2D Hammer Mill

Process

The 2D hammer mill is designed for the animal feed industry, to grind raw materials into small particles and meal. 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.

Benefits and Features

High effectiveness

- The grinding surface is a combination of breaker plates and screen. The product particle size will be reduced on the breaker plates and the particles will leave the hammer mill through the screen
- Small deviation in particle size distribution
- Quick screen exchange whilst the hammer mill is stationary, minimizing production loss
- Sieve above hammer mill for higher capacity of the grinding line (optional)
- Hopper under hammer mill (option)

Energy efficiency

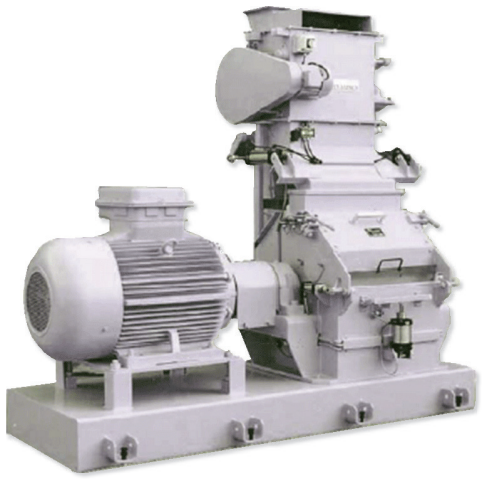
- Energy efficient motors with direct coupling to hammer mill rotor

Low maintenance costs

- Magnet and collecting bin for automatic ferro parts separation included in feeding device
- Automatic magnet cleaning
- Solid low maintenance construction
- Minimum service down time
- Bi-directional inlet flow director and rotor to have optimal use of the hammers on all their 4 sides
- The hammers are made of hardened steel, to reduce wearing costs

Easy and safe operation

- Temperature monitoring for grinding chamber and bearings for operational safety
- Designed and constructed according to CE and ATEX safety regulations



High feed quality

- Built completely according to the latest regulations and standards for safety and hygiene

Hygienic production

- Aspiration system necessary for correct functioning of the 2D hammer mill complete with automatic cleaning air filter and fan can be delivered optional
  Consists of:
  - 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

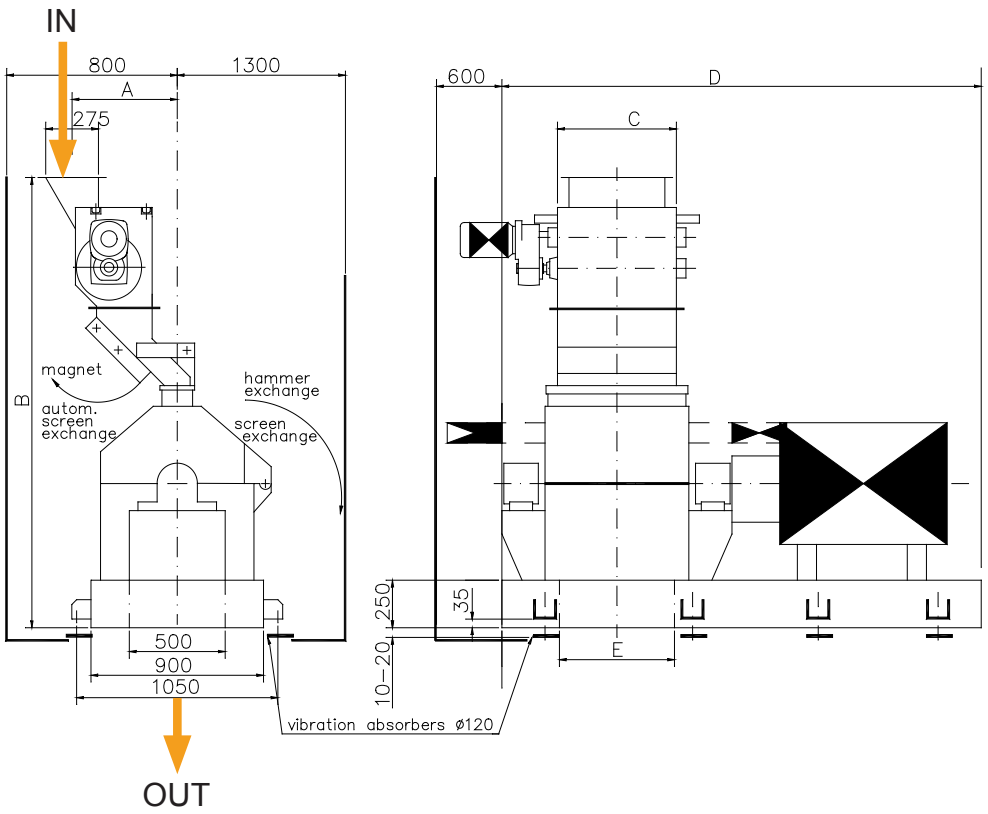
Flexible production

- Use of frequency converter for customer specific structure milling and increase of flexibility (option)
- Automatic screen exchange for two screens (option)

Design

- Solid rotor design ensures stability, durability and acts as a flywheel
- The rotor is machined from a solid steel part, resulting in a sturdy and steady operation of the rotor
- The hammer mill base plate is filled with concrete and the total assembly is mounted on slope absorbers for minimal vibration

Datasheet



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 55 - 75 kW	90 - 110 - 132 kW 103 - 126 kW	160 - 200 - 250 kW 184 - 230 kW
Motor power		3000 rpm	3000 rpm (50 Hz) 1800 rpm (60 Hz)	3000 rpm (50 Hz) 1800 rpm (60 Hz)
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	Hand operated	1	1	2
	Motor operated	Not applicable	2	4
Screen diameter		600 mm	600 mm	600 mm
Grinding surface		0.75 m²	1.32 m²	2.64 m²
Nett screen surface		0.40 m²	0.70 m²	1.40 m²
Breaker plate surface		0.32 m²	0.56 m²	1.12 m²
Fan air flow		23 - 35 m³/min	50 - 50 - 60 m³/min	75 - 90 - 115 m³/min
Fan power		3 - 4 kW	5.5 - 7.5 kW	11 - 15 kW

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