

GSL

Slow-speed Granulators



ZERMA
The Home of Size Reduction

**ZERMA**

GSL 180/120 - GSL 180/430 Range

The slow-speed granulators in the ZERMA GSL range from 180/120 to 180/430 have been specially developed as show-running grinders for applications in the injection-moulding sector.

The material to be granulated is fed via a sound-absorbing feed hopper that is available in a range of variants to suit the application. The slow-speed granulators of this range are mounted on either low or high level baseframes, depending on application, and with suction trough/bag fill chute to suit.

With these numerous options, the slow speed granulators can be tailored to an extremely wide range of applications. In addition to the advantages common to all slow-running grinders such as low noise characteristics and near dust-free product, GSL 180/120 to GSL 180/430 stand out due to their special knife, rotor, 'quick-snap' opening and good accessibility features.

**GSL 180/120**

Rotor-Ø: 180 mm

Grinding chamber:

270 x 120 mm

**GSL 180/180**

Rotor-Ø: 180 mm

Grinding chamber:

270 x 180 mm

**GSL 180/300**

Rotor-Ø: 180 mm

Grinding chamber:

270 x 300 mm

**GSL 180/430**

Rotor-Ø: 180 mm

Grinding chamber:

270 x 430 mm



The granulators of the GSL 300/400 - GSL 300/800 range are primarily intended for grinding scrap mouldings and sprues from the injection and blow moulding sector.

In addition to all the important advantages and features described for the GSL 180 range, the GSL 300/400 - GSL 300/800 slow running machines are especially suitable for larger mouldings such as car door liners, bumpers or hollow bodied parts.

The V shaped arrangement of the staggered rotor blades holds pre-cut material in the center of the cutting chamber. This prevents material sticking to the side walls and considerably reduces wear on the grinding chamber walls when processing fibre and glass reinforced plastics. The staggered rotor blades creates an individual blade cut thus increasing the cutting torque.



**Newly designed more aggressive infeed**

The rotor and cutting chamber of the GSL 200 series have been redesigned, creating a more aggressive in-feed for hollow parts, such as bottles or other blow moulded parts. The increased cutting chamber dimensions make feeding of larger runners possible, thus making the GSL 200 series a very versatile machine.

**Improved easy accessibility**

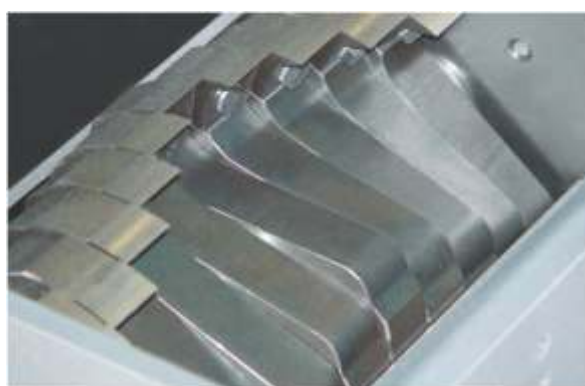
The already easy, comfortable and tool-less accessibility of the GSL series has been improved even more. Changes to the suction trough and screen holder make maintenance work easier and faster.

Integrated sealing helps keeping the working area clean and dust-free.



Special Knives make adjustment work unnecessary

The rotor is equipped with special knives. The curvature of the specially profiled rotor knives ensures a constant cutting radius after re-sharpening thus maintaining the original cutting gap. Awkward knife adjustment is no longer necessary. Downtime for knife changes is therefore reduced. The GSL stator knives can be rotated 4 times and can also be re-sharpened.



Heavy Duty Rotor Design

The rotor shaft has bearings at each end and the shaft diameter is designed for the largest rotor width to enable use of a modular assembly across the width range. The staggered rotor blades creates an individual blade cut thus increasing the cutting torque. All of the machines in this series are therefore suitable for grinding more solid materials and thicker walled sprues.



Quick Snap System

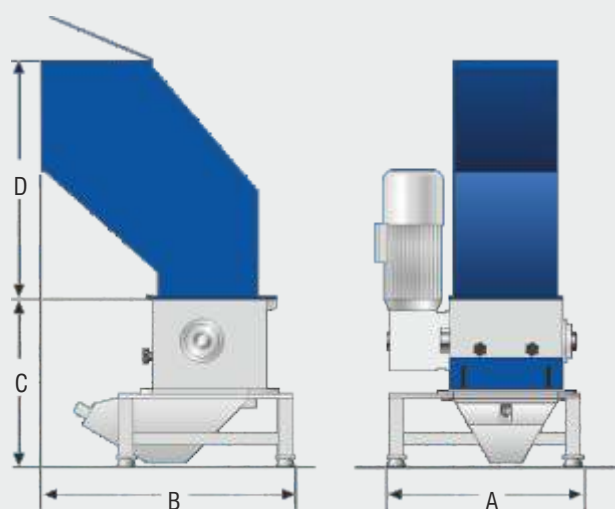
The ZERMA Quick Snap System allows the lower front plate section to be easily removed for granulator cleaning. The lower front plate section is held in position by two sturdy lever clamps. An electrical limit switch prevents the operation of the machine when this lower front plate is removed. The rotor outboard bearing is mounted in the fixed upper side chamber section.



Good accessibility

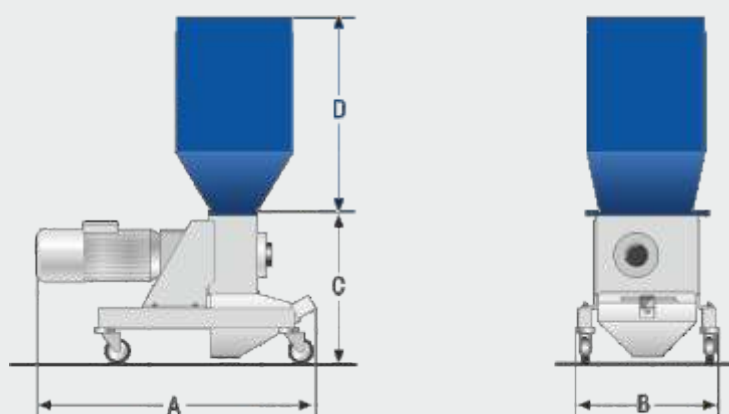
The granulators can be safely opened in just a few steps and without the use of tools. The feed hopper is hinged and can be tilted back. After removing the lower front plate section and the suction trough, the machine becomes easily accessible ready for quick cleaning in the event of colour or material change.

Type GSL	300/400	300/600	300/800
Rotor speed (rpm)	150	150	150
Number of rotor knives	33	48	66
Number of stator knives	2 (4 cutting edges)	2 (4 cutting edges)	2 (4 cutting edges)
Rotor diameter (mm)	300	300	300
Width of the rotor (mm)	400	600	800
Feed opening (mm)	400 x 400	600 x 400	800 x 400
Opening cutting chamber (mm x mm)	400 x 400	600 x 400	800 x 400
Drive capacity (kW)	7,5 - 11	11	18,5
Weight approx. (kg)	550	890	980
Dimensions:			
low execution			
Width A (mm)	820	1100	1410
Length B (mm)	1050	1010	1070
Height C (mm)	690	710	700
Height D (mm)	990	920	1050

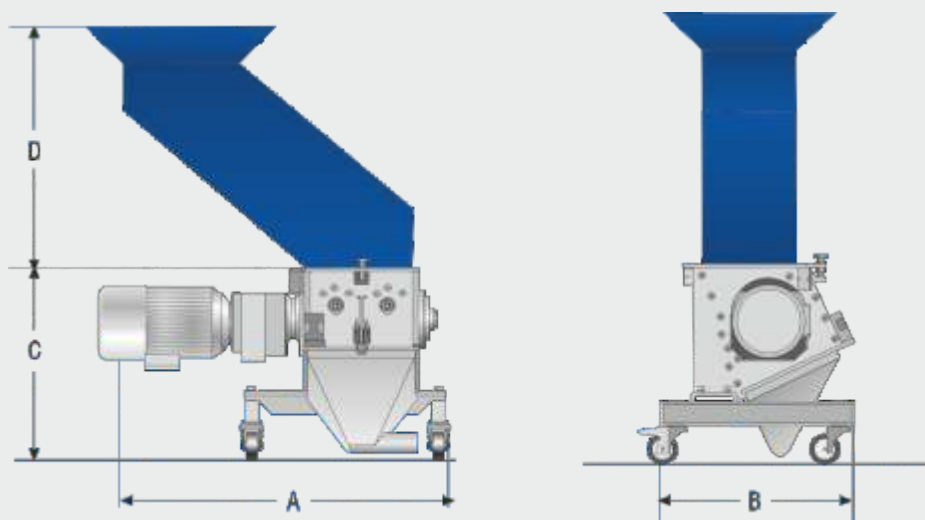


Technical Data GSL 180 Range

Type GSL	180/120	180/180	180/300	180/430
Rotor speed rotor (rpm)	150	150	150	150
Number of rotor knives	12	18	30	45
Number of stator knives	2 (4 cutting edges)	2 (4 cutting edges)	2 (4 cutting edges)	2 (4 cutting edges)
Rotor diameter (mm)	180	180	180	180
Width of the rotor (mm)	120	180	300	430
Feed opening (mm)	350 x 350	350 x 350	350 x 350	430 x 270
Opening cutting chamber (mm x mm)	270 x 120	270 x 180	270 x 300	270 x 430
Drive capacity (kW)	2,2	3,0	4,0	4,0
Weight approx. (kg)	120	130	150	170
Dimensiones:				
low execution				
Width A (mm)	420	420	420	420
Length B (mm)	850	910	1030	1160
Height C (mm)	450	450	450	450
Height D (mm)	600	600	600	900



Type GSL	200/180	200/270	200/360	200/500
Rotor speed (rpm)	150	150	152	152
Number of rotor knives	12	18	24	33
Number of stator knives	2 (4 cutting edges)	2 (4 cutting edges)	2 (4 cutting edges)	2 (4 cutting edges)
Rotor diameter (mm)	200	200	200	200
Width of the rotor (mm)	180	270	360	495
Feed opening (mm)	240 x 240	240 x 310	460 x 310	460 x 310
Opening cutting chamber (mm x mm)	250 x 190	250 x 280	250 x 370	250 x 505
Drive capacity (kW)	3	3	4	4
Weight approx. (kg)	175	205	235	270
Dimensions:				
low execution				
Width A (mm)	800	900	1080	1220
Length B (mm)	510	510	510	510
Height C (mm)	515	515	515	515
Height D (mm)	670	670	700	760



Options GSL 180 and GSL 300 Range

The granulators of the GSL range can be equipped with numerous options for the most varied of intended applications



High model, mobile bin



High model, sack-fill

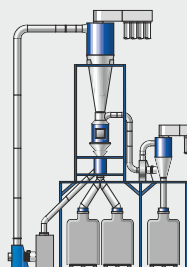


GSL 300/400, high model



**ZERMA**

ZERMA Recycling & Granulator Technology

GSL**GS****GSH****GSE****GSC****GSP****PM****ZS****Accessories**

ZERMA, with more than 60 years of experience, is one of the leading manufacturers of high quality granulators. Our product range begins with the small slow, speed granulators and reaches the large high performance granulators, including special machines such as the front entry granulators for pipes and profiles or the pulveriser systems for fine grinding applications. Using drive motors ranging from 2,2 kW to 200 kW, the ZERMA line of machines covers the complete spectrum of plastics size reduction applications.

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