



The Bematek Colloid Mill

Leads Technology Innovation

in Homogenizing, Emulsifying, and Dispersing

for Cosmetic Formulations

Valued as an industry innovator, Bematek brings more than 70 years experience to high-shear colloid mill design. We are inspiring process industry innovation and delivering solutions to meet the increasingly complex manufacturing demands of the cosmetic chemist.

The wet milling of formulations is one of the oldest processing activities that still exists today in modern manufacturing environments. The reduction of particles in dispersions and droplets in emulsions is done by applying hydraulic and mechanical shear to various process ingredients. Bematek colloid mills are recognized as the equipment of choice for increasing the stability of dispersions and emulsions in today's complex homogenizing processes.

The Bematek Colloid Mill is a conical rotor/stator mill for processing colloidal dispersions, emulsions and suspensions, and works on the principals of shear rate residence time.

- Rotor Speed
- Rotor/Stator Gap
- Rotor/Stator Surface Profiles
- Flow Rate

These parameters make scale-up from R&D to full production simple and reliable.

Advantages of the Bematek Wet Colloid Mill:

Modular Engineering

Design permits quick and easy mill chamber interchangeability with various mill head profiles to support multiple demands for a wide range of formulations.

High Shear Precision

Fine tuning of applied mechanical shear is achieved through a micrometer style gap adjustment dial. Milling speed can also be controlled by an optional variable frequency drive.

Temperature Control

The mill chamber thermal jacket provides the ability to manage milling temperature during the milling process. Thermal jackets are standard in Bematek mills.

Rotor Safety Stop

The milling chamber has an optional positive stop mechanism that will never allow the conical rotor to contact the stator, when making gap adjustments at operating speeds.

Colloid Mill Chamber Simplicity

Fewer major milling components means ease of use and lower maintenance costs. Mill heads can be exposed by removing only two parts. With only four major components, the entire mill head can be rapidly maintained and reconfigured for various applications.



We Listen. We Solve. We Deliver.

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