HAZEMAG

HAZEMAG Hammer Mills | HUM/HNM

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Effective and flexible fine crushing

Application
Hammer mills of the type HUM and HNM are employed for the fine crushing and/or mill drying of medium-hard to soft materials. Examples: Anhydrite, quicklime, lignite, dolomite, electronic scrap, gypsum, glass, potash, limestone, china-clay, diatomite, chalk, phosphates, salts, French chalk and clay.

Equipment
Due to their high level of flexibility, hammer mills can be adapted to different operating conditions. The housing is lined with replaceable abrasion wear plates. The hinged sections are opened hydraulically. The mounted equipment, such as e. g. impact and spacer strips (grinding path) and various grates can be replaced simply and employed flexibly, in order to achieve the targeted grain size. The rotors with shaft and bearings form the heart of a hammer mill. As a disc rotor, it is equipped with freely-swinging hammers.

Mill drying
By mill drying, the material is not only crushed, but dried simultaneously. Process gas is routed through the mill in direct flow with the crushing material. The dried goods generally leave the mill via grates and a downstream discharge screw conveyor, with attached rotary gate valve. The HAZEMAG rotary gate valves serve for the exclusion of false air.

Process-technical features of the HNM hammer mill
The fineness of the product is influenced by the control of the material flow.

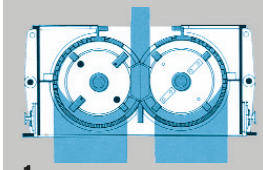
1. The double-rotor machine achieves its greatest throughput capacity in case of central material discharge, since the grinding grate or screen surfaces then have the largest area.

2. If a grinding path is installed below the first rotor, the material reaches the area of the second rotor, and is thus ground in a two-stage process to a greater level of fineness.

3. Optionally the product can be discharged pneumatically to top direction.

4. The HUM mill is equipped with one rotor. As a result of the symmetrical structure of the mill housing, the rotor rotation direction can be reversed.

Process-technical features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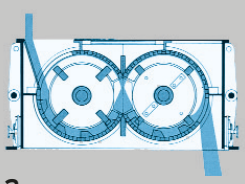
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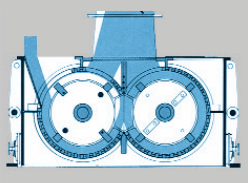
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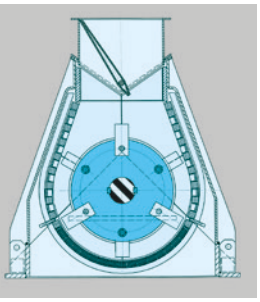
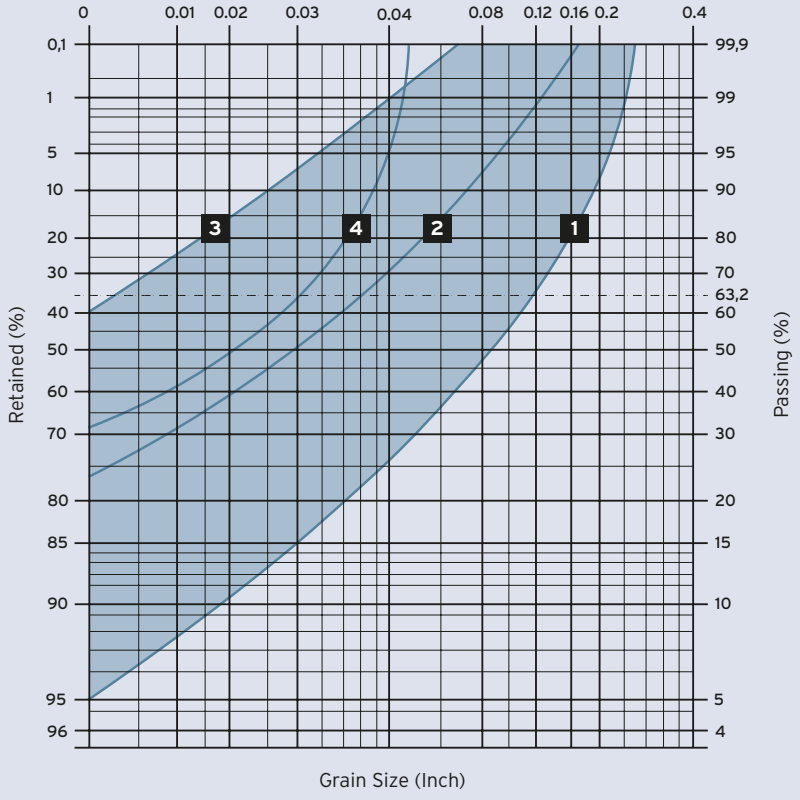

4.

Granulation Curve HUM



1. Product granulation after comminution at a low rotor tip speed using a 0.24 In milling grate
2. Comminution over a 0.16 In milling grate at a moderate rotor tip speed
3. Comminution over a 0.08 In milling grate and with a high rotor tip speed
4. Product from curve no. 2 after screening at 0.05 In

HUM/HNM | Hammer Mills – HAZEMAG is the specialist

HAZEMAG Unitor Mill | HUM				
Type	**Rotor dimensions Ø x width [Inch]**	**Capacity* for 95 % < 0.12 In [t/h]**	**Installed Power* [HP]**	**Weight [lb]**
HUM 0703	25 x 10	5	20 - 60	3,300
HUM 0705	25 x 20	11	25 - 75	4,000
HUM 0708	25 x 30	15	30 - 100	5,300
HUM 1008	40 x 30	30	40 - 250	10,600
HUM 1013	40 x 50	45	60 - 300	15,000
HUM 1313	50 x 50	55	75 - 400	23,400

* values are variable and can be aligned to the particular requirements

HAZEMAG Unitor Mill | HNM				
Type	**Rotor dimensions Ø x width [Inch]**	**Capacity* for 95 % < 0.12 In [t/h]**	**Installed Power* [HP]**	**Weight [lb]**
HUM 0703	25 x 10	10	2 x 20 - 60	4,200
HUM 0705	25 x 20	20	2 x 25 - 75	5,500
HUM 0708	25 x 30	35	2 x 30 - 100	6,800
HUM 1008	40 x 30	50	2 x 40 - 250	15,700
HUM 1013	40 x 50	75	2 x 60 - 300	22,000
HUM 1020	40 x 80	120	2 x 75 - 400	41,400
HUM 1313	50 x 50	130	2 x 75 - 400	46,300
HUM 1325	50 x 100	210	2 x 100 - 600	86,000

* values are variable and can be aligned to the particular requirements

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