Opposed Jet Mill

Models

A range of sizes designed for throughputs of between 0.5kg and 2 tonnes per hour.



Applications

Opposed Jet Mills are a type of air microniser used for the superfine grinding of a wide range of specialist materials when other forms of grinders are unsuitable, particularly in cases where the feed material is hard, already relatively fine, has a low melting point or where high purity products, without contamination, are required. Material is ground by attrition by introducing compressed gas, accelerated to sonic velocity through a series of nozzles, and an integral rotary classifier wheel ensures only fine milled product leaves the system.

This single unit is capable of milling materials up to a hardness of 10 Mohs and it enables accurate and highly controllable product sizes to be achieved with sharp cut-off and a typically narrow size distribution.

The Opposed Jet Mill range of equipment is widely used for reducing particle size in the chemicals, metal powders, minerals and plastics industries.

Features and benefits

- Average particle size 1–2 microns, depending on material
- Integral forced-vortex classifier provides accurate control of product size
- On-stream adjustment of product size by variable speed classifier rotor
- Generation of superfines controlled by adjustment of jet velocity
- Suitable for handling highly abrasive materials
- Ability to accept some feedstock up to 3mm reduces need for pre-grinding
- Low operating temperatures enable heat-sensitive material to be processed
- Manufactured in mild steel or stainless steel
- Alternative materials available for wear parts and/or mill linings
- Low operational noise levels
- Easy access for cleaning and maintenance
- Negative pressure within the milling chamber provides dust-free operation
- Complete with automatic control system



Opposed Jet Mill equipment range technical data

OPPOSED JET MILL MODEL	MAXIMUM WHEEL SPEED (RPM)	NOMINAL CLASSIFIER MOTOR SIZE (KW)	COMPRESSED AIR REQUIREMENT @ 7BAR PRESSURE		SUCTION FAN REQUIREMENTS	
			(M³/HR)	(CFM)	(M³/HR)	(CFM)
100	15,000	1.5	170	100	204	120
200	10,500	4	815	480	985	580
250	7,000	5.5	1,275	750	1,550	910
300	5,200	7.5	1,835	1,080	2,210	1,300
400	3,700	11	3,400	2,000	4,110	2,420

Note: All data provided is for guidance only and may be varied at any time by the company.