

FrymaKoruma Mills

The new standard in milling technology



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Highly efficient, outstandingly hygienic and extremely versatile – just three of many good reasons to choose FrymaKoruma mills. Used in laboratories and on production lines in many industries, FrymaKoruma mills are suited to a vast range of applications. Since the milling tools are interchangeable, all mills can be used for a wide range of purposes – precisely adaptable to the products to be processed.

Perforated disc mill (ML)

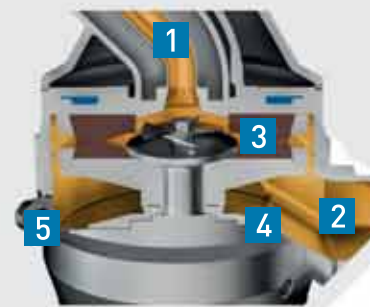
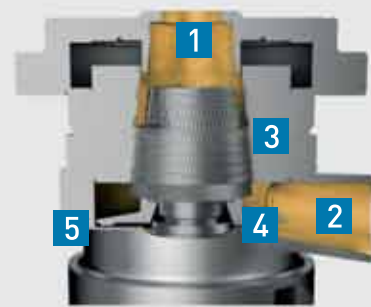
Perforated disc mills are used for initial size reduction and pre-milling of bulky products, pulping and mashing of bulky solids (e.g. fruit and vegetables). The knife arm rotates at around 3000 rpm, very close to the perforated disc, processing the product as it is fed in axially. The cutting and impact forces produced reduce size and force the product through the apertures in the disc. Perforated discs are available with a range of aperture sizes. The rotating ejector bar beneath the disc transfers the finished product to the mill outfeed.

Toothed colloid mill (MZ)

The principal application for toothed colloid mills is wet milling of fluids and high-viscosity suspensions and emulsions. FrymaKoruma mills can be supplied with a range of colloid milling sets, enabling optimal tailoring to each product. The standard milling set is suitable for universal use. The coarse toothed set is ideal for size reduction of solids in suspensions, while the crosstoothed set is used where smaller particle sizes and finer dispersion are required. Adjustment of the milling gap between rotor and stator allows optimal setting for every product, while stepless milling gap adjustment is available as an option for both manual and automatic adjustment. The gap width is indicated on a gauge.

Corundum stone mill (MK)

Corundum stone mills are used for dispersion and wet milling of liquid, viscous and pasty products. At the heart of these mills are the corundum stones, which are available with various grains to suit demand. The rotor element rotates against the fixed stator at high speed, achieving size reduction of the product in the milling gap through extreme shear and cutting forces. Axial milling gap control also allows adjustment of the pressure between rotor and stator, even during operation (negative gap adjustment). These units can also be fitted with automatic milling gap adjustment as an optional extra.



- 1 Product infeed
- 2 Product discharge
- 3 Grinding gap
- 4 Ejector
- 5 Residue discharge

Applications

Depending on the product and the required particle size, we offer you an individual mill.

Particle size



Vegetables

Recycling, e.g. paper or leather waste

Fruit

Meat and fish

Pet food

Fruit and vegetable juices

Soy milk

Paper coatings

Creams and ointments

Paints and varnishes

Hazelnuts

Grease and pesticides

Meat pastes

Pharmaceutical actives

Nut pastes and chocolate

Mustard

Make-up and cream

Lubrication grease

Sesame and hummus

Pet food

Chili sauces

Pigments

Agro chemicals

Options

Because of modular extension, the FrymaKoruma mills can be specially customized to your requirements:

- Material and surfaces according to customer requirements
- Tri-Clamp and flange connections
- Different positions for inlet/outlet
- Heatable/coolable
- Explosions-proof design (ATEX)
- Double acting mechanical seal
- Individual feeding via: feed pumps, hopper, feed screws
- Further options on request



Key benefits

High flexibility due to

- different grinding tools
- extensive options

High productivity

- high throughput
- high energy density in minimal space

Optimum hygiene values achieved by

- product chamber free of dead space
- Cleaning in Place (CIP)

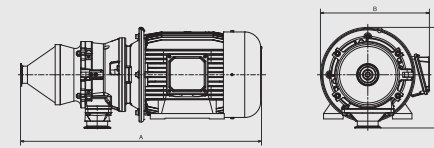
Cost savings thanks to

- low product loss
- perfect grinding chamber design

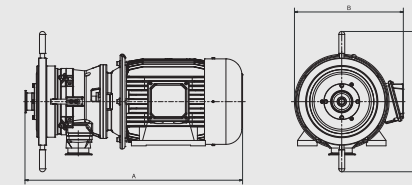
Consistently high product quality due to

- GMP design
- optimized seal technology

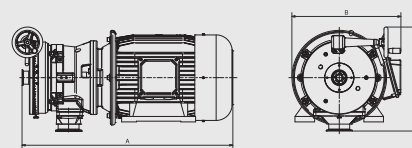
Perforated Disc Mill (ML)



Toothed colloid mill (MZ)



Corundum stone mill (MK)



	Throughput (l/h), approx.	Installed power (kW)	Dimensions (mm)			Weight (kg)
			Length	Width	Height	
ML 150	200-2500	5,5	750	300	360	85
ML 180	1000-12000	15	960	410	480	250
ML 250	4000-20000	30	1060	440	450	390
ML 330	8000-40000	60	1210	550	570	500
MZ 80	100-1000	5,5	600	300	380	100
MZ 100	200-2000	5,5	600	300	380	100
MZ 110	300-3000	5,5	600	300	380	100
MZ 130	700-7000	15	840	410	570	300
MZ 150	1500-15000	22	900	440	570	310
MZ 190	2600-26000	45	900	550	570	700
MZ 250	4000-40000	60	1090	550	570	1100
MK 95	10-160	5,5	560	370	350	100
MK 160	30-500	11	760	450	500	200
MK 180	50-1000	15	840	480	500	200
MK 250	90-2000	22	1130	530	560	400
MK 300	150-3000	37	1260	670	850	650
MK 320	200-5000	45	1310	370	870	650

Welcome to SWAT - The Customer Service you deserve!

Your targets:

- Make the best investment decision
- Reduce time to market
- Lower your break even point
- Fulfil your customer demands
- Increase your profitability
- Remain competitive

Our area of expertise:

- Consulting / Analysis / Research
- Speed / Quality / Compliance / Precision
- Efficiency / Safety / Hygiene / Automation
- Productivity / Sustainability
- Troubleshooting / Emergency / Used Machines
- Knowledge / Education

Let's aim for your targets, together!

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