

Combined Version of Shredder AND Granulator: The HERBOLD Granulator of the HB Series

The advantages of a single-shaft shredder are well known: it is possible to fill a feed hopper which is then gradually emptied by means of a hydraulically operated ram without the assistance of operators: due to its special design, the rotor only “nibbles” at the material that is fed via the hydraulic ram.

Until now it has not been possible to obtain small granule sizes with these shredders: often a 15 or 20 mm-screen has been the lower limit, making intermediate conveying and a secondary granulator necessary in order to achieve smaller granule sizes ranging from 4 to 8 mm and a satisfactory throughput.

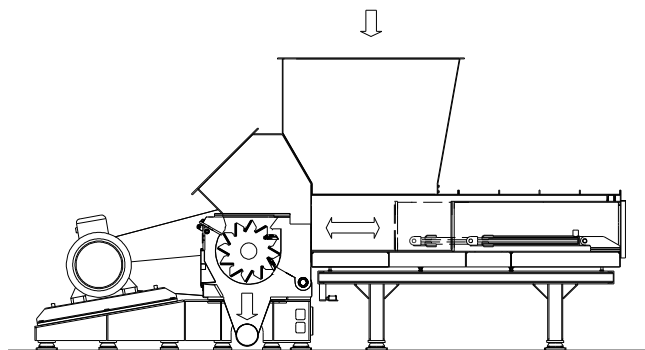


Fig. 1: Sectional view



Fig. 2: Small granule size

Now it is possible in one single size reduction step with the **HERBOLD granulator** of the HB series. The design of the HERBOLD HB granulator is a combination of a feed hopper and a hydraulic ram with a granulator. Due to the special design of the grinding chamber and the high cutting frequency, it is now possible to transform bales, cut open film rolls, mingled packs of sprue spiders, but also extremely large and thick-walled purgings into the finished product in one single step.



Fig.3:SML 60 /100 HB

Also bulk hollow bodies, e.g. whole IBC containers and rainwater collecting basins can be processed with this machine in a particularly economic way. An intermittent feeding of large quantities of material (e.g. a great many of bottle crates) is therefore possible without the necessity of dosed feeding or the risk of jammed material in the grinding chamber. Once the material has been fed and the hopper filled, no operators will any longer be necessary, thus enabling a semi-automatic operation.

Typical **input material** for the granulator of the HB series:



Fig .4: Cut open film rolls



Fig.5: Film bales

The main advantage of this new development is its space-saving design since only one size-reduction step is necessary. In addition, only one size-reduction step also makes cleaning and colour and material changes much easier: there is no problematic and difficult to clean intermediate conveying by means of a belt conveyor. Only one machine will need knife change and maintenance, thus reducing maintenance times and costs. Compared to a two-step solution and a granulator fed by gravity, it has also a considerably favourable effect on the energy balance.

The HERBOLD granulators of the SB series, too, show these advantages, well-known characteristics found in all granulators of HERBOLD-product range.

- the placement of the rotor bearings outside prevents fines from penetrating into the bearings and grease into the product
- double-cross cutting action
- fracture-proof welded construction

According to the application, different rotor types are available for the **HB series**. If requested, this granulator can also be delivered as a turn-key package solution with the necessary ancillary equipment, e.g. suction unit with big bag filling station or feeding by automatic lifting/tilting device.



Advantages and Features

- ✓ Fully automatic operation
- ✓ Large infeed opening
- ✓ Large feed hopper for feeding whole bales or full boxes of waste
- ✓ One-step size reduction to the desired final size
- ✓ Finished product ideal for further processing
- ✓ Easy access to the cutting chamber for cleaning works

Applications

Plastics

Bulk hollow bodies
 Purgings
 Pipes and profiles
 Films
 Post-consumer bottles
 Fibres
 Carpet waste

Wood

Recycling

Technical Data

Type		SML	SML	SMS	SMS
		60/100 HB	60/145 HB	80 /120 HB	80/160 HB
Rotor diameter	mm	600	600	800	800
Working width	mm	1000	1450	1200	1600
Drive	kW	45 - 100	55 -132	75 - 160	90 - 200
Throughput rate*	t/h	0.5 – 3.0	0.8 – 4.0	1.0 – 5.0	1.2 – 6.0
Weight	kg	4500	5500	6500	8000

Specifications are not binding and subject to change without notice.

Engineering, Production, Supply:

Herbold Meckesheim GmbH

Industriestr. 33
 D-74909 Meckesheim
 Germany
 Tel.: +49/6226/932-0
 Fax: +49/6226/932-495
 herbold@herbold.com
 www.herbold.com

Herbold Meckesheim USA

Resource Recycling Systems Inc.
 333 George Washington Highway
 USA – Smithfield, Rhode Island 02917
 Tel.: +1 401 232 3354
 Fax: +1 401 232 5425
 E-mail: info@herboldusa.net
 www.herboldusa.net