



DelumpWitt

In one step, the new DelumpWitt takes pharmaceutical and chemical bulk materials that have become hardened and lumpy over time and sizes them into free-flowing powder

DelumpWitt

Excellent for small batch production or for integration in turn-key systems

The DelumpWitt is particularly well-suited for disagglomeration, even of frozen products.

The DelumpWitt design considerably increases efficiency.

In sizing, it sets new benchmarks with regard to modularity, user and maintenance friendliness, while delivering more performance at lower costs.

The advantages are obvious

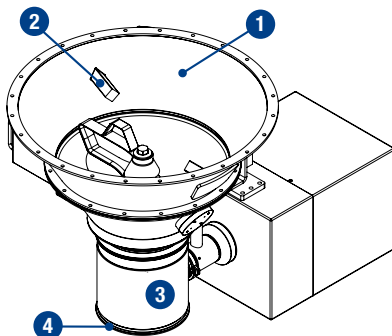
- Pregrinding, fine milling, and desizing with one machine.
- Intelligent design reduces the number of moving parts to a minimum.
- Using tri-clamp connections, the milling head can be swiveled out from the pregrinder in a few easy steps.
- CIP design and low risk of cross contamination. Quick, easy cleaning and maintenance assure higher operational availability at lower operating costs.

Other applications

- For applications in a minimum of available space, as it carries out two process steps in one module.
- It can be operated as a stand-alone-system and can be easily integrated into turnkey production facilities.
- The DelumpWitt is ideal for the demanding production requirements of the pharmaceutical, food, and chemicals industry.



The DelumpWitt Sizing Process



- 1 Inlet funnel for blocks as large as 60 x 30 x 20 cm
- 2 Lump breaker rotor
- 3 Lump rasp with rotor
- 4 Tri-clamp DN 300 outlet connection for fine, free-flowing, disagglomerated powder

The advantages of the round inlet funnel of the DelumpWitt compared to the rectangular inlet funnels of other systems reside in simplified processing of large lumps and in simplified integration in existing overall systems. In one step, the patented design turns blocks as large as 60 x 30 x 20 cm into 500 µm free-flowing powder.

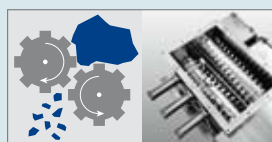
Milling forces



The DelumpWitt quickly and gently processes the product with pressure and grinding forces, and does so at a high flow rate.

The DelumpWitt is part of Frewitt's complete installations.

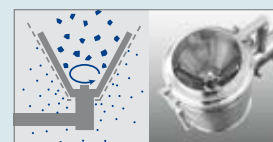
Blocks from 25 kg can be processed in one step to free-flowing powder.



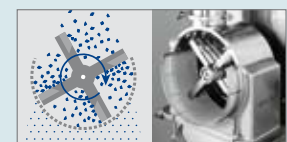
30 cm 2 cm
Crusher
CCD-450
CC-310



5 cm 250 µm
Oscillating sieve mill
MF-Lab
MF-3
MF-6
MF-8



2 cm 150 µm
Conical sieve mill
TC-Lab
ConiWitt-150
ConiWitt-200
ConiWitt-250



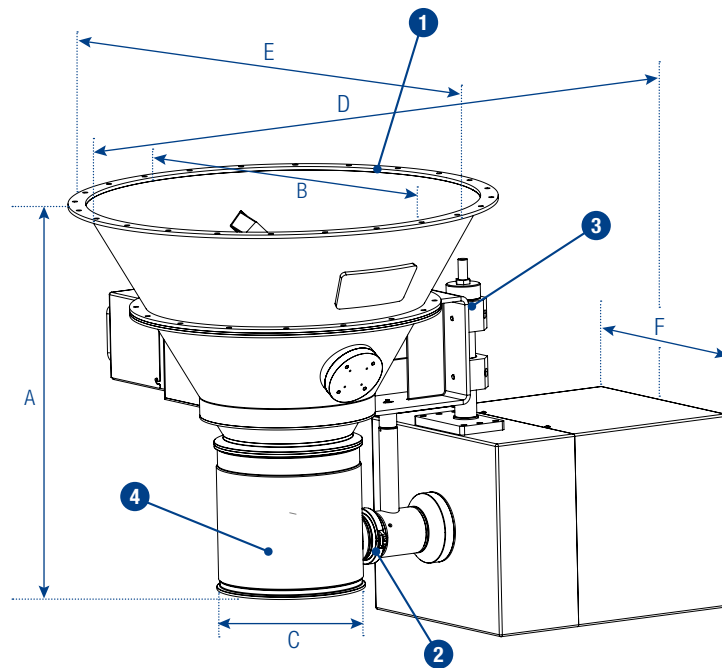
1 cm 50 µm
Hammer mill
HammerWitt-Lab
MFH-6
MFH-15



Particle size



The DelumpWitt in Detail



The DelumpWitt at a Glance

- 1 Inlet funnel for blocks as large as 60 x 30 x 20 cm
- 2 Milling head easily detachable with tri-clamp connections
- 3 Safety prompt (standard), no outside cables
- 4 Conical sieve (assortment of inserts of round/square openings, rasps)
- Lip seal easily replaced with gearbox closed
- Bottom-welded down-driver
- Durable shaft lip seal
- Rated for ATEX Zone 0/20 inside use
- Easy to clean
- Screwless access cover
- Easy to attach

Installation	A	D	E	F	B - INFEED	C - DISCHARGE
DelumpWitt	898	1525	1086	510	Ø980/900 - 24 x Ø12	Tri-clamp DN 300 ISO 2852

Advantages

Ergonomic and User Friendly

- Modular, compact design.
- Rotor and sieve easy to change.
- Mobile base on request.
- Lightweight, detachable milling head.
- The "Error Proof System" guarantees correct installation and removal of rotor and sieve.

Cleaning according to the strictest Health Standards

- Milling head autoclavable.
- The crushing and milling chamber is made from AISI-316L stainless steel.
- The polished, even surfaces allow the product to flow through without friction and without leaving residues.
- Complies with both, the Washing in Place (WIP) and the Cleaning in Place (CIP) standards.

Less Maintenance and greater workplace Safety

- Lip seal can be changed in only 15 minutes, with the gearbox closed.
- Approved for ATEX Zone 0/20 inside, Zone 1/21 outside.





Significantly more flexibility and performance

- High flow rate: up to 9000 kg/hr (depending on the product).
- Compact, modular design with round inlet and outlet funnels.
- Easily integrated in existing manufacturing processes (turn key systems).
- Batchwise or continuous infeed of blocks, can handle lumps and/or agglomerates (the conical infeed serves as an inlet funnel).
- The desired particle size can be adjusted as needed, by changing screen 7 rasp.
- Sizing and metering can be combined.
- The modular design allows rapid dismantling of the device for inspection and servicing.

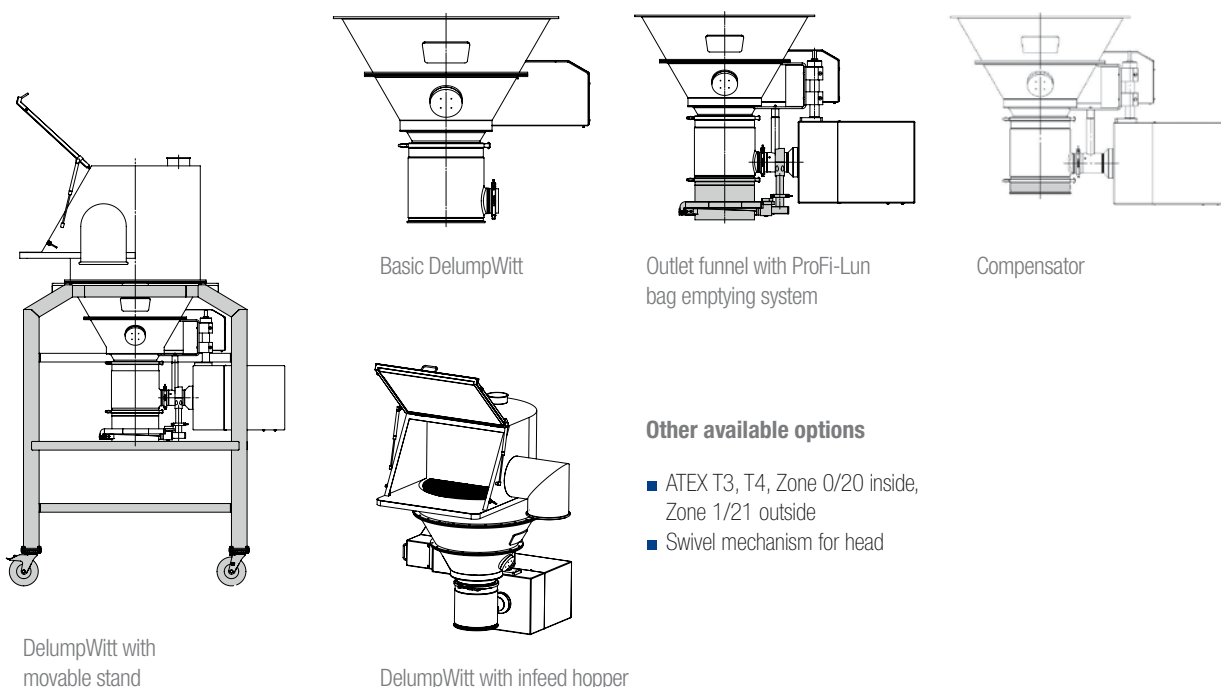


		Flow rate*	Voltage	Rotor speed	Power	Net weight
DelumpWitt	Non Ex	up to 9000 kg/h	400 V	24min-1 / 630 min-1	Max 7.5 kW	~ 370 kg
	ATEX	up to 9000 kg/h	400 V	24min-1 / 630 min-1	Max 5.5 kW	~ 370 kg

* The flow rate depends on the product and its properties

Execution	Parts in contact with the product	Parts not in contact with the product
Material	1.4435 / 1.4404 (AISI-316L)	1.4301 / 1.4305 (AISI-304)
Seals	FDA compliant plastics (EPDM / PTFE)	Various plastics
Surface	Ra ≤ 0.8 µm polished / head Ra ≤ 0.4 µm polished	Ra ≤ 1.4 µm polished
Welding seams	Ground and polished	treated and brushed
Rotor	Rotor with square profile arms	
Sieve / rasp	Round openings Ø 0.5 mm – 10 mm / square openings 3.0 mm – 10.0 mm / rasp 1.1 mm – 8.0 mm	
Distance rotor / sieve	No mechanical contact (metal abrasion)	

Options for custom-made solutions





Examples of applications

The DelumpWitt, due to its efficiency, ensures your disagglomeration of raw materials, salts, and many other products, is no longer a problem. The DelumpWitt can be operated as a stand alone unit or integrated into your existing production system. Let us advise you for optimal utilisation, albeit you need a stand alone unit or a complete turnkey oriented solution.



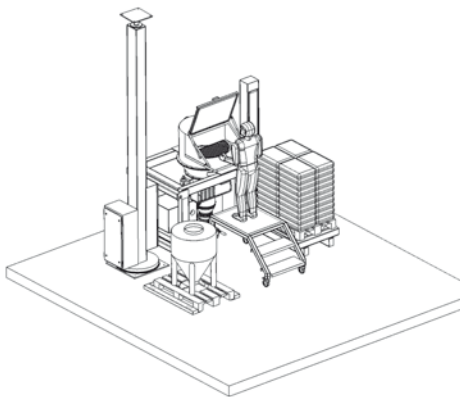
DelumpWitt as a stand alone unit. Large agglomerates are completely broken down into particles as small as 500 µm in the DelumpWitt.



Blocks as large as 60 cm are introduced into the inlet funnel.



In one step from blocks to granules.



DelumpWitt integrated in an existing inline system.



Quick and efficient CIP, employing a the swivel mechanism.



User-friendly inline system. One operator, two process steps in one machine.

Modular in conception, it offers, user friendliness, and easy maintenance, the DelumpWitt can be easily and quickly integrated anywhere. Call us to discuss your application.



Worldwide presence

References

Arena Pharmaceutical GmbH
 Bayer Schering AG
 BASF Orgamol SA
 Boehringer Ingelheim GmbH
 Ciba Spezialitätenchemie AG
 Cilag AG

Clariant Produkte AG
 F. Hoffmann-La Roche AG
 Firmenich SA
 Grünenthal GmbH
 Hobako AG
 Lonza AG

Merck & Cie KG
 Nestlé SA
 Novartis Consumer Health SA
 Pfizer
 Pharmasynthese
 Sanofi Aventis

Sanofi Chimie
 Siegfried LTD
 UCB Farchim SA
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