

HAMMER MILL – LARGE-CHAMBER MILL SERIES FD

## THE POWER PACKAGE FOR FINE GRINDING OF PET FOOD AND FISH FEED

The FD hammer mill was designed specifically for the requirements of fine grinding. Sophisticated design for the efficient grinding of demanding recipes and products: The special 6-axis rotor design with quick-change beater frame system, as well as optimised beater configuration, delivers maximum material contact for the efficient production of fine feed qualities.

The FD also offers the option of simply enlarging the baffle zone, thereby optimising the fineness and grinding capacity depending on the recipe and requirements.

The FD Series comprises three sizes with a drive-power range between 160 and 355 kW.



### TECHNICAL DETAILS

- Strong welded-steel construction with symmetric design, allowing rotation in both directions
- Strong wear-resistant parts protect the grinding chamber and are easy to maintain
- Two position inlet flap with proximity switches to change direction of rotation
- Large hardened impact plates at both sides of the mill inlet area to ensure best grinding performance
- Catch-trap for foreign bodies inside the grinding chamber to protect the screens, easy to clean
- Dynamically balanced long-life rotor in special design, run down time < 6 minutes without brake
- Special beater fastening in support frames (cassette-exchange), beater changes in just a few minutes
- Wide opening doors allow easy access to the grinding chamber
- Large screen area consisting of 4 screens that can be easily and individually changed
- Mill and motor section are separable, making installation easier especially in limited spaces
- Tested and certified in a shock-resistant and flame escape proof design up to 0.4 bar
- Grist spectrum can be varied by a frequency converter (FC) and the beater configuration

Tietjen large-chamber hammer mills prove their worth operating 24 hours a day, 7 days a week – often in the harshest of environments. The reliability of our machines is legendary.

Mill Type	FD 12	FD 20	FD 25						
Grinding chamber diameter	1200 mm	1200 mm	1200 mm						
Screen width	640 mm	1000 mm	1250 mm						
Grinding chamber area	1.84 m <sup>2</sup>	2.88 m <sup>2</sup>	3.60 m <sup>2</sup>						
<b>Dimensions and Weights</b>									
Length* (approx.)	2610 mm	2610 mm	3010 mm						
Width (approx.)	1600 mm	1600 mm	1600 mm						
Height (approx.)	1600 mm	1600 mm	1600 mm						
Weight without motor	1900 kg	2400 kg	2800 kg						
* depending on motor size									
<b>Drive 1500 1/min, 50 Hz – speed between 1000 and 1800 1/min (34 – 60 Hz)</b>									
Power range	132 kW	160 kW	300 kW	250 kW	280 kW	315 kW	280 kW	315 kW	355 kW

Smooth running large-chamber grinder at a noise level under load < 88 dB (A)

Common application 

ATEX category:  
II 3 D

Pressure shock  
resistance:  
0.4 bar

**STANDARD SUPPLY AND OPTIONS**

**STANDARD SCOPE OF SUPPLY:**

- Multi-layer coating: colour RAL 9001 (cream)
- Pressure shock-resistant 0.4 bar and flame escape proof design
- Automatic door-locking system with stand still monitor
- Manually operated inlet flap with proximity switches
- Elastic pin coupling (N-Eupex) with protection hood
- Vibration dampers, height adjustable
- Sealing frame between the mill outlet and under hopper intake
- Electrical components pre-wired into terminal boxes
- Drive motor B3 with integrated PTC sensors
- 1 set of beaters fitted on beater frames
- Beater frame changing device
- 2 sets of screens, one set pre-fitted in the mill
- 1 set of special tools

**OPTIONS:**

- Extension of the impact zone (impact plate with ribs)
- Security package:
  - Bearing-temperature monitoring
  - Milling-chamber temperature monitor
  - Vacuum monitor for grinding chamber
- Pneumatic servo drive for mill inlet flap (for remote control of rotation direction change)
- Electrical components suitable for installation in ATEX Zone 22 II 3D



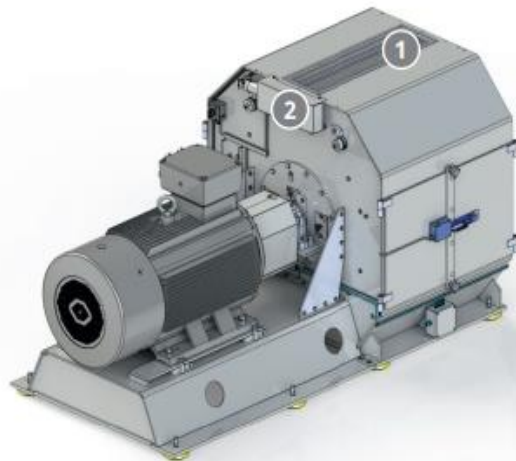
Special sieve seal with support basket for fine grinding



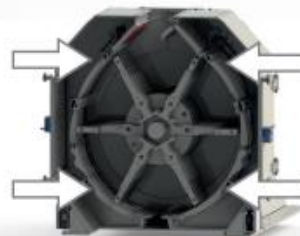
Hardened impact plates



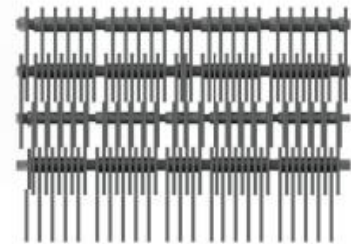
Pneumatically operated inlet flap (optional)



Beater frame with changing device  
 - easy and quick change of rackets  
 in a few minutes



4-part sieve segments individually exchangeable  
 Extension of the impact zone possible  
 - Optimised particle size reduction



Racket configuration  
 M configuration



Approx. 70% impact area in relation to the screen width  
 - Optimised particle size reduction