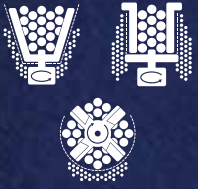


FREDRIVE

CONIWITT
TURBOWITT
HAMMERWITT



WE
CARE
ABOUT
MILLING



FREDRIVE

MODULAR, FLEXIBLE, COST EFFECTIVE, PERFORMING

FREWITT, world leader in powder size reduction technologies, presents FreDrive, an innovative technology combining multiple, milling processes in a single, milling platform dedicated to the pharmaceutical, chemical and food products industries.

MODULARITY – A distinctly avant-garde, modular concept: FreDrive allows you to alternate, depending on your production requirements, between 5 milling heads for size-specific crushing, fine grinding, de-agglomeration, or controlled sifting.

FLEXIBILITY – Incomparable versatility: FreDrive allows you to adapt your milling platform easily and quickly, to suit your current or future production requirements, regardless of your manufacturing environment or production site.

PERFORMANCE – Enhanced by a factor of 5: FreDrive proves its capabilities with the same degree of flexibility across the entire range of your processing needs, from small batch to large-scale production.

SAVINGS – Enhanced return on investment and lower cost of ownership: FreDrive integrates three milling processes into a single platform, allowing you to use up to 5 different heads and reduce investment costs by 70%!

3 PROCESSES - 5 MILLING HEADS - ONE SYSTEM

This innovative system is a unique multi-process platform.

An unequalled flexibility and extraordinary performance allow for significant savings.

Owing to a design enabling the use of up to 5 different interchangeable milling heads on the same base module, FreDrive permits conical sieve milling, hammer milling, and controlled sifting operations – all with a sole compact platform.

NEW FEATURES / ADVANTAGES

- 3 processes > 5 heads > 1 platform
- 5 milling heads, easily interchangeable on a single Tri-Clamp flange
- Enhanced milling capacity, from small batches to high volume production jobs with integrated scale-up factors
- Auto-detection of milling heads and auto-adjustment of associated speed ranges
- Intuitive colour touchscreen-based multifunction user interface
- Available in a mobile version with integrated lifting system for ATEX zones 1 and 21
- Continuous monitoring of operation status with integrated diagnostics
- Integration and management of production formulas in the machine
- Real-time monitoring and reporting of process parameters
- CFR Part 11 functions integrated in the control module
- Available for products with MIE >1 mJ without inerting process







CONIWITT

FLEXIBLE, COMPACT, EFFICIENT

150

200

250

The ConiWitt is a high-performance, high-quality conical sieve mill that is used for deagglomerating and sizing granular products to finenesses of up to 150 μm .

Thanks to its compact and modular design, the ConiWitt is easy to integrate in complete process plants. With its extraordinary diversity and high performance, this conical sieve mill can be used in any demanding milling process, whether for achieving optimum grain size distribution or high flow rates, as well as for milling temperature-sensitive products, or potentially explosive substances.

THE ADVANTAGES OF THE CONIWITT

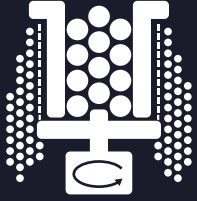
- Very broad scope of application ranging from all types of dry to wet and sensitive powders
- Diverse usage possibilities ranging from stand-alone and inline to integration in complete installations
- Clear GMP-capable concept for smooth, reproducible production including scale-up
- High level of production safety thanks to certified ATEX construction for Zone 0/20 and a MIE range down to $> 1 \text{ mJ}$
- High level of operational safety for containment requirements up to OEB 5 ($< 1 \mu\text{g}/\text{m}^3$)
- Easy and quick cleaning - Washing in place (WIP), CIP, SIP optionally available
- Ultimate production flexibility due to the modular design
- Versatile usage due to a large selection of milling elements, which can be changed easily and quickly
- Energy input reduced and optimised, guaranteeing reduced heating of the product



PROCESS CHARACTERISTICS

Particle size range		5 cm-150 μm
Throughput	ConiWitt-150	500-1500 kg/h
	ConiWitt-200	1000-2500 kg/h
	ConiWitt-250	2000-5000 kg/h
Density		up to 2 kg/dm ³
Temperature range product		from -20 °C to +60 °C





TURBOWITT

PERFORMING, MODULAR, INNOVATIVE

C20

C25

The TurboWitt is a cylindrical sieve mill. Having a rotating sieve drum, it is well-suited for homogenizing and control-sieving granular products to a fineness down to 150 µm.

The TurboWitt rotating sieve drum brings substantial benefits. The centrifugal forces acting on the product and the two changeable stator arms gently and very efficiently convey the product through the sieve openings. Its compact and modular design allows easy integration in nearly all process flows.



THE ADVANTAGES OF THE TURBOWITT

- Very broad scope of application ranging from all types of dry to wet and sensitive powders
- Diverse usage possibilities ranging from stand-alone to in-line, as well as integration in complete installations
- Clear, GMP-capable concept for smooth, reproducible production including scale-up
- High level of production safety due to certified ATEX construction for Zone 0/20 and a MIE range down to > 1 mJ
- High level of operational safety for containment requirements up to OEB 5 (< 1 µg/m³)
- Easy and quick cleaning - Washing in place (WIP), SIP optionally available
- Ultimate production flexibility permitted by the modular design, which enables milling heads to be changed within two minutes
- Versatile usage due to a large selection of milling elements, which can be changed easily and quickly
- Energy input reduced and optimised, guaranteeing reduced heating of the product

PROCESS CHARACTERISTICS

Particle size range up to 150 µm

Throughput TurboWitt C20 1000–15000 kg/h
TurboWitt C25 2000–25000 kg/h

Density up to 2 kg/dm³

Temperature range product from -20 °C to +60 °C





HAMMERWITT

PERFORMING, FLEXIBLE, PRECISE

3

6

15

The HammerWitt is a hammer mill that guarantees optimum milling results in the fine milling and pulverization of hard, crystalline, and fibrous products to fineness of up to 30 μm .

The HammerWitt is used for laboratory applications, small batch production as well as for large capacity production. With its compact and modular design, it is easy to integrate in nearly any process flow. It is constructed to ensure optimum and reliable production in GMP and High Containment, even for very hard products.

THE ADVANTAGES OF THE HAMMERWITT

- Very broad scope of application ranging from all types of dry to wet powders
- Diverse usage possibilities ranging from stand-alone and inline to integration in complete plants
- Clear GMP-capable concept for smooth, reproducible production including scale-up
- High level of production safety thanks to certified ATEX construction for Zone 0/20 and a MIE range down to $> 1 \text{ mJ}$
- High level of operational safety for containment requirements up to OEB 5 ($< 1 \mu\text{g}/\text{m}^3$)
- Easy and quick cleaning - Washing in place (WIP), SIP optionally available
- Ultimate production flexibility thanks to the modular design, which enables milling heads to be changed within a few minutes
- Versatile usage due to a large selection of milling elements, which can be changed easily and quickly
- Rapid milling ensures low energy input and minimal temperature increase



PROCESS CHARACTERISTICS

Particle size range		1 cm-30 μm
Throughput	HammerWitt-3	up to 700 kg/h
	HammerWitt-6	up to 2000 kg/h
	HammerWitt-15	up to 5000 kg/h
Density		up to 2 kg/dm ³
Temperature range product		from -20 °C to +60 °C





WORLDWIDE PRESENCE



FREWITT HEADQUARTERS

Frewitt manufacturer of machines Ltd.

Route du Coteau 7
1763 Granges-Paccot
Switzerland

Postal address

P.O. Box 615
1701 Fribourg
Switzerland

P: +41 26 460 74 00
info@frewitt.com
www.frewitt.com

**Frewitt Pharma Machinery
(China) Co. Ltd.**

1029 Shenfu Road,
Xinzhuang Industrial Zone
201108 Shanghai
China

P: +86 21 548 32950
info@frewitt-china.cn
www.frewitt-china.cn

Frewitt USA, Inc.

249 Homestead Road,
Building 5, Unit 8
Hillsborough, NJ 08844
USA

P: +1 908 829 5245
info@frewitt-usa.com
www.frewitt-usa.com