

SIZE REDUCTION, DISINTEGRATION AND DISPERSION EQUIPMENT



In-Line Disintegrator

Continuous In-line Processing Equipment for Liquids and Slurries.

The Hosokawa Micron In-line Disintegrator for liquids and slurries is developed from the well proven RD Series of Vertical Hammer Mills. Manufactured with all contact parts from stainless steel, the In-line Disintegrators offer effective mixing and delumping in pipe systems at up to 10 bar g.

Unique in Mixing

Centrifugal grinding action passes every particle through screens which are perforated through 360°. Strainers are eliminated. Will handle fluids with high viscosities.

Efficient in design

- Belt drive for flexibility and speed adjustments
- Quick opening for fast easy cleaning
- Compact and robust in construction

Operation

The Disintegrators have a rotor fitted with hard faced, rigid hammers, the tips of which run at close clearance to a stainless steel screen perforated through 360°. Materials enter at the top of the rotor and are subjected to repeated impact and attritional forces from the high speed rotating hammers, centrifugal force carrying the mixture through the perforated screens. Intensive mechanical energy is applied to the materials as they pass rapidly through the mill. The basic mixing action is achieved by the intense turbulence and high shear rate created by the machine.

Special design machines are available for depositing and sticky materials such as Latex Slurry, PVC / ePVC Slurries, Sulphur Slurries and similar materials; using careful selected and developed mechanical sealing technologies and systems and Ex / ATEX certified parts and components for use within these (and allied) industry areas.

Typical Applications:

- Detergent and dyestuffs delumping upstream of spray dryers
- Dispersing colour pigments
- Intimate mixing and delumping of materials
- Grinding in liquid suspension
- PVC Slurry
- Sulphur Slurry



SPECIFICATION Disintegrator Model No.	Capacities		Max Installed Power
	m ³ /hr	gpm	kW
RI 6	24.5	90	11
RI 8	60	220	37
RI 12	120	440	55

Capacities will vary depending on products being processed

Dispersitron

The Hosokawa Micron RH Dispersitron circulates and disperses mixtures, eliminates lumps and creates a suspension/emulsion simultaneously.

Continuous Process

Liquids and solids / powders are metered into an agitated feed tank; after initial mixing the suspension is fed (by either gravity or a transfer pump) through the RH Dispersitron unit that may be configured either as single or dual series in-line arrangement; either within a recirculatory (for difficult to process materials) or flow-through mode.

The RH Dispersitron is available in a variety of designs from simple, chemical duty design through to high-end sanitary design for use within the pharmaceutical and bio-chemical industries requiring the highest degree of cleanliness and cleanability.

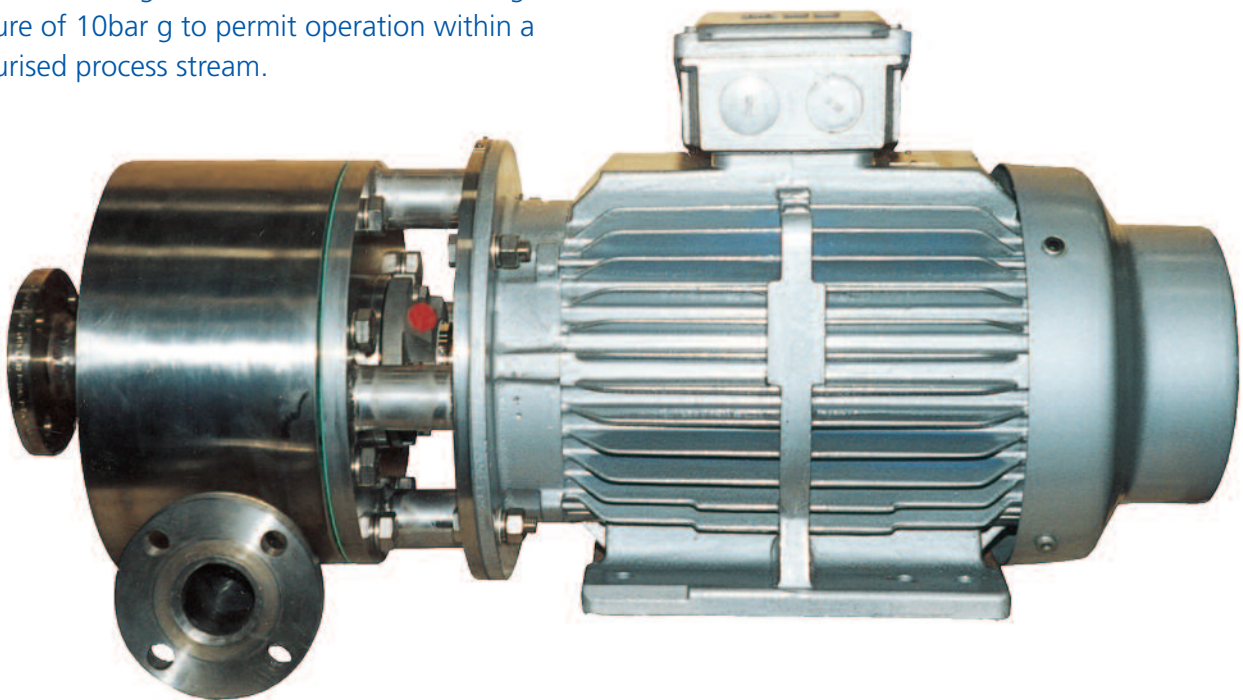
In standard configuration the units have a design pressure of 10bar g to permit operation within a pressurised process stream.

Batch Process

For intense mixing or difficult to mix products, recirculation allows a residence time which allows complete ingredient dissolution.

Typical Applications:

- Food
- Pharmaceutical
- Chemical
- Pigments/Paints
- Emulsification
- Homogenisation



Model	Motor Range
RH6	2.2 - 7.5kW
RH8	7.5 - 18.5kW
RH12	18.5 - 45kW



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