

# HERBOLD



## HERBOLD Circular Shredder Series ZSR 230

For shredding of large-diameter, reject pipes: a completely new solution! The HERBOLD ZSR series circular shredder.

Thick-walled PE pipes are continually growing in size: while 1600 mm used to be the common standard, dimensions of over 2000 mm are no longer any exception. The production of such pipes with wall thicknesses sometimes over 100 mm and purgings weighing several 100 kg naturally results in rejects, which must be economically recycled. HERBOLD has taken a completely new approach to this problem: the ZSR series circular shredder.

The material is deposited in a horizontal charging trough, which is equipped with a feeding device on the front side. This feeding device pushes the material deposited in the trough against an inclined disk rotor, which is equipped with special cutting tools. This rotor cuts the material into thick-walled rolled chips, which are then ground further in the following granulator.

*Optimum quality of the preliminary shredding*



*Typical granulate size after preliminary shredding approx. 50 - 100 mm*

Only with such thick-walled rolled chips can easily-flowing material with a high bulk density be achieved in the following granulator.

The previous solutions on the market using single- or multiple-shaft shredders have significant disadvantages:



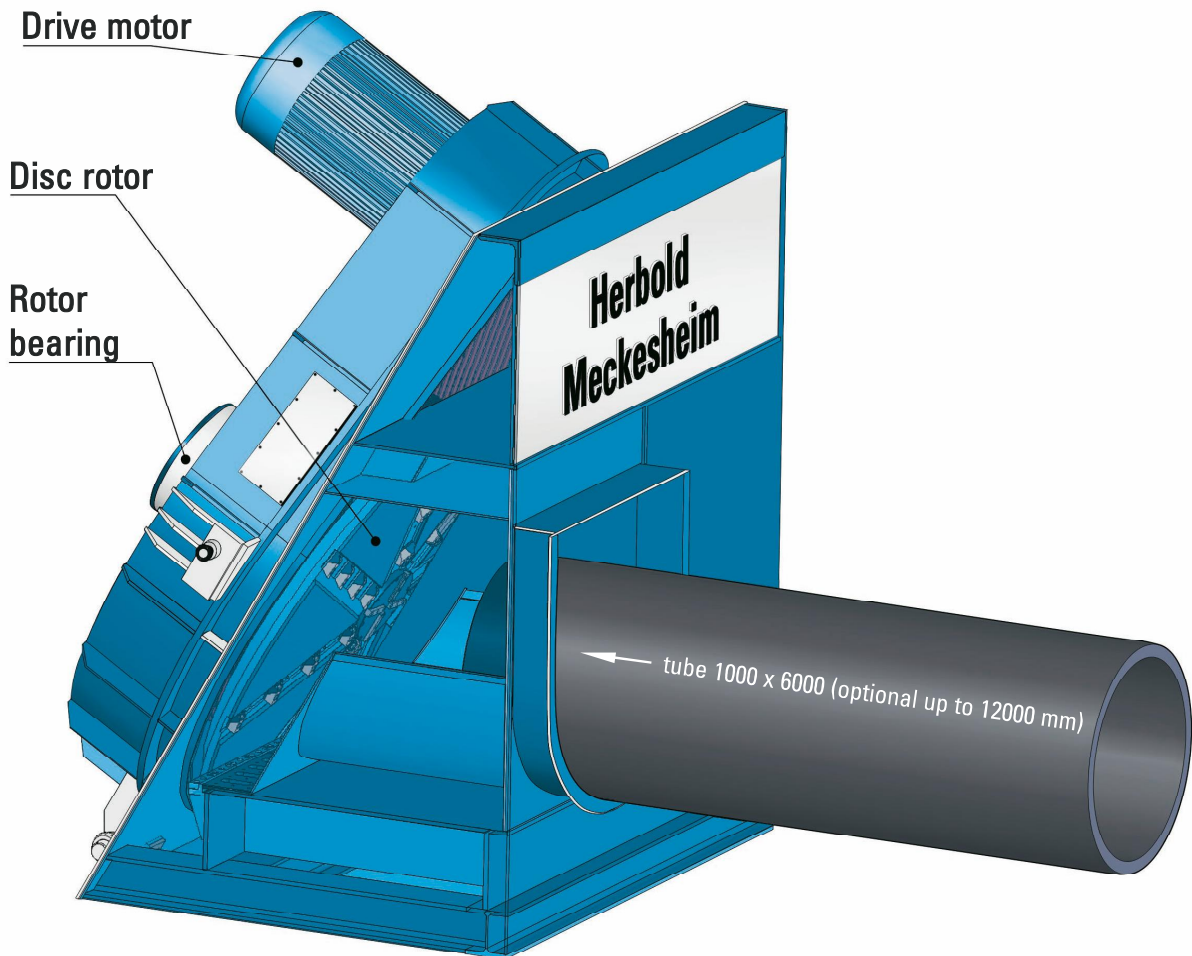
- The milling quality is inadequate because of the thin chips produced by the shredder: the material has poor flow properties, and often has to undergo a second granulation process in order to be fed in again.
- The pipes must either be placed vertically into the shredder shaft, several shredder shafts have to be engaged or there are other restrictions, e.g. in the pipe length, if these have to be fed in parallel.  
Due to the working method of these systems, the performance is low, and the efficiency questionable.

With the HERBOLD circular shredder, these problems no longer exist:

- The achievable end-product consists of a material with excellent flow properties with high bulk density, and a low proportion of fines, which can easily be transported and used in conventional systems.
- Pipes of 6 m, 12 m or even longer can be fed in horizontally and processed without preliminary cutting. The feed trough is closed and locked by means of a cover before the shredding process starts: this procedure prevents the danger of accidents and foreign bodies accidentally falling into the trough.
- The throughput performance is very high, with even the smallest machines achieving a performance of 1.5 to 2.5 t/h.

### Technical Data HERBOLD ZSR 230

Type	ZSR 230
Max. pipe diameter	1000 mm
Drive performance	90 - 110 kW
Throughput	1.5 – 2.5 t/h



### Our product range

- Granulators
- Pulverizing Systems
- Shredders
- Hammer Mills
- HOG Shredders
- Guillotines
- Washing Systems
- Plastcompactors

### Herbold Meckesheim GmbH

Industriestr. 33  
D-74909 Meckesheim  
Postfach 1218  
D-74908 Meckesheim  
Tel.: + 49 (0) 6226/932-0  
Fax: + 49 (0) 6226/932-495  
E-Mail: [Herbold@Herbold.com](mailto:Herbold@Herbold.com)  
Internet: [www.Herbold.com](http://www.Herbold.com)

Herbold Meckesheim USA  
Resource Recycling Systems Inc.

P.O. Box 239  
Slatersville  
Rhode Island 02876  
Phone: + 1 401-597-5500  
Fax: + 1 401-597-5535  
[info@HerboldUSA.com](mailto:info@HerboldUSA.com)  
[www.HerboldUSA.com](http://www.HerboldUSA.com)