

ALPINE FINE CUTTING MILL TYPE AFS



HOSOKAWA ALPINE

PROCESS TECHNOLOGIES FOR TOMORROWSM



POM



ALPINE fine cutting mills AFS are employed for the fine milling of soft to medium-hard plastics in the fineness range of several hundred μm to 2 mm.

APPLICATIONS

It is irrelevant whether the feed material is virgin material or product from a granulator. The end product achieved with the AFS mill is characterised by a smooth, cubic shape with extremely good flow properties and is thus optimum for further processing.

PRINCIPLE OF OPERATION

The feed material, usually between 4 and 8 mm in size, is fed into the grinding zone via the intake chute on the mill door. Size reduction takes place between the axially adjustable stator disc and the rotating grinding disc, which rotates at a high peripheral speed in accordance with the shearing and cutting principle. The actual grinding is effected in stages through a tapered grinding gap from the inside to the outside. The finely ground



POLYAMID GRANULES

product exits the milling zone through an exactly defined gap. Wherever a precise top-size limitation is required, the mill can be operated in circuit with a suitably designed screening machine. The oversize particles are routed back into the milling zone. Most types of plastic can be finely ground at ambient temperature using this technology. If, on the other hand, the feed material is heat-sensitive, cryogenic mode is also possible. Contact our application engineers for advice and assistance. Our wide range of application know-how ensures optimum advice and the execution of sophisticated individual machines and complete systems.

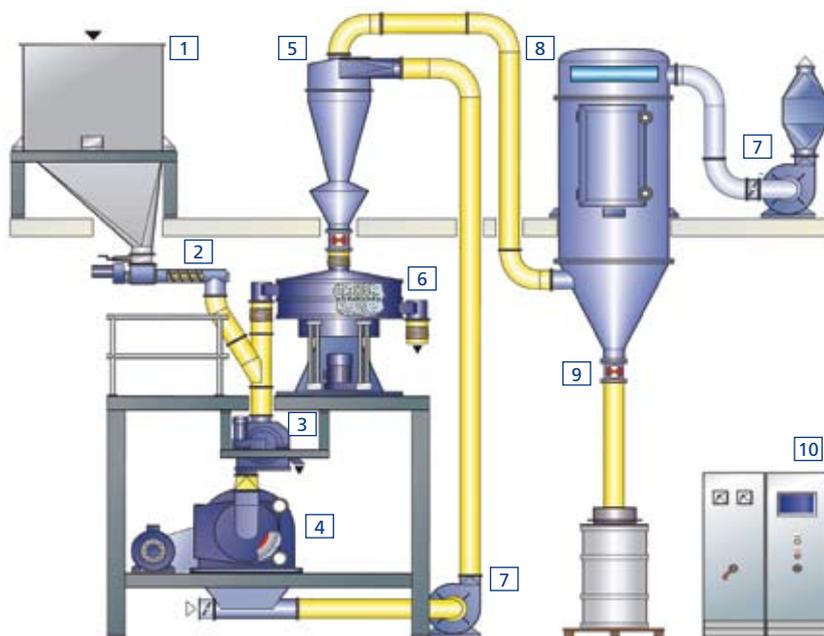
FEATURES

- One-piece milling discs with a variety of tothing geometries optimised with regard to wear and maintenance
- High throughput capacity at low specific energy consumption
- Exact milling gap adjustment from the outside by means of a precision adjustment mechanism
- The milling elements can be exchanged within a few minutes
- Quick and easy access to the milling chamber for cleaning and maintenance
- Reliable high-speed precision bearings
- Compact and stable design, either of spheroidal graphite cast iron or in welded design
- Largely automated mode of operation using controlled feed metering
- Temperature and mill load measurement to maintain a constant level of high product quality

Type	kW	F approx.
200 AFS	22	1
315 AFS	37	1.6
500 AFS	55	2
800 AFS	75	4

F = Scale up factor

- 1 Supply bin
- 2 Feed metering unit
- 3 Metal separator
- 4 Fine cutting mill AFS
- 5 Cyclone
- 6 Screening machine
- 7 Fan
- 8 Autom. filter
- 9 Rotary valve
- 10 Control cabinet



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