

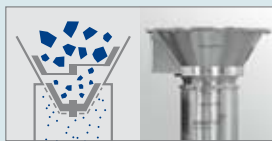
TurboWitt C20-C25

*The rotary sifter with a rotary sieve drum
for diversified and efficient disagglomeration in the pharmaceutical,
fine chemical, and food industry*

TurboWitt C20-C25

Milling process

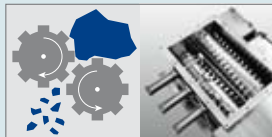
DelumpWitt



Particle size

60 cm
500 µm

Crusher CC-310 · CCD-450



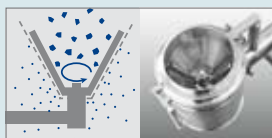
30 cm
2 cm

Oscillating sieve mill MF-3 · MF-6 · MF-8 · MF-Lab



5 cm
250 µm

Conical sieve mill ConiWitt 150-200-250 · TC-Lab



2 cm
150 µm

Rotary sieve mill TurboWitt C20-C25



1 cm to 1 mm
150 µm

Hammer mill MFH-6 · MFH-15 · HammerWitt-Lab



1 cm
30 µm

Excellent for disagglomeration and controlled sieving

The TurboWitt is especially well-suited for the disagglomeration and homogenization of diverse products.

The rotary TurboWitt has a radical new design, which considerably increases efficiency due to the centrifugal forces acting on the product and the two fix-mounted stator arms, the product gently flows through the sieve openings.

The TurboWitt sets new benchmarks in terms of modularity, user friendliness, and facilitated maintenance.

A broader usage spectrum

Due to tri-clamp connections, the light-weight milling head can be removed from the drivershaft quickly and easily.

That means: quick cleaning and easy maintenance, and high operational availability at lower operating costs.

It functions as a stand-alone system, or it can be easily integrated into production facilities.

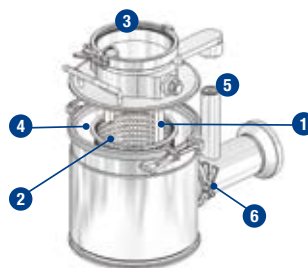
The TurboWitt is ideal for the demanding disagglomeration of hard and soft products in the pharmaceutical, fine chemical, and food industry.

The advantages are obvious

- High flow rate.
- Gentle disagglomeration with a low fine particle fraction.
- The innovative design reduces the number of moving parts to a minimum.
- Thanks to controlled sieving, particles of foreign matter remain in the drum.
- Any TurboWitt can be converted into a ConiWitt 150, 200 or 250 conical sieve mill.



The TurboWitt milling process



- 1 Stator arms with round or square cross-sections
- 2 Different drum inserts
- square openings
- rasps
- 3 Vertical, uninterrupted product flow thanks to the down-driven design
- 4 No mechanical contact between the drum and the stator
- 5 In-feed funnel with safety device (cable inside the channel arm)
- 6 Detachable head, can be replaced with a HammerWitt-Lab or converted into a ConiWitt 150, 200 or 250.

The TurboWitt consists of the milling head, the stator, and the sieve drum. Centrifugal force acts on the product, causing it to flow gently under the two fix-mounted stator arms, through the sieve openings.

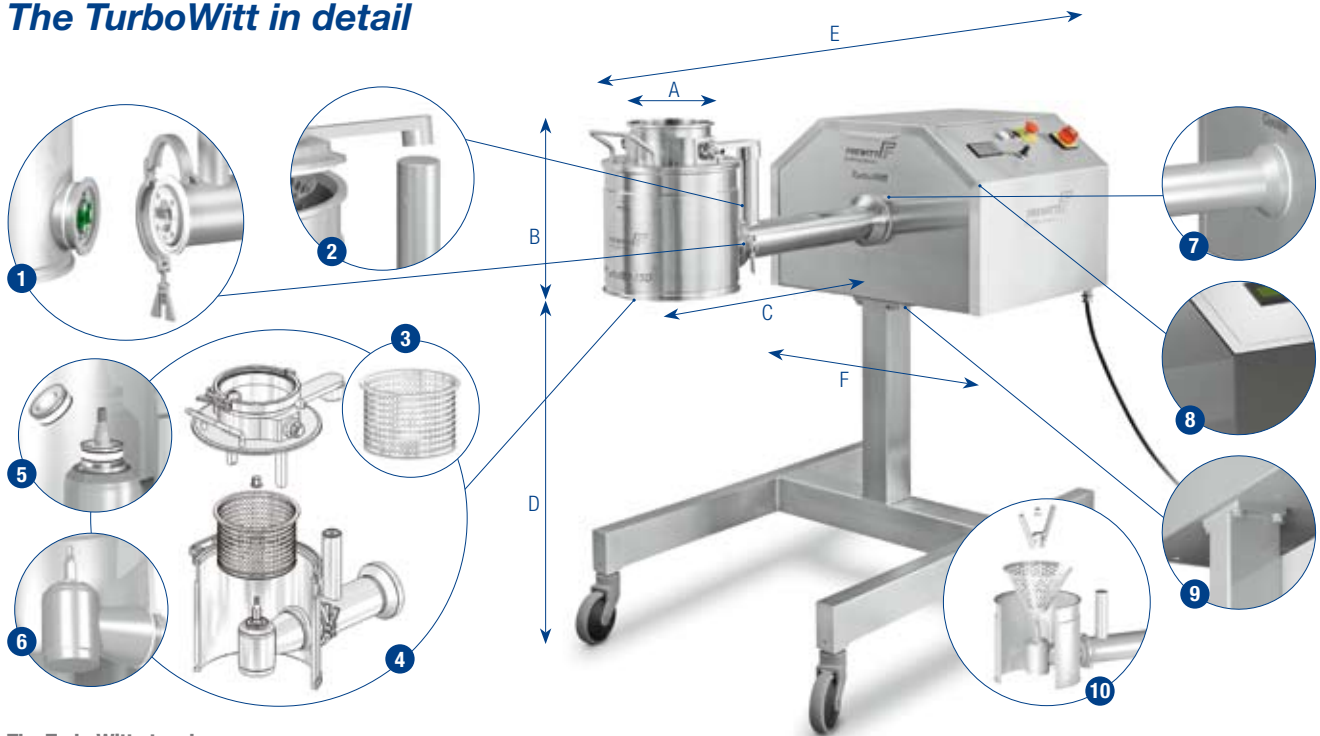
In contrast to systems with rotary milling tools, the TurboWitt foreign products are excluded from the milling process and easily removed during the controlled sieving process.

Milling forces



Milling in the TurboWitt is achieved primarily by the particles being held and comminuted between the drum surfaces and the stator.

The TurboWitt in detail



The TurboWitt at a glance

- 1 Light-weight milling head, detachable with tri-clamp connections. Interchangeable with the ConiWitt 150, 200 or 250 conical sieve mill heads and the HammerWitt-Lab.
- 2 Safety devise (standard), no outside cables
- 3 Sieve drums with square openings and rasps
- 4 Easy handling, quick cleaning and conversion
- 5 Lip seal can be changed quickly with the gearbox closed
- 6 Bottom-welded down-driver
- 7 Easy to clean – arm with no outside cables
- 8 Hood without screws
- 9 Easy to attach
- 10 By means of the ConiWitt-Kit the TurboWitt can be modified to the conical sieve mill
- Stator (with square arm profile or round arm profile)
- Quick conversion into a ConiWitt conical sieve mill makes it a multifunctional mill
- Can be installed through a wall, with the motor in the machine room
- Available in ATEX Zone 0/20 execution

Installation	B	C	D	E	F	INFEED (ISO 2852)	DISCHARGE (ISO 2852)
TurboWitt-C20	370	650	920	1421	653	DN 150	DN 250
TurboWitt-C25	440			1523	786	DN 200	DN 300

Advantages

Ergonomic and easy to use

- Compact, modular design.
- Stator and sieve drum are easy to change.
- Ultra light-weight, detachable milling head.
- Any TurboWitt can be converted into a ConiWitt conical sieve mill.
- The «Error Proof System» guarantees correct installation and removal of the stator and the sieve drum, and also safe use.
- Mobile stand on request.

Cleaning according to the strictest health standards

- Milling head autoclavable.
- The milling head is made from AISI-316L stainless steel. The polished, even surfaces allow the product to flow through without friction, no remaining residues.
- The TurboWitt complies with both the «Washing in Place» (WIP) and «Cleaning in Place» (CIP) standards.
- Inside cables allQuick, safe cleaning possible thanks to inside cables.

Less maintenance and greater workplace safety

- The lip seal can be changed in only 15 minutes with the gearbox closed.
- Efficient customer service and quick delivery of spare parts.
- Available in ATEX Zone 0/20 inside, Zone 1/21 outside.



Use only original Frewitt replacement and spare parts. Using other than original Frewitt parts voids the ATEX certification and can lead to hazardous situations, which in turn can result in an explosion or an injury.





High flexibility and optimum milling results

- Optional base with adjustable height.
- The modulaire conception ensure adaption to future requirements.
- The moderate drum speed prevents the product from overheating.
- Offering a wide selection of sieve drums and the standard stator, the milling process is adaptable to any conceivable product.
- The granulometry of the product hardly changes at all and the fine particle fraction remains very small.
- With the TurboWitt conversion kit, an existing ConiWitt can also be converted into a TurboWitt.


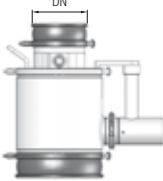
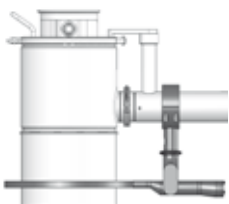
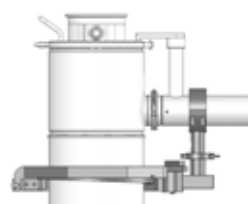


	Flow rate*	Voltage	Speed	Power	Net weight
TurboWitt-C20	1000-15'000 kg/h	400 V - 50 Hz	max. 2400 rpm/min	4.0 kW	~ 160 kg
TurboWitt-C25	2000-25'000 kg/h	400 V - 50 Hz	max. 1800 rpm/min	5.5 kW	~ 170 kg

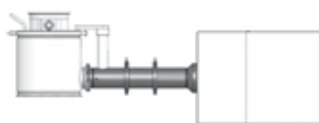
* The flow rate depends on product characteristics and particle size.

Construction	Parts in contact with the product	Parts not in contact with the product
Metals	1.4435 / 1.4404 (AISI-316L)	1.4301 / 1.4305 (AISI-304)
Seals	FDA compliant plastics (EPDM / PTFE)	Various plastics
Surface finish	Ra ≤ 0.8 µm polished / Head Ra ≤ 0.4 µm polished	Ra ≤ 1.4 µm polished
Weld seams	Ground and polished	Treated and brushed
Stator	with 2 square arms profil or 2 round arms profile	
Sieve drums / rasp	square openings Ø 0.5 mm – 10 mm / rasp 1.1 mm – 8.0 mm	
Distance Rotor / sieve	No mechanical contact (prevents metal abrasion)	

Options for custom-made solutions

Inlet funnel		Outlet funnel			
					
Silicone collar	Compensator	ProFi-Bant	ProFi-Lun		
TurboWitt-C20 DN 315	DN 150	TurboWitt-C20 DN 200/300	TurboWitt-C20 DN 200/300		
TurboWitt-C25 DN 315	DN 200	TurboWitt-C25 DN 200/300	TurboWitt-C25 DN 200/300		
	DN 250				
	DN 300				

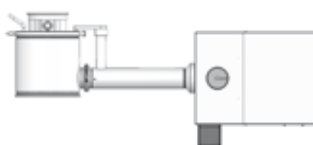
Midsection for arm extension



Bare Bone



Swivel joint



Available upgradeable

- Bottom (standard), top, or side mounting possible
- ATEX T3, T4, Zone 0/20 inside, Zone 1/21 outside
- Swivel mechanism for head
- Enables installation through a wall, with the motor on the other side in the machine room
- Can be converted into ConiWitt 150, 200 or 250
- Easily installed on elevator column



A multipurpose milling system

TurboWitt is the name of the new brain child developed for the disagglomeration of sugar, lactose, salt, additives, and many more products.

The secret of the success lies in the fact that the TurboWitt can be easily converted into a conical sieve mill and just as easily back into a TurboWitt.

The TurboWitt ensures reliable, quick processing, is safe for the user and gentle on the product, plus it lowers production costs. The TurboWitt – a unique sieve mill in the Frewitt product line that is capable of growing with your needs.



TurboWitt combination with the ConiWitt 200 and elevator.



TurboWitt with available option from a HammerWitt-Lab head for fine milling in kilo-size.



Installation for powder handling with disagglomeration, dosing and Inliner.



Every TurboWitt can be converted into conical sieve mill ConiWitt (150, 200 or 250).



In-line Installation with inlet- and outlet compensator ATEX conform, pivot arm.



In-wall installation with newly developed swivelball connection.

You can integrate the TurboWitt easily and quickly anywhere, due to its modular construction. Call us and discuss your application with us.



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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