



**Vertica™ Series**  
Hammer Mill

# Vertica™ Series.

## Easy to operate and highly efficient.

### Application

The Vertica™ series 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

Due to the closed aspiration system inside the grinding chamber, no aspiration is required for the grinding process. In most grinding applications, this slashes energy consumption by as much as 25% in comparison to that of horizontal hammer mills. Because of closed aspiration system, there is very low moisture loss.

### Short change-over times

Excellent access through the hopper cone, which can be automatically lowered, and the easy screen and hammer changes minimize downtime. 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 cone. 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) depending on material, the Vertica hammer mill is only half as loud as horizontal hammer mills. Suitable for ATEX Zone 22.



### Advantages

- Up to 25% less energy consumption
- Low moisture loss
- Short change-over times, low maintenance
- Noise level max. 83 dB(A) depending on material

# Vertica™ Series.

## Compact design, versatile application.

### Application limits

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

- Max. particle size 60 mm edge length
- Bulk density 0.2-0.8kg/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

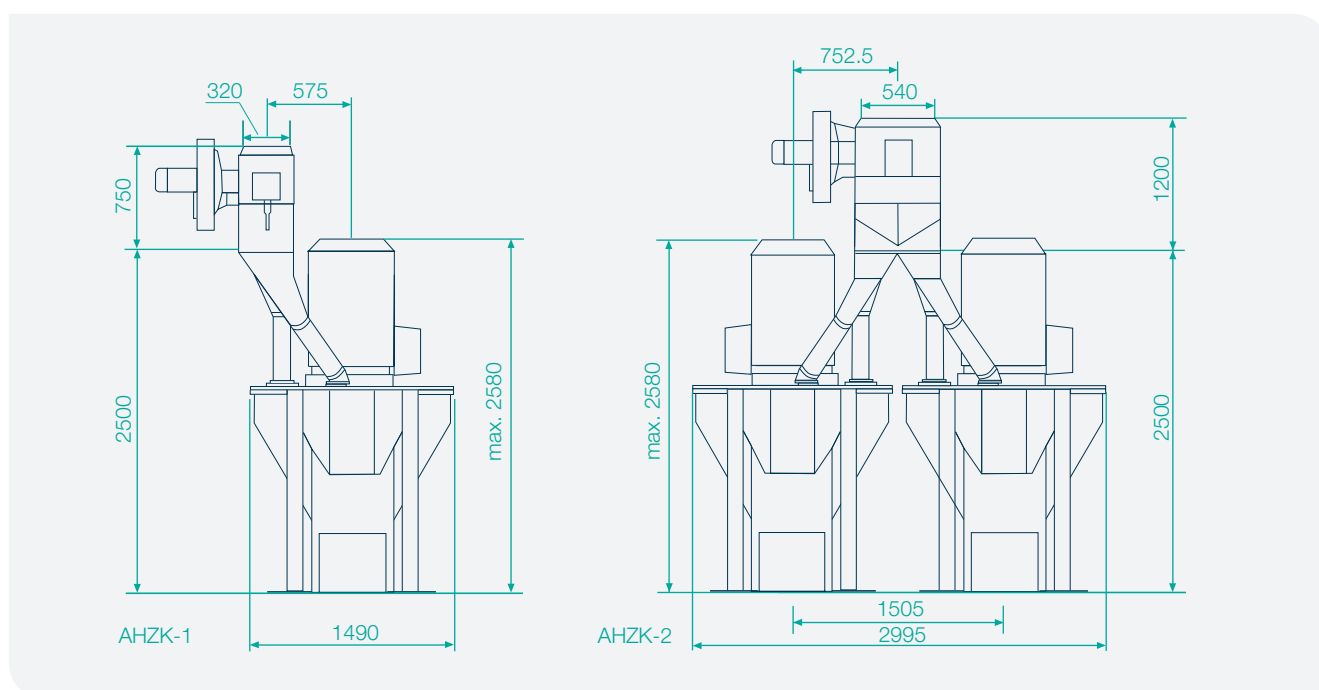
The DFCQ machine controller controls the operation of the Vertica hammer mill as follows:

- Throughput is automatically adjusted according to the motor load
- Control of the hopper including safety functions
- Control of limit switches and sensors
- Communication interface to the plant control system

### Technical data, dimensions

		AHZK-1	AHZK-2
<b>Flow rate*</b>	<b>t/h</b>	max. 16	max. 32
<b>Motors 50Hz</b>		55 / 75 / 90 / 110 kW; 1500 min <sup>-1</sup>	55 / 75 / 90 / 110 kW; 1500 min <sup>-1</sup>
<b>Motors 60Hz</b>		63 / 86 / 103 / 126 kW; 1800 min <sup>-1</sup>	63 / 86 / 103 / 126 kW; 1800 min <sup>-1</sup>
<b>Sieve area</b>	<b>m<sup>2</sup></b>	0.7 m <sup>2</sup>	0.7x2 m <sup>2</sup>
<b>Sieve hole-Ø</b>	<b>mm</b>	2.0 / 2.5 / 3.0 / 3.5 / 4.0 / 5.0 / 6.0 / 8.0	2.0 / 2.5 / 3.0 / 3.5 / 4.0 / 5.0 / 6.0 / 8.0
<b>Weight</b>	<b>kg</b>	2000	4000
<b>Volume</b>	<b>m<sup>3</sup>/min</b>	13.30	23.60

\*Depending on raw material and granulation.



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