

## Fully Automatic Recycling of Edge Trims: Granulator with Suction Nozzle

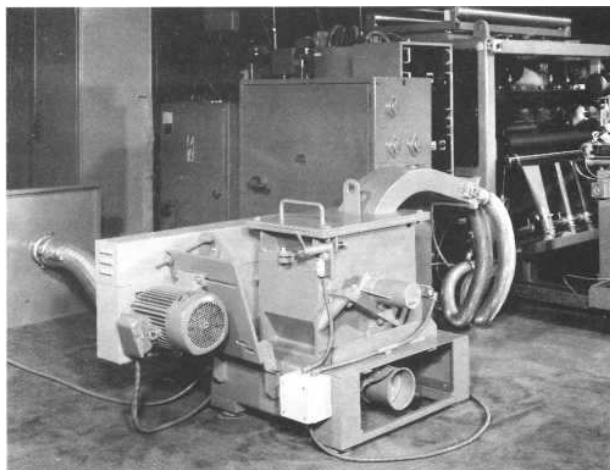


The HERBOLD Granulators of the AD series offer a particularly safe and trouble-free solution for the recycling of edge and middle trims, operating effectively on high speed production lines.

### Examples of Applications:

- Cast film
- Blow film
- Foam film
- Paper
- Fleece
- Laminating units

The blower installed in this granulator series is sized so that it is suitable for removing the reduced trim and simultaneously for feeding the edge trims to the granulator. The advantages of this system:

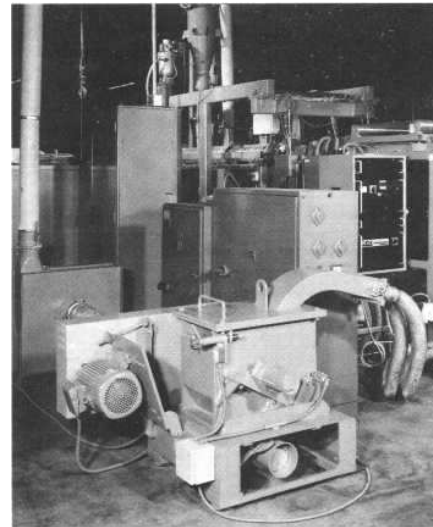


Granulator SML 30/30 AD at a cast film unit with edge and middle trims recycling

- The feeding velocity adapts itself automatically to the speed of the production line.
- The trim is automatically reintroduced to the feed nozzle in cases where the trim is torn off.
- Economical solution since no additional mechanical devices are necessary for feeding purposes.

HERBOLD Granulators of the AD series implement the double cross cutting action (see [Information Sheet 21](#)), and are particularly suited for this size reduction application:

- The rotor and stator (bed knife) blades are mounted at an angle inclined to each other so that the cutting gap remains constant across the entire width of the cutting chamber.



Granulator with direct feed to the extruder

- The noise level is noticeably lower. As a rule a noise level of 85 dB (A) can be obtained without any additional noise protection measures.
- The bulk density of the reduced material is much higher than with the cutting geometry of competitive equipment.
- Less sensitivity to purging, e.g. due to torn off trims.

### Three alternatives for recycling edge trims:

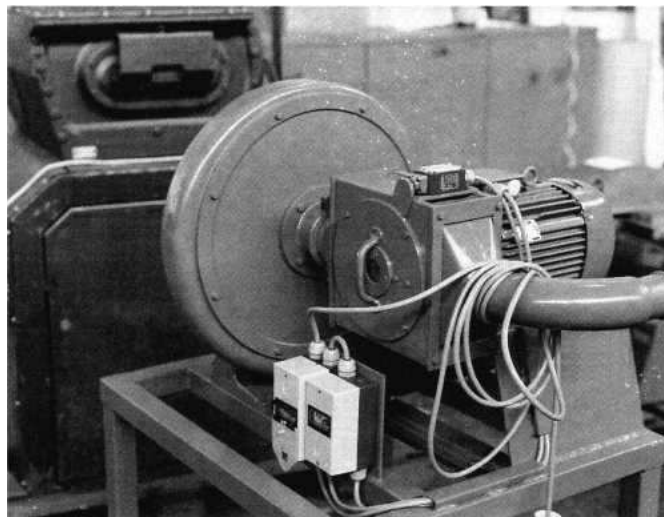
- Granulators with feed roller device (for thick edge trim over 500 microns and medium plant speeds of up to 100 m/min for the best solution. See [Information Sheet 23](#)).
- Granulators with separate feed and cage receiver above the feed opening (for the modification of existing feed systems or for special applications). See [Information Sheet 14](#).
- Granulators with suction nozzle: for very thin film on high speed production lines.

Granulator AD series Type SML	20/10	20/20	30/30	30/50
<b>Rotor dimensions</b> Ø [mm/in] x width [mm/in]	200 x 100 mm 8.0 x 4.0 in	200 x 200 mm 8.0 x 8.0 in	300 x 300 mm 12.0 x 12.0 in	300 x 500 mm 12.0 x 20.0 in
<b>Drive power [kW] / [HP]</b>	2,2 - 4 kW 3 - 5.5 HP	3 - 5,5 kW 4 - 7.5 HP	5,5 - 11 kW 7.5 - 15 HP	7,5 - 15 kW 10 - 20 HP
<b>Throughput [kg/h]**</b> <b>with 4 mm (0.15 inch) screen</b>	20 - 25	30 - 50	40 - 100	80 - 150

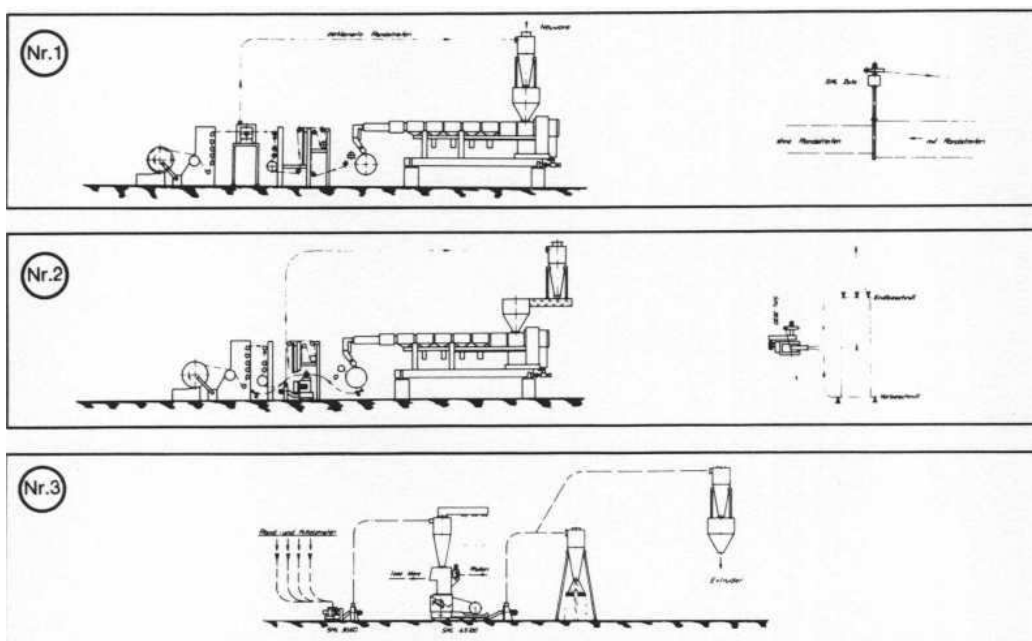
\*\* The throughputs given above depend upon the type of material and the system assembly.

Examples of system assembly:

- No. 1 Recycling edge trims with return-feed of the reduced material:  
The virgin granulate is fed via the cyclone air outlet effecting that its weight feeds the recycled film chips into the extruder.
- No. 2 Recycling edge trims with return-feed of large quantities of reduced material:  
When large quantities of recycled material are to be return-fed into the extruder the use of a dosing screw is recommended.
- No. 3 Complete recycling on a film production line:  
In addition to edge trims from start-up and end cuts, middle trim, reject rolls and lumps of waste can also be recycled. The granulator, equipped with a suction nozzle, pre-cuts the material which is subsequently fed to a fine granulator fitted with a roller feed device for feeding rolls of material and reject pieces. Upon request a switch-over material diverter plate can be fitted for redirecting the granulate to a sacking unit when the extruder return-feed system registers full.



Granulator SML 20/10 AD



## Our product range

- Granulators
- Pulverizers
- Shredders
- Plastcompactors
- Hammer mills
- Guillotines
- Washing systems

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