



Granulators and shredders

## SHREDDING OF PIPES AND PROFILES

- With granulators and shredders
- Pipes up to 3000 mm diameter
- One work process
- Low noise emissions







PVC profile waste



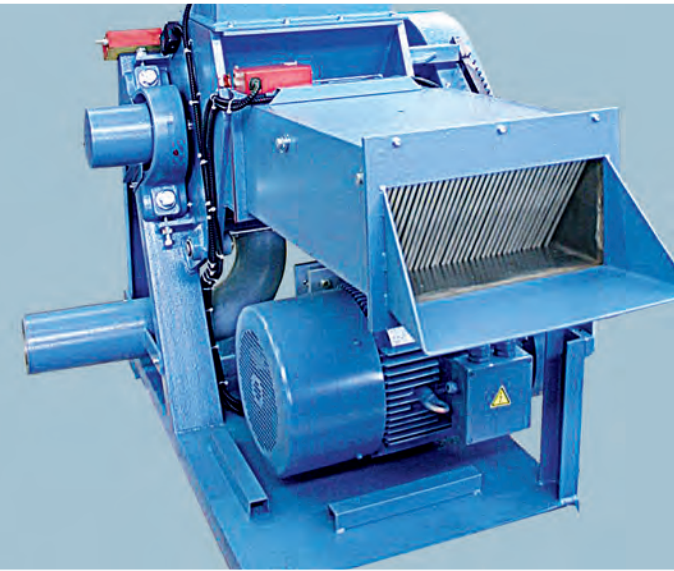
Profiles



Thick-walled pipes



Pipes



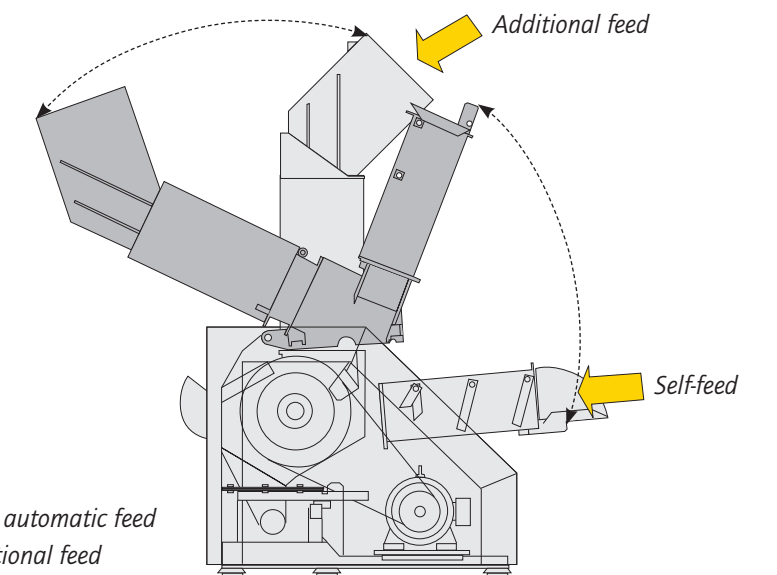
SMP 35/42



SMP 45/70

## Profile Granulator SMP Series

Different types of plastic and construction of the pipes pose particular challenges to the machines.



What is needed is a low noise and an optimized power consumption. Plastic waste is reduced in the production process and along the whole supply chain. To minimize disposal costs and to be able to

use granulated material rather than new, requires efficient superior-functioning pipe shredding technology. HERBOLD Meckesheim offers a broad portfolio of granulators and shredders for these tasks.

### Many Different Challenges

- In choosing the optimal shredding machines for pipes, several factors must be taken into consideration: will the plant be set up in the extrusion/production areas or in a separate room? Are there frequent changes of color or material during production? To what extent should the plant be automated? What is the investment available? Clients demand simple handling and the possibility of cutting pipes of all sizes, lengths and diameters. HERBOLD offers the ideal solution to each individual demand.

### Shred pipes to a diameter of 3000 mm in one work process

- PP, MDPE, HDPE, etc. pipes place particular demands in shredding due to their tough properties. This waste is valuable raw material though. Pre-cutting is costly and has high risks bound up in it.

It is possible to shred pipes with a diameter up to 3000 mm in one work procedure with the HERBOLD granulator without preliminary processes.

### SMP profile granulator

- The SMP profile granulator is available for light pipes with a small diameter up to approx. Ø 250. Due to a special configuration of the cutting rotor, the material is caught by the blades, fed in automatically and shredded. Short pieces and fittings can be fed in via the additional feed. This variation is principally intended for drains and sewerage pipes. You can find further information in our "SMP profile granulator" brochure.





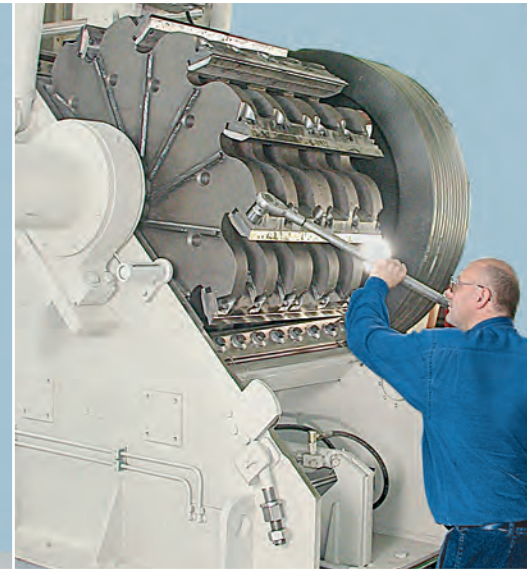
SMP 60/100



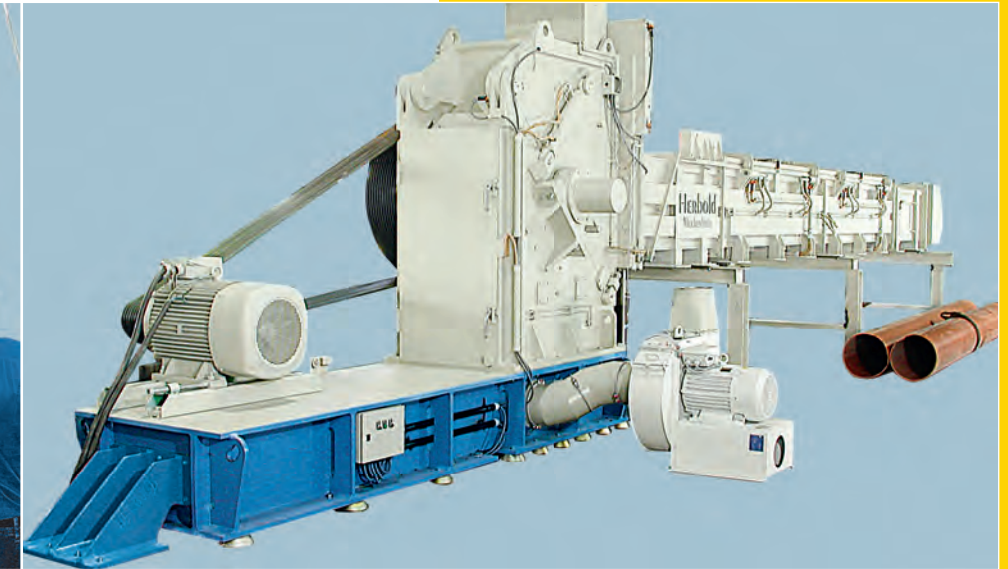
Granulator with a tilting load-hopper



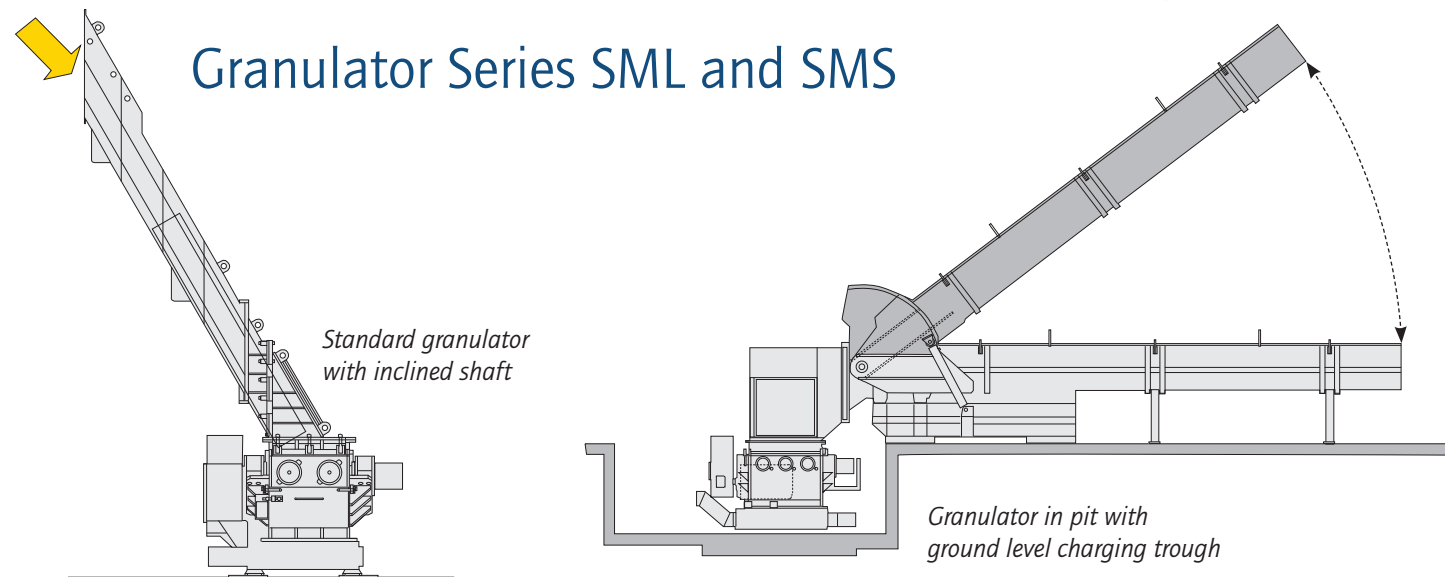
Side tilting load-hopper  
SMS 60/100



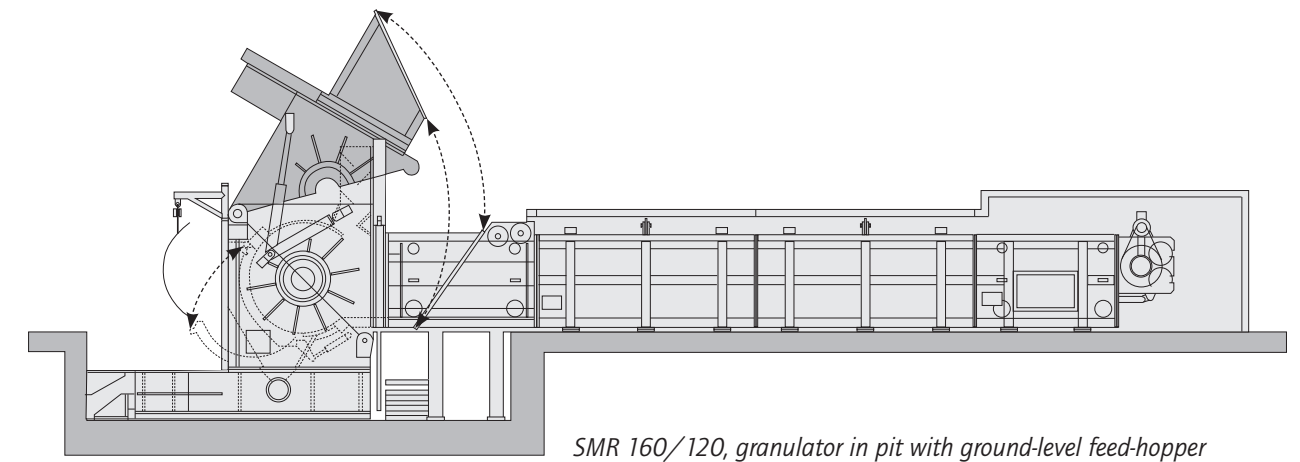
SMR 120/80 open



SMR 120/80



**Pipe Granulator SMR Series**



**Standard granulator with inclined shaft**

- The cheapest solution is to use a standard granulator which is equipped with a special feed hopper. Since this cannot be fed in batches, there is a danger of overfeeding and blockages occurring. For this reason, thick-walled pipes more than about 2 m in length must be pre-cut before they are fed into the granulator. An operating platform or a pit is necessary for this variation.

**Standard granulator with side feeding**

- To ease handling, a standard granulator can be provided with an increased working width of about 1000 mm. This makes the feeding of the pipes, which is parallel to the axis of the rotors, easier since a less sharp feed angle is required. A tilting feed hopper is available for this machine; the room height needs to be suitable for the combined height of the appliance. You can find further information in our "SML granulator" and "SMS granulator" brochures.

**An ideal system for safe and automatic shredding**

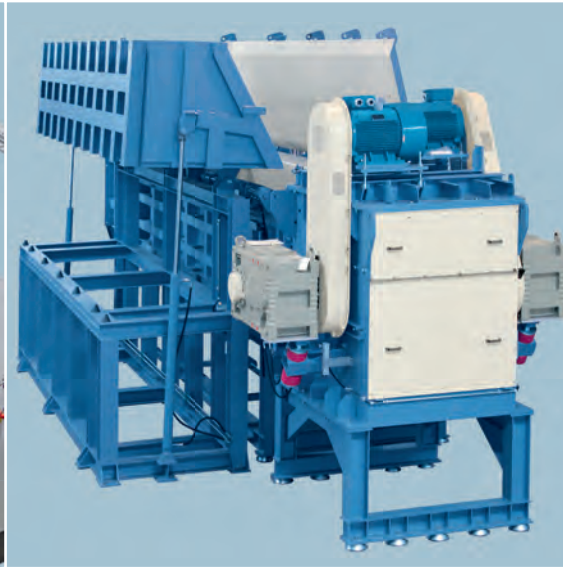
- The pipes, profiles or sheets are placed in the feed-hopper by crane or fork-lift truck. If the pipe granulator is delivered with a storage trough, the whole process can be automated. During loading, the cutting chamber of the granulator is separated by a sliding valve up to the receiving hopper. No material can escape from the granulator during any phase of the granulation process. As soon as the loading hopper is filled, it is hydraulically bolted. A feeding unit pushes the pipes or sheets into the cutting chamber and the rotor catches the material and shreds it. A suction unit transfers the granulated material to, e.g., silos. Effective sound insulation allows installation near the extrusion plant. You can find further information in our "SMR granulator" brochure.



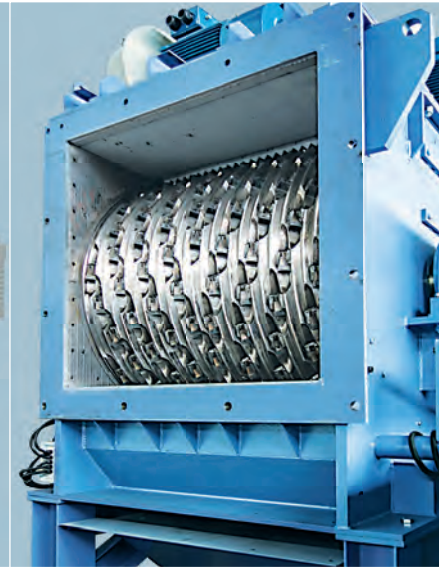




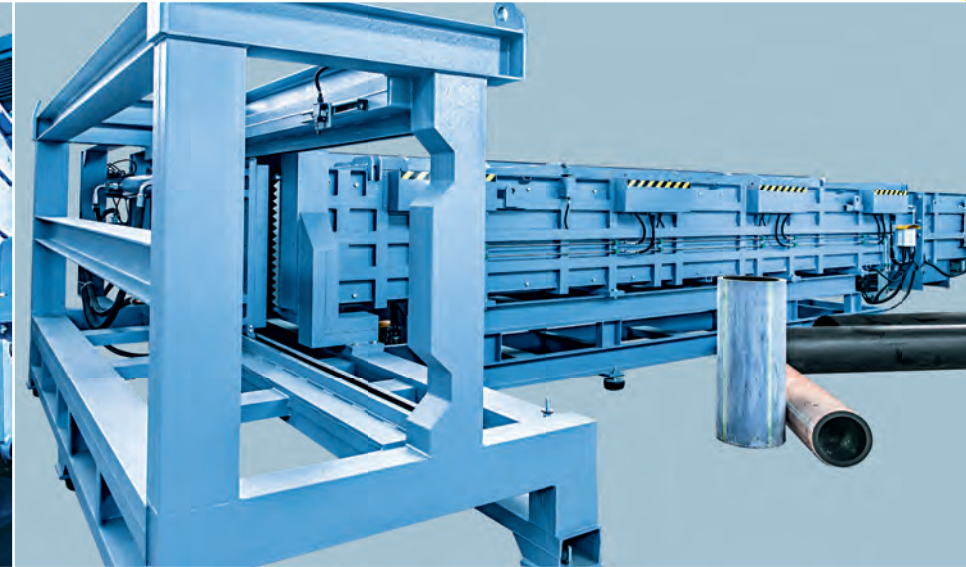
EWS 45/160



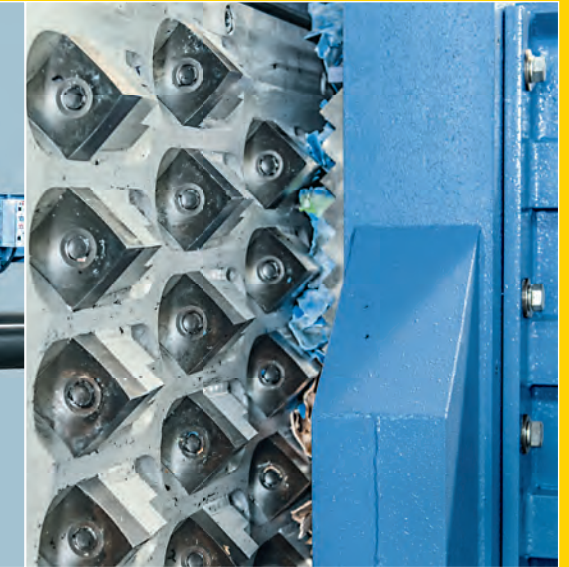
EWS-R 150/200



EWS-R 150/200 interior room



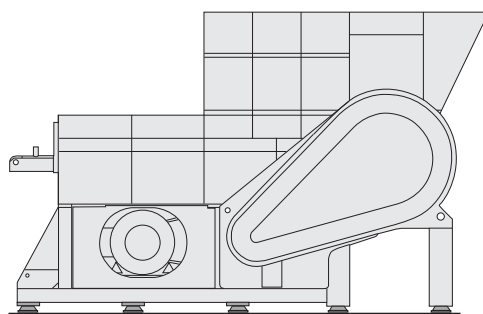
Herbold Oscillating Shredder Series HOS



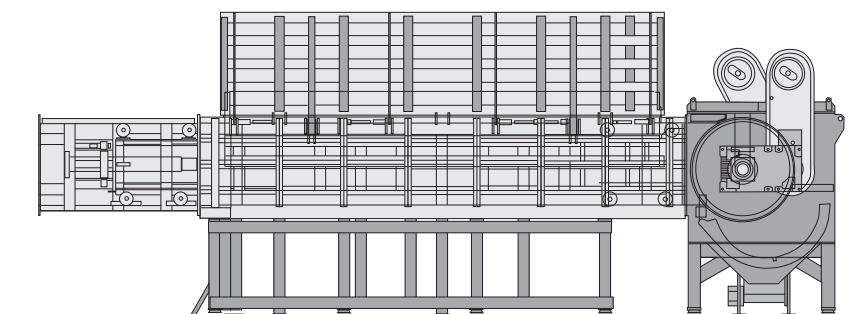
Grating-Principle

## Single-shaft Shredder Series EWS and EWS-R

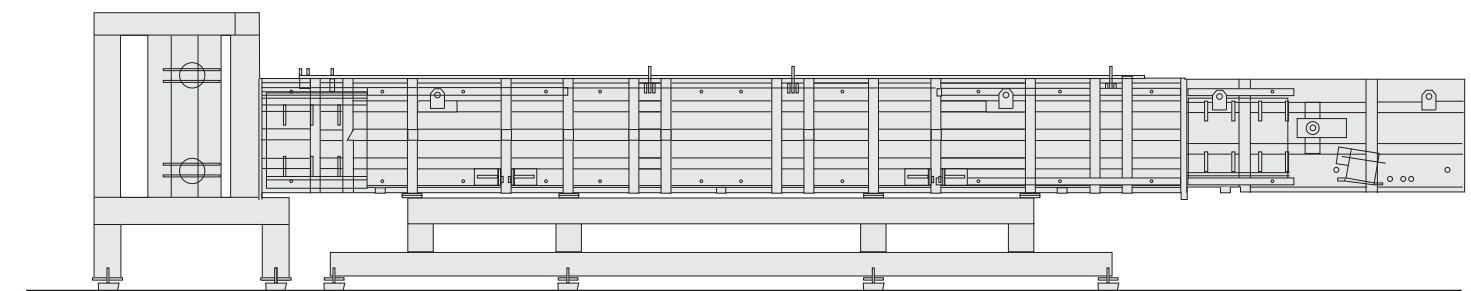
## Oscillating Shredder Series HOS



EWS 45/120



EWS-R 150/200



HOS Shredder with feed-hopper

### EWS

- The shredder hopper is closed during operation by a hydraulic cover for reasons of noise prevention and to prevent material escaping. The pieces or fittings to be granulated can be fed into the generously sized hopper opening. After the material to be shredded has been fed in, it is pushed into the rotor by a hydraulically powered feed device. This feed device is controlled via the energy consumption of the drive motor. When the feed device returns backwards, it creates space for material to fall into and the pushing procedure begins again. You can find further information in our "HR and EWS single shaft shredders" brochure.

### EWS-R

- The pieces or fittings to be granulated can be fed into the generously sized hopper opening and fed to the shredder. Feeding can be done by hand, by fork-lift or by conveyor belt. It is advisable to feed the shredder with a tilting storage trough. After the pipe or profiles have been fed in, they are pushed into the rotor by a powered feed device. This feed device is controlled via the energy consumption of the drive motor. You can find further information in our Information Sheet 66 "EWS series single-shaft shredder".

### HOS Working Principle

- The HOS shredder has a feed hopper with a hydraulic cover for receiving the materials to be fed in. A hydraulically operated feed cylinder pushes the material cyclically - depending on resisting pressure - into the cutting parts. This consists of a plate with knife holders, bolted knives or a fixed knife rail. After the material has been shredded to sizes of around 50-100 mm, it falls onto the conveyor belt beneath. Depending on the required grade of the granulated material, the shredded material is fed into a downstream granulator. You can find further information in our Information Sheet 59 "HOS Herbold oscillating shredder".







The Herbold company is a family company and has been in existence for four generations:

**1884** Company founded by Adam Herbold in 1884 as an agricultural mill construction company

**1921** Take-over of the company by Georg Herbold

**1956** Oskar Herbold continued the company

**1978** The brothers Karlheinz and Werner Herbold took over the company

## Our product range

Guillotines

Shredders

Hammer mills

Granulators

Pulverizing systems

Washing systems & components

Plastcompactors/agglomerators

## Herbold wet and dry technical laboratory



In the Herbold technical laboratory tests are possible with clean pipe and profile waste as well as tests with contaminated post-consumer pipes and profiles.



For more information, please see our videos on our website [www.herbold.com](http://www.herbold.com)

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