granulators, or as discharge belts to move material from the first step of shredding to a granulator in a two-step recycling process.

BLOWER & DE-DUSTING SYSTEMS

ZERMA offers a complete program of suction systems to discharge material from the machines. These systems include blowers, piping, cyclones and bag filling stations.

METAL DETECTION & SEPARATION

In order to create the best output material it is important to make sure the material is free from contamination such as metal. ZERMA offers a wide range of products to detect and remove various kinds of metal contamination.

SCREENING

It is always important to achieve a well defined output size. ZERMA offers a range of screening solutions for different materials and throughputs.

FORCE FEEDING

Increasing the throughput of the ZERMA GSH granulators when used with loose materials. This system forces the material into the cutting chamber and avoids the problem of material 'dancing' on the rotor.

SPARE PARTS

BLADES

A granulator performs best and most economical when the blade is sharp. Regular knife changes and correct setting of the cutting gap help ensure a good final result and reduced power consumption.

SHREDDER KNIVES

The ZERMA shredder knives can be turned once one side is worn out, this helps increase the blades lifetime. For new blades, contact Zerma Africa.

PULVERISER TOOLS

The Pulverisers can be equipped with either segments or one piece grinding discs, both can be resharpened. If you need help resharpening or replacing them contact Zerma Africa.

SCREENS

The right screen size can make a big difference in the performance of a machine, and sometimes you just need a new screen fast.

OTHER STANDARD PARTS

From bolts to V-belts, there are many more parts to a ZERMA machine than knives, screens and rotors, but the spare part service is the same. We keep most standard parts in stock available for a fast delivery.



For more information email us at info@zerma.co.za

zerma.co.za

We reserve the right to make technical changes and measurement adjustments.
Images shown in this brochure may also contain optional equipment variations.