

# Hammer Mill Vertica™.

DFZK



# The trend-setting grinding concept. Easy to operate and highly efficient.



## Advantages

- Up to 25% less energy consumption
- Virtually no moisture loss
- Short change-over times, low maintenance
- Noise level max. 83 dB(A)

## Application

The Vertica hammer mill is primarily used in the feed production industry in pre-grinding and post-grinding applications.

It is also suitable for grinding processes in the grain milling, oil milling, and biomass industries as well as in other production industries.

## Efficient grinding

Thanks to the closed aspiration system inside the grinding chamber, no aspiration is required for the grinding process. In structural grinding applications, this slashes energy consumption by as much as 25% in comparison to that of horizontal hammer mills. The loss of moisture of the material during grinding is virtually zero.

## Short change-over times

Excellent access through the hopper, which can be automatically lowered, and the easy screen and hammer changes minimize downtimes. The rotor braking system based on the reverse current principle stops the rotor immediately.

## Low maintenance

The use of high-grade materials and the design of the grinding chamber significantly reduce the maintenance requirement as well as wear and tear.

Wear parts are plugged in or bolted and are therefore easy to exchange.

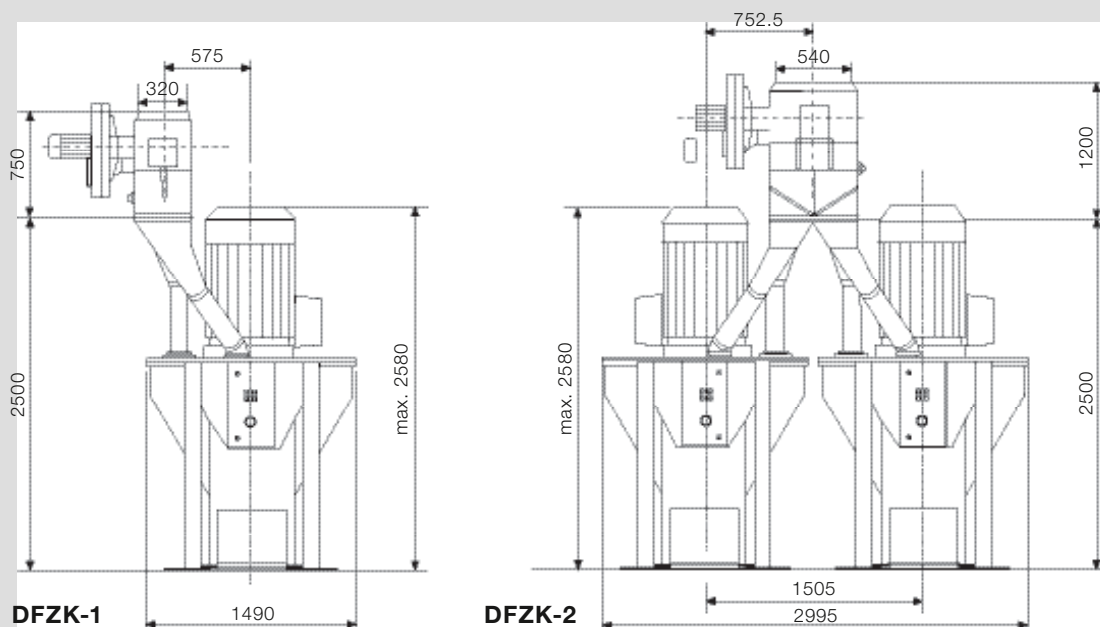
## Outstanding sanitation

The grinding chamber is very easily accessible from all sides, thanks to automatic lowering of the hopper. This greatly simplifies inspection and cleaning of the grinding chamber.

## High operating reliability

The two-hand safety switch prevents improper operation of the hopper. The temperature and vibration detection systems (optional) offer additional safety. With its noise level of max. 83 dB(A), the Vertica hammer mill is only half as loud as horizontal hammer mills. Suitable for ATEX Zone 22.

# Compact design. Versatile application.



## Weights and volumes

Model	Weights [kg]				Volume [m <sup>3</sup> ] seaworthy packing
	without motor	incl. 110 kW motor	packed	seaworthy packing	
DFZK-1	1300	2000	2650	2950	13.30
DFZK-2	2800	4000	4800	5950	23.60

## Technical data

Model	Throughput*	Motors		Screen configuration		Number of hammers
		50 Hz	60 Hz	Screen area	Screen hole Ø [mm]	
DFZK-1	max. 35 t/h	55 / 75 / 90 / 110 kW 1500 rpm	63 / 86 / 103 / 126 kW 1800 rpm	0.7 m <sup>2</sup>	2.0 / 2.5 / 3.0 / 3.5 / 4.0 / 5.0 / 6.0 / 8.0	48 (24 long, 24 short)
DFZK-2	max. 70 t/h					

\* Depending on the raw material and granulation.

## Application limits

The material is fed to the hammer mill by the DFAV feeder. The materials suitable for grinding include free-flowing bulk solids with the following specifications:

- Max. particle size 60 mm edge length
- Bulk density 0.2–0.8 kg/dm<sup>3</sup>
- Moisture content of material up to 15% H<sub>2</sub>O
- Temperature of material max. 40 °C

## Hammer mill control unit DFCQ

The DFCQ machine controller controls the operation of the Vertica hammer mill as follows:

- Automatic control of the material flow on the basis of a target power value for the main motor
- Automatic starting and stopping of all motors
- Control of the hopper, including monitoring of the safety functions
- Control of limit switches and sensors
- Communication interface with the process control system

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