



## **Hammermills MFH**

MFH-6 • MFH-15



## **Effective and future-oriented**

### **Operation / Concept**

The modular, compact and operator-friendly approach of the Hammermill MFH ensures optimum crushing results with an excellent throughput for most of the diverse product ranges in the pharmaceutical, chemical and food industries.

The high rotor speeds are largely responsible for the immediate size reduction of the product at high throughput rates.

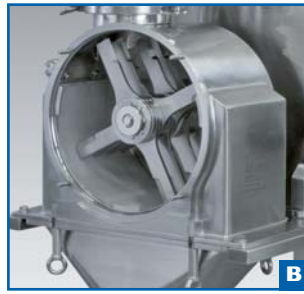
The Hammermill MFH rotor can be reversed without any difficulty, enabling products to be crushed, via reduction in size by the hammers (impact side) or by the knives (cutting side).

The Hammermill MFH is especially suited for crushing hard, crystalline or fibrous products, as well as those products whose grains must be very fine (< 0,2 mm).

Depending on the desired result, screens, rasps or perforated plates may be used.

The rotor drive is protected by a single bearing, ensuring the product is heated to a minimum during the process (cooling system available on request).

A seamless, mono-bloc housing prevents production accumulation and facilitates service and cleaning.



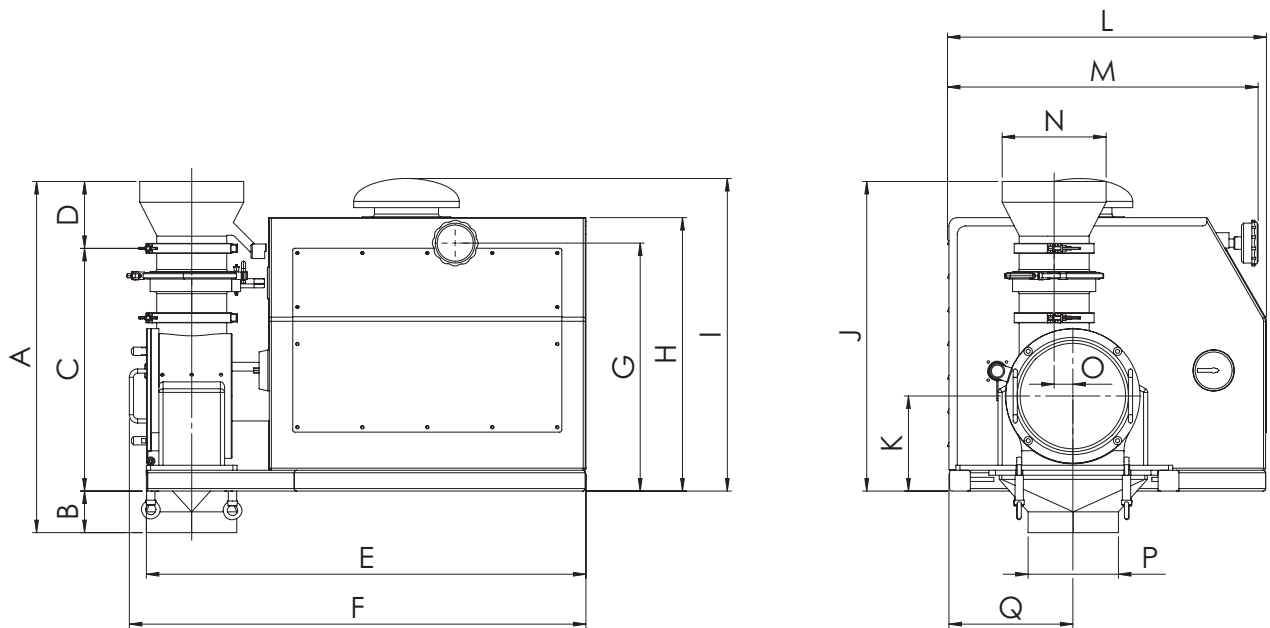
## Key Features /Advantages

- A** Quick and simplified change of tools (rotor and sieve) due to the existing front door.
- B** New design of the housing: a minimum of welds contact the product stream, and all welds are ground. The housing has a minimal area where product deposits may occur; thus, cleaning is simplified (possibilities of WIP, CIP, SIP).
- C** Operator-friendly control panel for controlling the mill and dosing equipment.
- D** The total sealing of the dosing equipment provides for dust-free processing of the products. It is attached to the entry of the Hammermill MFH by three-clamp flanges.
- E** The dosing equipment with its paddle wheel ensures an optimal product feed to the Hammermill.
- F** Depending on the product, the rotor can be reversed without any difficulty to the hammer side (impact side) or to the knife side (cutting side).

## Hammermills MFH – gentle processing of difficult products

<b>Execution</b>	<b>Parts in contact with product</b>	<b>Parts not in contact with product</b>
Material	I.4435 / I.4404 (AISI-316L)	I.4301 / I.4305 (AISI-304)
Seals	FDA-compliant materials (EPDM / PTFE)	Various materials
Surfaces	Funnel: Ra ≤ 0,8 µm polished Head: Ra ≤ 0,4 µm polished	220 grit, polished
Weld seams	Housing: ground and polished Pharma rotor: cast and polished No pharma rotor: brushed	Treated and ground
<b>Rotor</b>	MFH-6 rotor with 24 blades / MFH-15 rotor with 16 blades	
<b>Mill</b>	Protection type IP-55	

### In-Line



### Standard dimensions (subject to modifications)

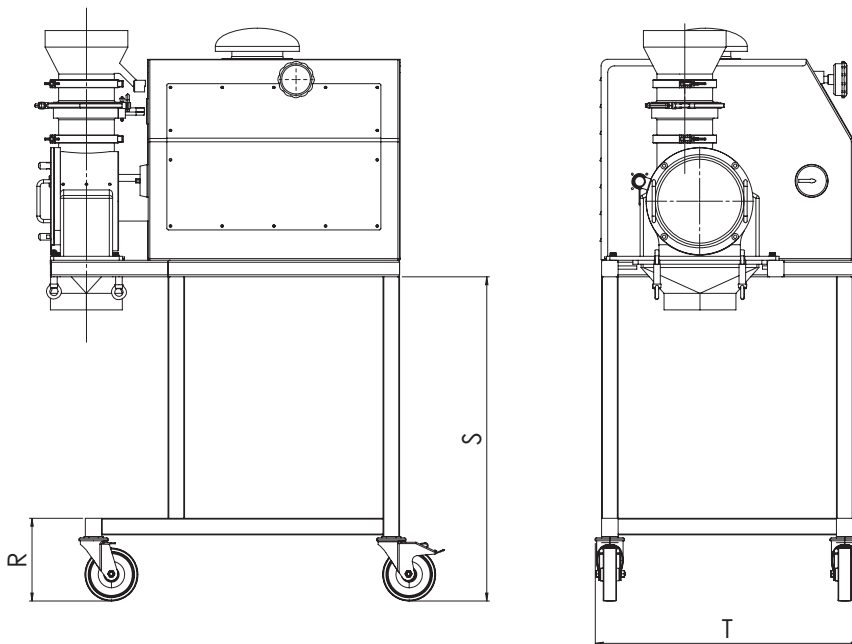
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
<b>MFH-6</b>	Not Ex	844	100	583	160	1057	1098	–	657	–	744	228	767	–	250
	ATEX							596		751				745	
<b>MFH-15</b>	Not Ex	1023	180	682	160	1231	1261	–	721	–	842	269	832	–	250
	ATEX							682		816				740	

We recommend the exclusive usage of original spare and wear parts from Frewitt. The usage of parts not originating from Frewitt renders our ATEX Certification non-valid, and could consequentially lead to dangerous situations, such as explosions or personal injury.



<b>Sieves</b>	0,18 mm – 10,0 mm
<b>Distance rotor/sieve</b>	no material to material (metal abrasion)

## Mobile



O	P	Q	R	S	T	Flowrate*	Voltage	Rotor speed	Power	Net weight
45	DN200	298	250	980	798	1200 kg/h	3x400V - 50 HZ	5700 t/min	4 kW	420 kg
						1200 kg/h	3x400V - 50 HZ	6000 t/min	4 kW	420 kg
80	DN250	360	250	1000	863	5000 kg/h	3x400V - 50 HZ	5700 t/min	7,5kW	470 kg
						5000 kg/h	3x400V - 50 HZ	4500 t/min	7,5kW	470 kg

\*Flowrate is depending on product characteristics and particle size.

## Applications examples of the Hammermill

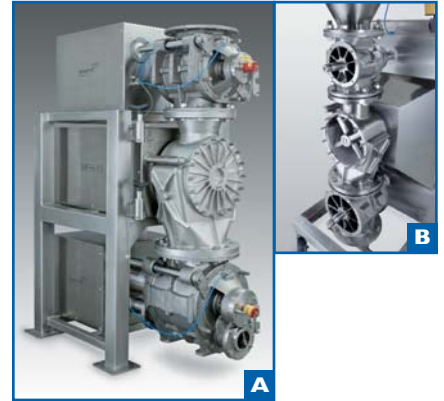
A precision instrument, it is ready for integration, either as a mobile, or an in-line component within any system configuration.



API Milling and Big Bag filling



Milling and dosing of an Osteoperosis



Pressure wave-proof Hammermill MFH  
a) Lactose-protein milling  
b) Influenza – Fine Milling Medication

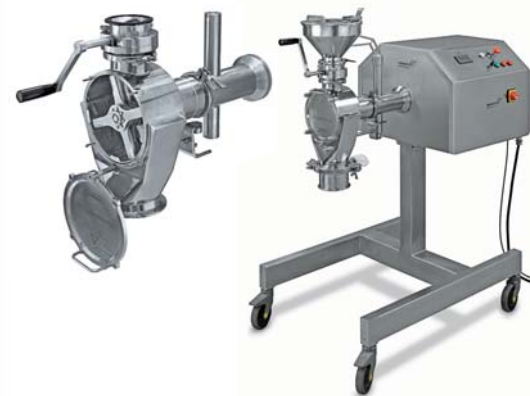
## HammerWitt-Lab

The new hammer mill for small batch production and laboratory application with upgraded process characteristics for the pharmaceutical, food, and fine chemical industries. Setting new benchmarks in the industry in terms of modularity, user and maintenance friendliness, it offers unsurpassed flexibility at less cost.

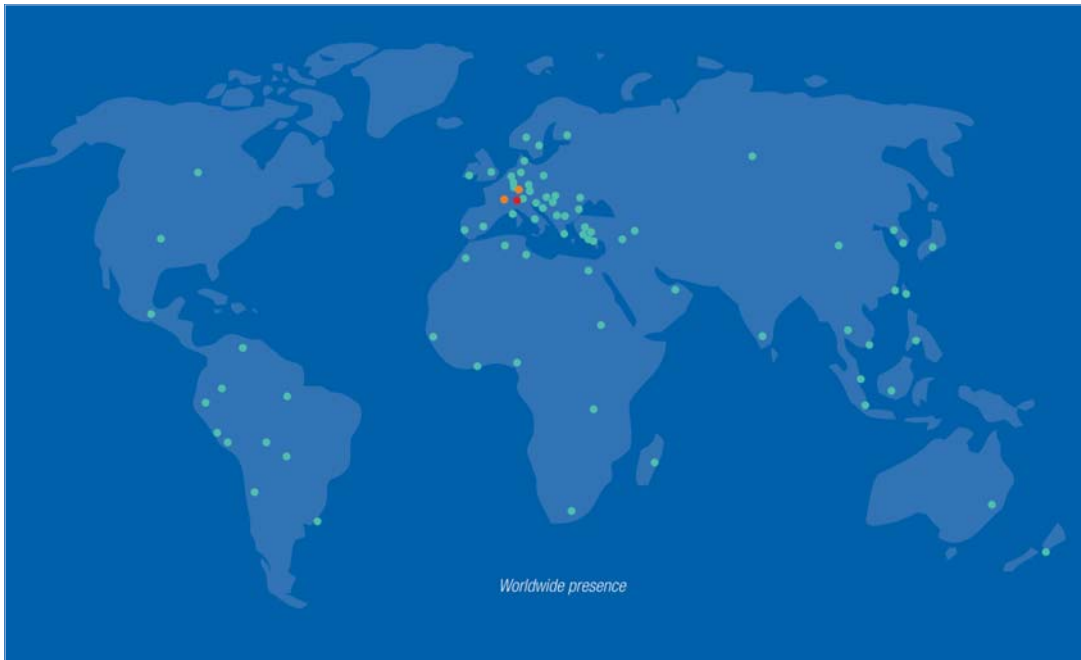


### The advantages are obvious

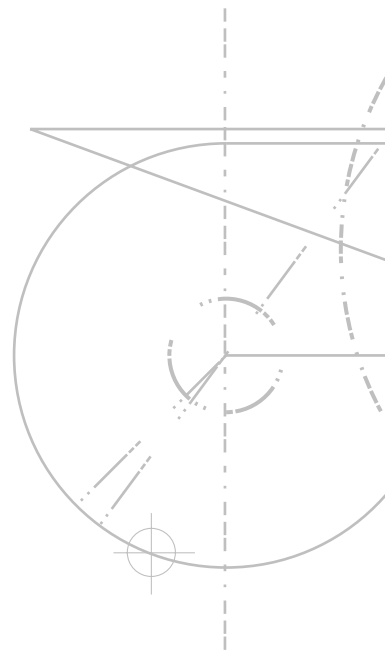
- Highly flexibility due to the interchange ability with a ConiWitt-150/200 conical sieve mill head! This means two milling processes on one machine!
- The ingenious design reduces the number of moving parts to a minimum. Using tri-clamp connections, the lightweight milling head can be removed from the shaft easily and quickly.
- The Error-Proof-System guarantees correct installation, easy removal of the rotor and sieve, and is safe to use.
- The rotary paddle feeder can be operated either manually or pneumatically.
- The milling head is made from AISI-316L stainless steel. The polished, even surfaces allow the product to flow through avoiding friction and without leaving residues.
- The result: quick, easy cleaning and maintenance, as well as high operational availability at lower operating costs.
- Flow rate up to 300 kg/h
- The outputs of the HammerWitt-Lab can be up-scaled to those of the MFH-6 and MFH-15 industrial hammer mills.



Thanks to its modular design, you can integrate the HammerWitt-Lab anywhere quickly and easily. Call us and discuss your application with us.



Worldwide presence



- References:
- |                             |                             |
|-----------------------------|-----------------------------|
| Arena Pharmaceutical GmbH   | Lonza AG                    |
| Bayer Schering AG           | Merck & Cie KG              |
| BASF Orgamol SA             | Nestlé SA                   |
| Boehringer Ingelheim GmbH   | Novartis Consumer Health SA |
| Ciba Spezialitätenchemie AG | Pfizer                      |
| Cilag AG                    | Pharmasynthese              |
| Clariant Produkte AG        | Sanofi Aventis              |
| F. Hoffmann-La Roche AG     | Sanofi Chimie               |
| Firmenich SA                | Siegfried LTD               |
| Grünenthal GmbH             | UCB Farchim SA              |
| Hobako AG                   |                             |

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