

2D Hammer Mill

Van Aarsen designs, produces and supplies hammer mills for the toughest applications in the animal feed, pet food, aqua feed and wood processing industry, based on 60 years experience.

Together with the GD series the 2D Hammer Mill range covers capacities ranging from 5 – 100 tons per hour, dependent on type of raw material, formula and required grinding structure and can be incorporated in a pre-grinding as well as a post grinding system as a complete grinding solution including pre-bin, feeder, magnet cleaner, hammer mill, discharge hopper, aspiration filter, fan and control system.

Features of the 2D Hammer Mill

- Low energy consumption
- Largest grinding surface in the industry
- Optimum operational utilization
- Minimum service down time
- Solid low maintenance construction
- Compact shaped feeding device with frequency controlled dosing roller for smooth load control and air intake function
- Automatic screen exchange



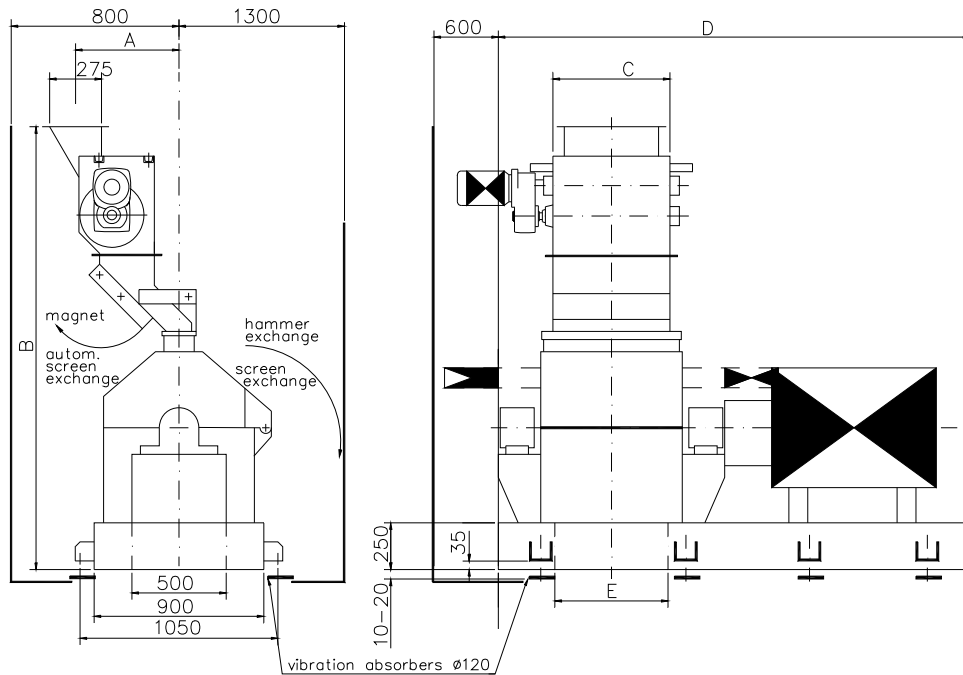
- Magnet and collecting bin for automatic Ferro parts separation included in feeding device
- Energy efficient motors with direct coupling to hammer mill rotor
- Use of frequency converter for customer specific structure milling and increase of flexibility
- Automatic magnet cleaning
- Solid rotor design ensures stability, durability and acts as a flywheel.
- Built completely according to the latest regulations and standards for safety and hygiene.

Design

- Bi-directional inlet flow director and rotor to have optimal use of the hammers on all their 4 sides
- The hammers are made of extreme long lasting material to reduce operational wearing costs.
- The rotor is machined from a single steel part. Shaft breakage or distortion does not stand a chance.
- The grinding surface is a combination of breaker plates and screen. On the breaker plates the product particle size will be reduced and those particles will leave the hammer mill through the screen.
- The hammer mill base plate is filled with concrete and the total assembly is mounted on shock absorbers for minimal vibration.
- Quick screen exchange whilst the hammer mill is stationary, minimizing production loss.
- Aspiration system necessary for correct functioning of the 2D hammer mill complete with automatic cleaning air filter and fan.
- According to CE and ATEX safety regulations.

Design options

- Frequency controlled main drive
- Sieve above hammer mill
- Hopper under hammer mill
- Temperature monitoring for grinding chamber and bearings for operational safety
- Aspiration system:
 - Filter integrated in hopper below hammer mill (less contamination)
 - Filter separated from hopper below hammer mill
 - Air flow valve for easier filter cleaning
 - Fan drive with frequency control



Type	Dimensions for sketch in mm					
	A	B	C	D	E	Width grinding chamber
HM 400-2D	428	2072	380	1900	400	400
HM 700-2D	549	2342	620	2500	600	700
HM 1400-2D	549	2342	1320	3600	1200	1400

	HM 400 2D	HM 700 2D	HM 1400 2D
Max. dimensions of input material	Ø 20 x 20 mm	Ø 20 x 20 mm	Ø 20 x 20 mm
Installed power at 50Hz / 60Hz	55 - 75 kW	90 - 110 - 132 kW	160 - 200 - 250 kW
Weight (static)	± 2.900 kg	± 4.200 kg	± 5.850 kg
Hammer dimensions	150 x 50 x 6 mm	150 x 50 x 6 mm	150 x 50 x 6 mm
Rows of hammers on circumference	4	4	4
Number of hammers	76	136	272
Number of screens	2	2	4
Screen diameter	600 mm	600 mm	600 mm
Grinding surface	0,75 m ²	1,32 m ²	2,64 m ²
Nett screen surface	0,40 m ²	0,70 m ²	1,40 m ²
Breaker plate surface	0,32 m ²	0,56 m ²	1,12 m ²
Fan air flow	23 - 35 m ³ /min	50 - 50 - 60 m ³ /min	75 - 90 - 115 m ³ /min
Fan power	3 - 4 kW	5.5 - 7.5 kW	11 - 15 kW