

Conical Mills (Over-Driven)

Sanitary size reduction milling machines for dry and wet processes in the pharmaceutical, food and related industries.



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Technical Overview

The Hanningfield Uni-Mill B-Series (M10-B, M20-B, M30-B, M60-B) utilises the current industry standard over-driven conical mill design, featuring a belt-driven impeller, rotating inside a screen (60° inclusive screen angle). This principle achieves comminution by compression and shearing of the particles between the impeller and surface of the screen.

The Uni-Mill over-driven models are designed to be used with spacers, allowing customers to adjust and set the optimal gap between the screen and impeller for efficient milling (for spacer-less mills see Under-Driven Conical Mills). The Uni-Mill can be supplied with a wide-range of tooling to achieve the required final particle size and throughput. Conical mills are able to achieve size reduction as low as 150 microns (80 mesh) with minimal heat generation and are suitable for both dry and wet milling applications.

As standard, all contact parts are manufactured from 316L stainless steel (180 grit), with FDA compliant seals, gaskets etc. Non-contact parts such as frames, motor covers and control panels are manufactured from 304 stainless steel (150 grit). All standard materials of construction and surface finishes can be upgraded or downgraded upon request.

Features:

- Stainless steel construction (with 316L contact parts)
- All seals FDA compliant (silicone, PTFE etc.)
- ATEX (ex-proof) versions available

Benefits:

- Perfect for heat sensitive materials or rugged applications
- Lower noise due to belt-driven operation
- Achieve various particle sizes on one machine, simply by changing screen and / or impeller (spacers required)
- Easy to operate

Product Images



Data Table

Criteria	Unit	M10-B	M20-B	M30-B	M60-B
Max. Throughput	kgs/hr	360	1800	3600	7200
	lbs/hr	800	4000	8000	16000
Screen Diameter	mm	127	203	305	609
	in	3.25	8	12	24
Standard Motor	kW	1.5	4	7.5	15
	HP	2	5	10	20
Standard Speed	RPM	2440	1480	960	480
Approx. Weight	kgs	150	200	250	475
	lbs	330	440	250	475
Lowest Achievable Particle Size	Approx. 150 microns (80 mesh)				
Typical Noise Level	<78dB				
Contact Parts	AISI 316L stainless steel (1.4404)				
Non-Contact Parts	AISI 304 stainless steel (1.4301)				
Country of Design	United Kingdom				
Country of Manufacture	United Kingdom				

Typical Applications



In-Line Vacuum Transfer Milling



Hand Feed



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IN BRITAIN**

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