# HERbold

## **Information Sheet 24**

# Special rotor G3 (guillotine rotor), model with double cross cutting action

HERBOLD granulators can be equipped with this special rotor for applications in which smearing or sticky material is to be reduced.

Some typical applications: Bales of natural and synthetic rubber, atactic polypropylene, blocks of wax, types of thermoplastic rubber, polyurethane sheets, bales of bitumen, frozen meat, EPDM.



Rotor G3 for granulator model SMS 80/120: The inclined mounting of the rotor and stator cutters is clearly visible. As the stator cutter is positioned in the lower section of the machine it is also possible to check the cutting gap when the machine is open.



The out-board mounted rotor bearings ensure easy accessibility to the front side of the rotor plates. This is a special feature of the HERBOLD design.

HERDOLD M E C K E S H E I N

A further application is found in the reduction of material where there is the risk of a standard rotor blocking due to excessive friction, e.g. with pressed bales, bundles of fibres, film, tape and other mono- and multi-filaments. This type of rotor can also be used for the hot melt granulation of molten plastics.

Furthermore, this type of rotor can be used in slow-running units for special applications, e.g. the size reduction of spices and drugs with a minimum amount of fines.

### Construction

The cutters are mounted on supports which are attached to side plates positioned on each side of the cutter. The thin-line, low friction shape of the cutter ensures clean cutting of the material to be reduced with a minimum of rubbing or crushing.

The special type of rotor shaft, as opposed to a conventional shaft located in the grinding chamber, is fitted to the front side of the rotor plates. With this design the rotor shaft is kept outside of the side plate of the rotor and out of the cutting area of the grinding chamber. This reduces friction - otherwise caused by rubbing inside the cutting chamber.

### **Double cross cutting action**

The cutters operate with a scissor-like cutting action because of the double cross cutting effect (the rotor **and** stator cutters are mounted at an angle opposed to each other). The cutters only get in contact with one another at one point at a time which reduces the noise generation and power consumption considerabely.







The rotor plates, positioned at the sides of the cutters, are completely covered by the granulator casing. This prevents material rubbing against the side walls of the casing, thus avoiding friction.



Two-stage size reduction with powdering and talcum recovery



# **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 Internet: 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 www.HerboldUSA.com

Specifications are not binding and subject to change without notice. Edition 05/2007