

Colloid mill is a kind of ultra-fine pulverizing mechanical equipment for finely shearing, emulsifying and dispersing. On it there is a motor drives a rotating tooth rotor which relates to a matching stator. The rotor rotates at high speed while the stator is stationary. Processed medium is pressurized by its own weight or by external pressure (which can be generated by a pump) to produce a downward spiral impact force. Then the medium will face strong shear forces, friction, high frequency vibrations and high speed vortices as it flows through the gap between the fixed and rotating teeth (adjustable gap). Consequently all solid in the medium is effectively emulsified, dispersed, homogenized and crushed to achieve ultra-fine crushing and emulsification.

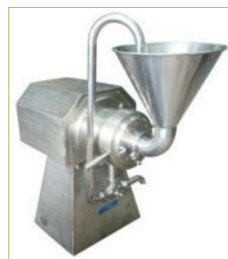
Except motor, on our colloid mill series, all parts are made of high strength stainless steel. In particular, the key grinding components, both rotator and stator are reinforced and therefore have good corrosion and abrasion resistance, so that the processed medium is pollution-free and hygienically pure. Sefluid's colloid mill series is suitable for high viscosity materials and materials with large particles.



Split Type



Vertical Type



Horizontal Type

## Applications



## Structure Type

### Split Type

Split type colloid mill's motor is discrete on the grinding plate. It has features of good stability, easy operation, corrosion resistance and long service life motor. With the use of labyrinth seal, there will be no problem of product leakage and motor failure. The pulley driving for power transmission can increase the speed to make the mixing work more effective.

### Horizontal Type

Horizontal type colloid mill also known as pipeline colloid high viscosity mixer pump. It can link with the pipeline for quick big batch mixing work. The machine can be customized according to user's special requirements.

### Vertical Type

Vertical type colloid mill has a special extended shaft directly driven by the motor. It has features of compact structure, small size, light weight and reliable sealing structure, and can work continuously for a long time.

- Food industry: aloe vera, pineapple, sesame, fruit tea, ice cream, mooncake filling, cream, jam, juice, soybean, soybean paste, soy sand, peanut milk, protein milk, soy milk, dairy products, wheat milk extract, flavoring, various drinks, etc.
- Chemical industry: paints, pigments, dyes, coatings, lubricants, greases, diesel, petroleum catalysts, emulsified asphalt, adhesives, detergents, plastics, FRP, leather, emulsions, etc.
- Chemicals for daily use: toothpaste, detergent, shampoo, shoe polish, advanced cosmetics, shower gel, soap, balm, etc.
- Pharmaceutical industry: various types of syrups, nutritional solutions, Chinese medicine, plasters, biological products, fish liver oil, pollen, royal jelly, vaccines, various ointments, various oral liquids, injections, still drops, etc.
- Construction industry: various paints. Including interior and exterior wall coatings, anti-corrosion and waterproof coatings, cold porcelain coatings, colorful coatings, ceramic glazes, etc.
- Other industries: plastic industry, textile industry, paper industry, coal flotation agent, nanomaterials and other industries need high quality environmental protection production.

## Features



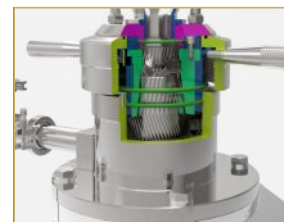
Food grade stainless steel for all parts, more material for options



High-precision milling assembly and tight gear structure crushing particles instantly



Adjustable particle size, easy for regulation



Beautiful design, good sealing, stable performance and convenient operation



Adopt quick-fit joints, easy to install, easy to disassemble and clean



Motor with high power, large torque, low temperature rise and low vibration



Double reinforced base with excellent stability for stable operation of the machine



Square or tubular discharge port for various user options

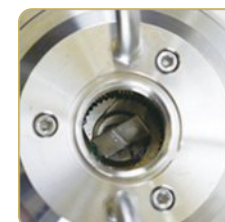
## Milling Structure



Screw feeder



Rotable Miller



Blade feeder



Static Miller

## Specifications

Model	Fineness (μm)	Capacity (t/h)	Power (Kw)	Milling Slice Dia. (mm)	Inlet Dia. (mm)	Outlet Dia. (mm)	Cooling System Inlet	L×W×H (mm)
SML50	5-40	0.01-0.2	1.1	50	32	15	1/8"	420×280×760
SML80	3-40	0.3-1	3	80	50	25	1/4"	520×400×900
SML100	2-40	0.5-2	5.5	100	50	32	1/4"	560×420×950
SML120	2-40	0.7-3	7.5	120	65	40	1/4"	560×420×950
SMF80	2-40	0.3-1	4	80	50	25	1/4"	640×550×1030
SMF100	2-40	0.5-2	5.5	100	50	32	1/4"	750×620×1080
SMF120	2-40	0.7-3	7.5	120	65	40	1/4"	750×620×1080
SMF140	2-40	1-4	11	140	80	40	1/4"	820×700×1250
SMF200	2-40	2-7	15	200	120	65	1/4"	980×800×1550
SMF280	2-40	3-10	22	250	120	65	1/4"	1140×900×1850
SMW80	2-40	0.3-1	3	80	48	25	1/4"	630×380×790
SMW100	2-40	0.5-2	5.5	100	66	25	1/4"	680×370×900
SMW120	2-40	0.5-3	7.5	120	66	32	1/4"	680×370×900
SMW140	2-40	0.5-4	7.5	140	66	32	1/4"	680×370×900



\*\*\*SML series is vertical type, SMF is split type, SMW is horizontal type