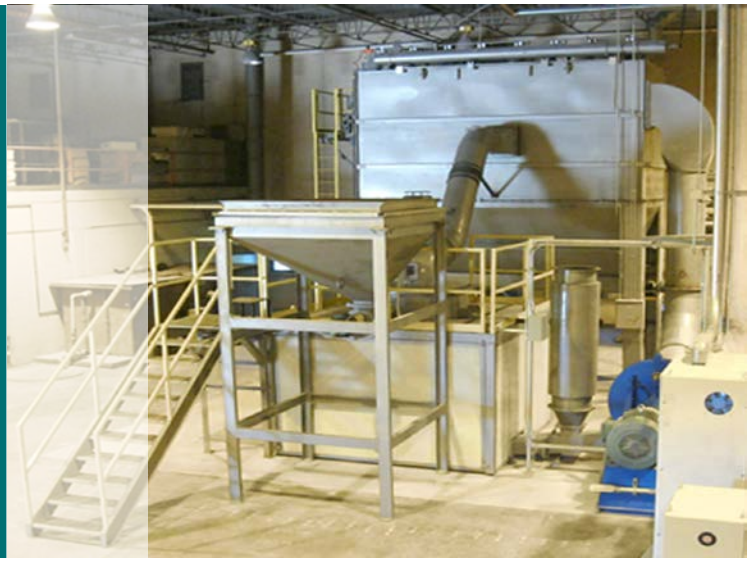
schenck process

Raymond® Ultra Fine Mill
For ultra fine product ranges

- **Efficient ultra fine grinding with low specific energy comsumption**
- **Low classifier speed, high fineness separation**
- **Compact mill and classifier arrangement**
- **Flexible grinding element arrangement to suit product requirements**
- **Low investment costs**



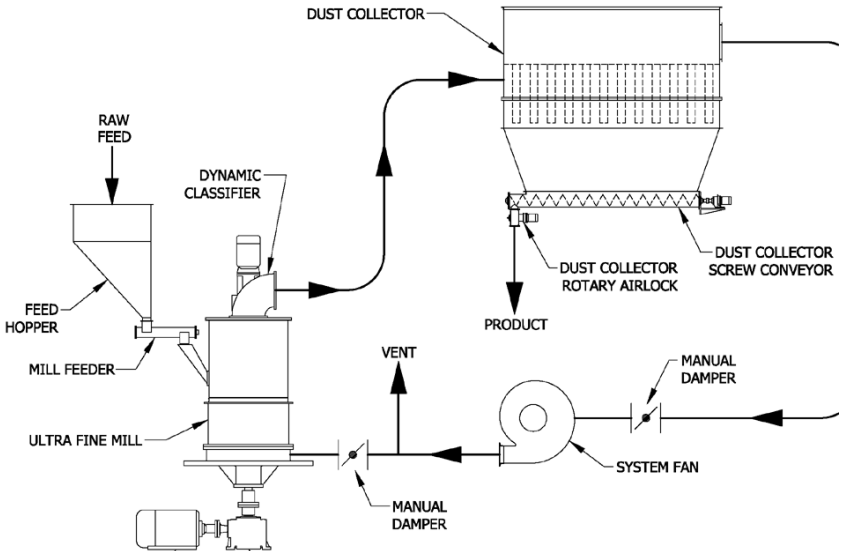
The Raymond® Ultra Fine mill system is designed to produce extremely fine powders for use in various applications including coatings, fillers and pigments. The mill system will generate products as fine as 50% passing 2 microns or as coarse as 50% passing 20 microns.

Principle of operation

The Raymond® Ultra Fine mill is an air-swept vertical ring-roll mill with integral classification. A vertical shaft rotates an assembly of convex rolls inside multipe concave grinding zones. As the unit turns, centrifugal force drives the rolls against the grinding ring. Feed material enters the top of the grinding zones and flows down through the grinding elements via gravity to a material spreading plate where it is distributed by centrifugal force and discharges into the process gas stream. The gas stream flows upward in the annular space around the grinding zones to the turbine classifier where the coarse particles get separated and returned to the grinding zone while acceptable material flows to product collection in a pulse jet dust collector.

Construction features

- **Independent mill speed reducer** – steel housing contains high efficiency gearing designed for extended service life.
- **Noise reduction** – mill is completely contained within a sound enclosure and vented process gas discharges through a silencer.
- **Product collector** – primary pulse jet collector is specially designed for ultra- fine material handling.
- **System control** – variable speed control for mill, turbine classifier, and system fan provides maximum flexibility and energy savings.



Nominal Performance for Raymond® Ultra Fine Mill

Model	UF2A		UF2		UF2B		UF3A		UF3B	
Fineness	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity
D97-microns (mesh)	kWhr / ton	Ton / hr	kWhr / ton	Ton / hr	kWhr / ton	Ton / hr	kWhr / ton	Ton / hr	kWhr / ton	Ton / hr
38 (400)	22	6-7					23	8-8.5		
23 (600)	33	4-5	35	4-5			29	6-6.5		
18 (800)	48	3-3.2	45	3-3.5			34	4.5-5	48	4.5-5
10 (1250)			70	2-2.5			67	3-3.5	70	3-3.5
7.0 (1800)			95	1.5-1.8	90	1.5-1.8			85	2.5-3
5.9 (2400)					120	1.2-1.3			120	1.5-1.8
5.0 (2500)					145	0.9-1.1			175	1-1.2

Note: Based on grinding calcite with feed size <10mm, silica <0.4% and moisture <5%

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