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Information Sheet 32

Granulators with Feed Ram

HERBOLD offers an interesting solution for the size reduction of bulky blow and injection moulded pieces in the smallest granulator possible. By forcing the feed material into the grinding chamber it is possible to implement unusually small granulators for extremely voluminous waste. The following practical example illustrates this solution:

Reduction of 220 litre (60 gal.) canisters on a blow moulding line

Conventionally sized unit:	Granulator Ø 600 x 800 mm 23½" x 31½" Drive 75 kW (100 HP)
Unit with ram:	Ø 300 x 800 mm 12" x 31½" Drive 22 kW (30 HP)

Due to the extremely high power saving (in the example above 22 kW as opposed to 75 kW) it is possible to recycle this type of waste very economically in-line on blow or injection moulding systems.

In the example it is possible to select a granulator to guarantee a more gentle feeding so that even cold "tops and tails" and congealed "cowpads" can be reduced in the same machine. This is a great advantage compared to granulators with tangential feed openings. The latter are suited for bulky hollow pieces and warm "tops and tails", but tend to clog, when thick-walled cold waste is being fed.



Granulators with feed rams are even more advantageous than two stage systems fitted with a shredder. This is because the purchase price and the running costs of a two stage system are automatically higher from the start.





Double Cross Cutting Action - superior to every other cutting geometry

The rotor and bed knives are mounted at inclined angles opposed to each other. This not only guarantees a long life for the granulator's components, but also reduces stress and dulling to the knife edges. Additional benefits of the new age design are a lower noise level, less energy utilization, a better quality of the granulate size (less fines) and a higher bulk density and throughput; potential problems of jamming in the granulator are being reduced. The scissor-like cutting effect onto the material is doubled compared to granulators with a single cross cutting blade configuration.

The cutting gap problems which are quite common with the single cross cutting granulators are compensated when the knives are inclined.

(See also Information Sheet 21: What is "Double Cross Cutting Action"?)





Our product range

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

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