FREWITT

FLEXMILL LAB

NW, HW-1, OW-1, CW-50, SW-50 & PM-160

WE CARE ABOUT MILLING

WWW.FREWITT.COM

PATENTED · FREWITT ·

This technology is patented and owned by Frewitt. Any infringement of our rights will be subject to immediate legal action.

FLEXMILL-LAB

FREWITT, the world leader in powder size reduction technologies, is committed to listening to the needs and expectations of its markets.
After a period of reflection and design, we are pleased to present the complete FlexMill-Lab range, a system that provides modularity and simplicity whilst allowing you to reduce costs.

SUITABLE FOR THE FOLLOWING INDUSTRIES:

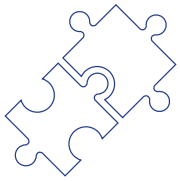
Pharmaceutical

Battery

Chemical

Food

WHY CHOOSE FREWITT



MODULARITY
A completely new modular design

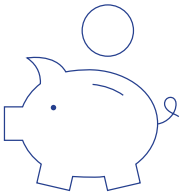
FlexMill-Lab integrates 6 different milling processes in one system, enambling the user to achieve a wide particle size range of **D90 < 50 nm.**

PERFORMANCE
Enhanced performance

FlexMill-Lab can handle small laboratory batches from **50 g to 1 kg** while offering the flexibility to reach a capacity of **30 – 150 kg/h** for pilot production. In addition, scale-up is guaranteed to allow for industrialization to Frewitt production mills.

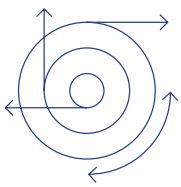
SAFETY
Safety for all

FlexMill-Lab is suitable for use in strict compliance with the requirements of the pharmaceutical industry as well as GMP, FDA, ATEX and CE standards.



COST-EFFECTIVE
Encompassing a true rationalization of investment

FlexMill-Lab integrates 6 grinding technologies into one platform, generating substantial savings in investment costs. The modular concept allows you to purchase only the grinding technologies that you require with the option to upgrade the platform according to your future needs.

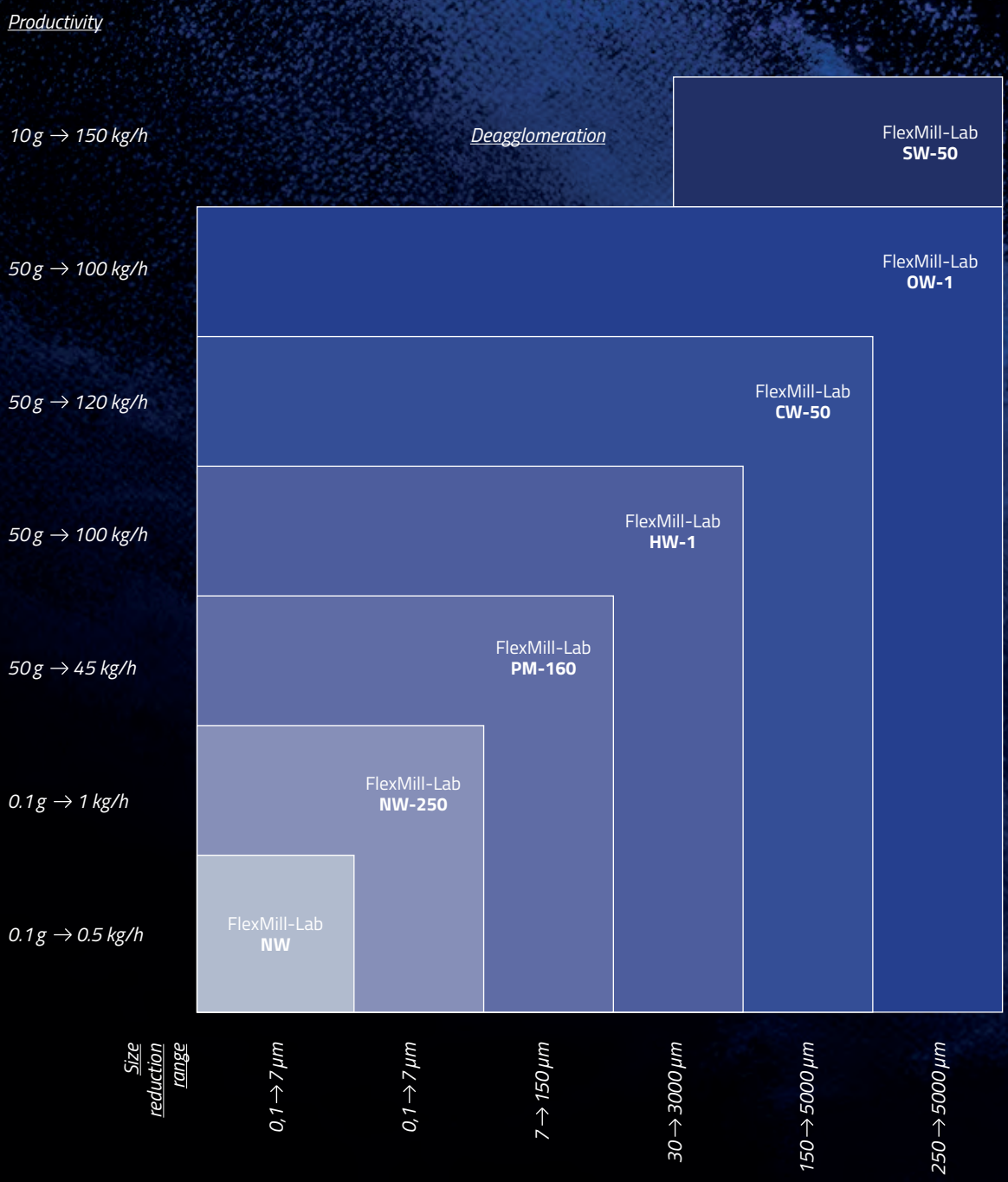


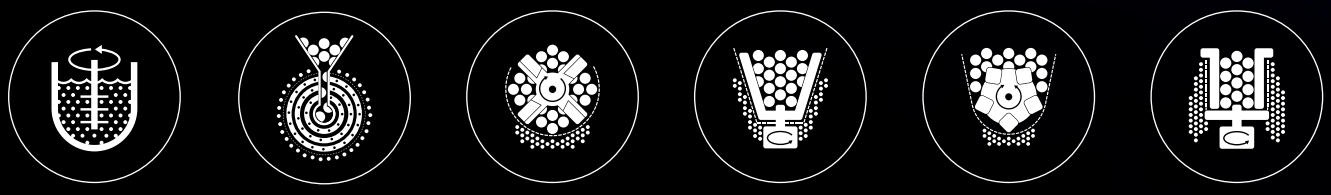
FLEXIBILITY
Unrivalled versatility

FlexMill-Lab allows you to quickly and easily switch between milling technologies. The interchangeable heads can be installed and removed within seconds and are sealed for cleaning and sterilization.

OUR PRODUCTS AT A GLANCE

PRODUCTIVITY





FlexMill-Lab **NW** | FlexMill-Lab **PM-160** | FlexMill-Lab **HW-1** | FlexMill-Lab **CW-50** | FlexMill-Lab **OW-1** | FlexMill-Lab **SW-50**

FLEXMILL-LAB OW-1

POWERFUL, MODULAR, INNOVATIVE

FlexMill-Lab OW-1 is an oscillating and rotating mill especially designed for the processing of powders with high requirements in terms of particle size distribution uniformity and temperature sensitivity.

PROCESS CHARACTERISTICS

Size reduction range
20 mm → 250 µm

Productivity
50g → 120 kg/h

Product temperature range
-20°C to +60°C

Product density
up to 2kg/dm³

TECHNICAL SPECIFICATIONS

Materials

AISI 316/316L - Ra ≤ 0.8 µm	Interior
AISI 304/304L - Ra ≤ 1.4 µm	Exterior
EPDM/PTFE	Seals

FLEXMILL-LAB CW-50

FLEXIBLE, COMPACT, EFFICIENT

FlexMill-Lab CW-50 is a high-performance, conical sieve mill that is used for the sizing and deagglomeration of all types of dry and wet powder products to a fineness of 150 µm

PROCESS CHARACTERISTICS

Size reduction range
10 mm → 150 µm

Productivity
50g → 100 kg/h

Product temperature range
-20°C to +60°C

Product density
up to 2kg/dm³

IMPLEMENTATIONS

Standard

Simple HMI interface
Glass product receptacle
Entry funnel
WIP (milling head only)

Optional

Mobile cart
Mobile cart with lifting device
ATEX certified milling head
Volumetric dosing device
Anti-vault stirrer for the entry funnel

FLEXMILL-LAB SW-50

POWERFUL, MODULAR INNOVATIVE

FlexMill-Lab SW-50 is a rotating cylindrical drum mill designed for deagglomeration and homogenization of any type of dry or wet powder up to a size of 150 µm.

PROCESS CHARACTERISTICS

Deaggloration range
10 mm → 150 µm

Productivity
50g → 150 kg/h

Product temperature range
-20°C to +60°C

Product density
up to 2kg/dm³

IMPLEMENTATIONS

Standard

Simple HMI interface
Glass product receptacle
Entry funnel
WIP (milling head only)

Optional

Mobile cart
Mobile cart with lifting device
ATEX certified milling head
Volumetric dosing device
Anti-vault stirrer for the entry funnel

FLEXMILL-LAB HW-1

POWERFUL, INTERCHANGEABLE, PRECISE

FlexMill-Lab HW-1 is a high-performance hammer mill, designed for the milling and pulverization of hard, crystalline and fibrous products to a fineness of up to 30 µm.

PROCESS CHARACTERISTICS

Size reduction range
10 mm → 30 µm

Productivity
50g → 100 kg/h

Product temperature range
-20°C to +60°C

Product density
up to 2kg/dm³

IMPLEMENTATIONS

Standard

Simple HMI interface
Glass product receptacle
Entry funnel
WIP (milling head only)
Volumetric dosing device

Optional

Mobile cart
Mobile cart with lifting device
ATEX certified milling head
Anti-vault stirrer for the entry funnel

FLEXMILL-LAB PM-160

POWERFUL, MODULAR, PRECISE

FlexMill-Lab PM-160 is a high-performance pin mill designed for pulverizing hard or crystalline products to a particle size down to D90 of 10 µm.

PROCESS CHARACTERISTICS

Size reduction range
2 mm → 10 µm

Productivity
50 g → 45 kg/h

Product temperature range
-20 °C to +60 °C

Product density
up to 2kg/dm³

IMPLEMENTATIONS

Standard

Simple HMI interface
Glass product receptacle
Entry funnel
Volumetric dosing device

Optional

Mobile cart
Mobile cart with lifting device
ATEX certified milling head
Controlled milling under inert atmosphere
Anti-vault stirrer for the entry funnel

FLEXMILL-LAB NW

HIGH MILLING EFFICIENCY

FlexMill-Lab NW is a high-performance bead mill engineered specifically for wet nano milling of pharmaceutical products down to D50 of 50 nanometer.

PROCESS CHARACTERISTICS

Batch size
from mg to
1.5 kg of solid product

Product temperature range precise control of processing temperature

Product density
D50 down to 50 nm

IMPLEMENTATIONS

Standard

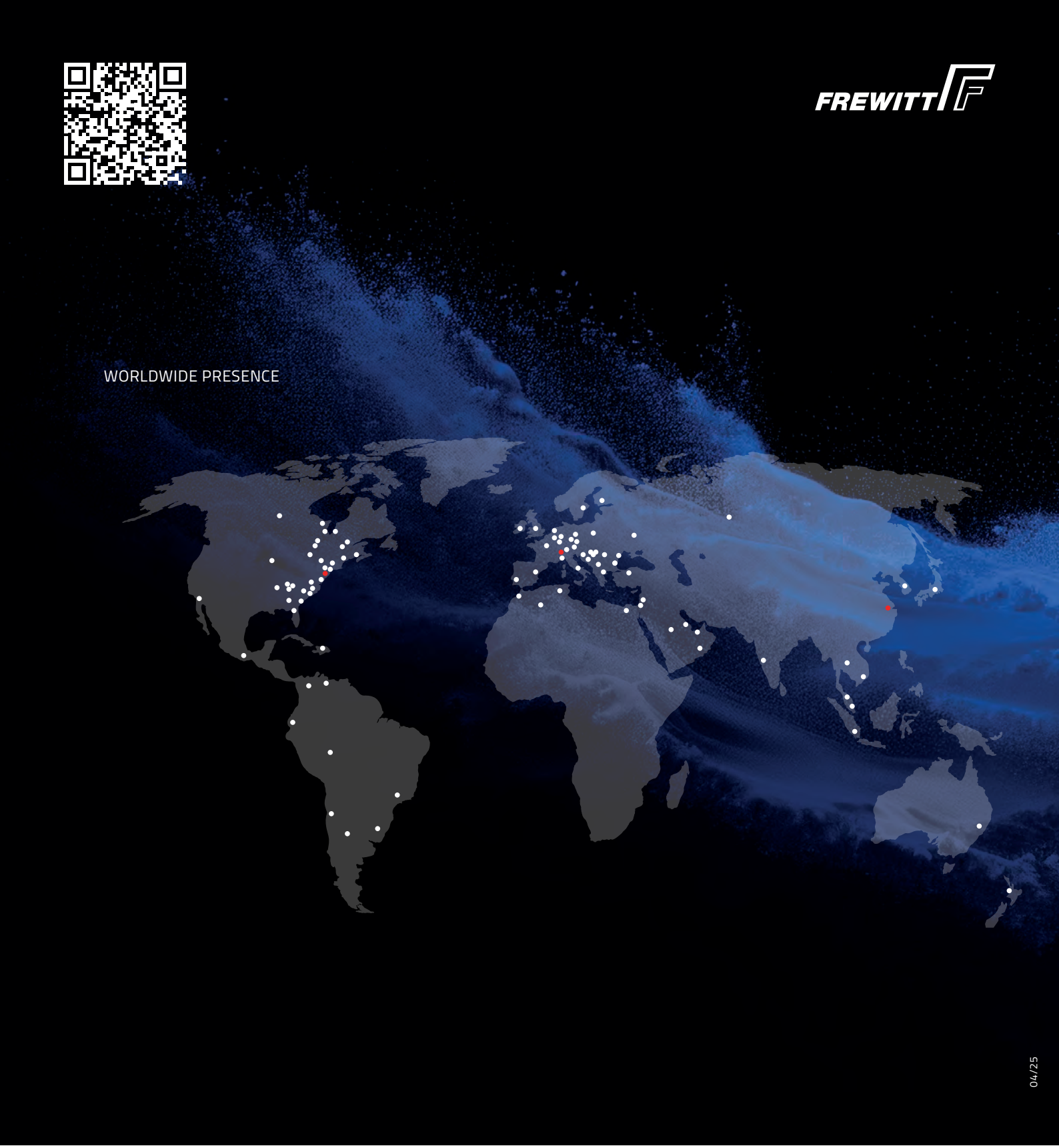
Simple HMI interface
Vertical separation system

Optional

Mobile cart with lifting device
Milling tool type 15
Milling tool type 50
Milling tool type 100
Milling tool type 250
Milling tool type 500*

*Production mill

WORLDWIDE PRESENCE



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