

FREWITT 

# FLEXMILL

PMC-160



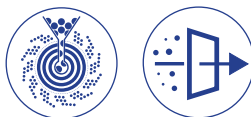
WE  
CARE  
ABOUT  
MILLING

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# PMC-160



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

## **2 PROCESSES - 2 MILLING HEADS - ONE SYSTEM**

A unique, multi-process platform, the PMC-160 offers unequalled flexibility and extraordinary performance allows for significant savings.

Owing to a design enabling the use of 2 interchangeable milling heads on the same base module, FlexMill permits scale-up of 2 processes, 1 with or 1 without cryo – all within the same platform.

The PMC-160 is a high-performance pin mill designed for pulverizing hard or crystalline products to a particle size down to D90 of 10 µm. Ideal for processing small-scale laboratory batches of 50 g to 2 kg, or work in continuous mode up to 50 kg/h. The PMC-160 lends itself to be used for lab, pilot, or production scale needs. The device's compact design facilitates an easy integration and a quick set-up in any laboratory as well as an integration into production lines or isolators.

## **SUITABLE FOR THE FOLLOWING INDUSTRIES:**



Pharmaceutical



Battery



Chemical



Food

## **MODULARITY**

A distinctly avant-garde, modular concept: FlexMill allows you to alternate, depending on your production requirements, between 2 milling heads for the micronization of low Tg products (glass transition temperature) and products resisting milling in ambient conditions.

## **PERFORMANCE**

FlexMill proves its capabilities with the same degree of flexibility across the entire range of your processing needs, from small batch to production scale.

## **INNOVATION**

Due to its extraordinary versatility and high performance, this mill can be used in many demanding milling processes, whether for achieving optimum particle size distribution, milling temperature-sensitive products, or potentially explosive substances.

## **SAVINGS**

Enhanced return on investment and lower cost of ownership: FlexMill integrates two milling processes into a single platform. With its low level of consumption, the PMC-160 is the best solution for combining micronization and cost saving.

## **ADVANTAGES**

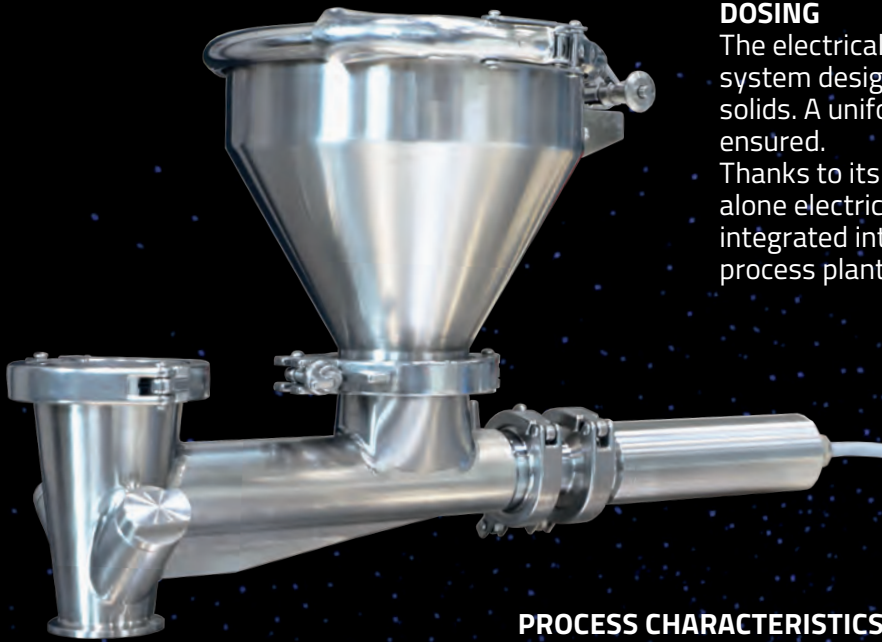
- Scalable to Frewitt Lab Scale / Production Scale Pin Mill systems
- Compact assembly for easy in-line integration
- Flexibility of modular arrangement
- Easy top-down cleaning (easy disassembly for easy cleaning)
- Reduced product contact surface areas
- Less energy consumption



## DOSING

The electrical Frewitt single screw feeder is a compact system designed for the gentle and precise dosing of solids. A uniform and clog-free product flow is thus ensured.

Thanks to its compact construction, the stand-alone electrical Frewitt single screw feeder is easily integrated into Frewitt units or the customers' existing process plants.



## PROCESS CHARACTERISTICS



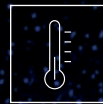
### End fineness

Down to D 90 < 6 µm



### Throughput

Up to 50 kg/h



### Product temperature range

-20°C to +60°C



### Rotor speed

Ultra high speed

## EXECUTIONS



### Standard

- Pharma execution GMP/FDA
- Fully automated system
- Integrated dosing system with anti-vault stirrer for entry funnel
- Integrated cooling system
- Pressure and temperature sensors
- Inline process
- Mobile cart with lifting device



### Optional

- ATEX
- WIP cleaning
- Controlled milling under inerted atmosphere
- Specific custom tooling
- 21 CFR part 11/ GAMP 5
- Flexible arrangement
- Automatic LN2 control

## TECHNICAL CHARACTERISTICS



### Materials

AISI 316/316L - Ra ≤ 0.8 µm  
AISI 304/304L - Ra ≤ 1.4 µm  
EPDM/PTFE/Silicone

Interior  
Exterior  
In product contact, certified FDA



### Dimensions & weight

Length	1950 mm
Width	950 mm
Height	1800 mm
Weight	350 kg





WORLDWIDE PRESENCE



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