

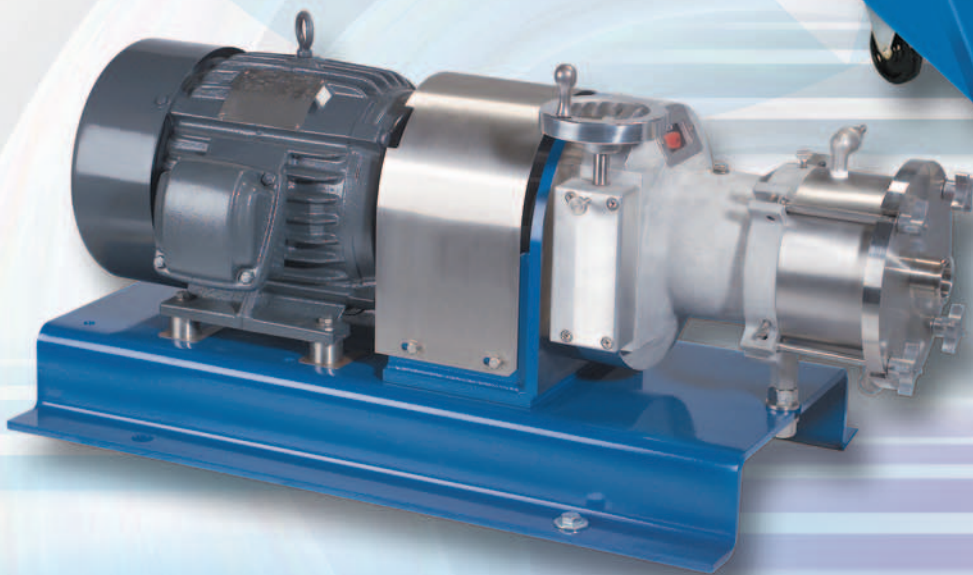


ENTORNO  
INDUSTRIAL



## Colloid Mills

Batch or Continuous Flow  
High Shear Mixers



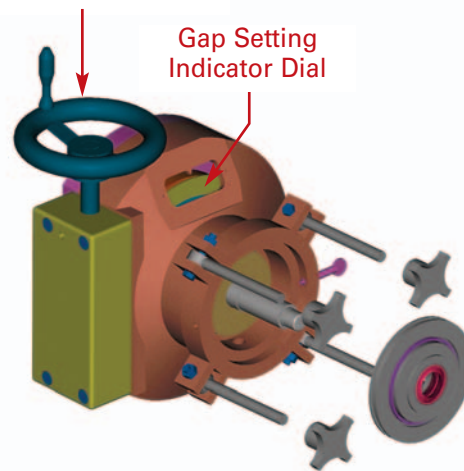
## Versatility

The Greerco Colloid Mill is the most versatile high shear mixer available. With a simple turn of the wheel, you can achieve the process results you have been looking for.

- The rotor-stator gap can be adjusted on-the-fly by turning a hand wheel
- Changing the gap setting allows the user to modify the shear rate applied to the fluid and achieve the desired process results
- Indicator dial defines gap-setting position and ensures process repeatability
- This machine is designed to handle a wide range of applications and empowers the user to make simple adjustments to achieve the precise product qualities they require
- Vertical or horizontal mounting position makes mill ideal for batch, batch-continuous or in-line applications

Gap Setting Adjustment  
Hand Wheel

Gap Setting  
Indicator Dial



W200V Lab Model

## Cost Effective Solution

### Initial Investment

Unlike competitive designs, the versatility of the Greerco Colloid Mill eliminates the need for the costly add-ons typically offered to achieve optimal process results.

### Process

Easy installation and operation maximizes process productivity while reducing cost.

### Longevity

Time-tested design has been proven to provide years of continuous operations with minimal maintenance costs.

## Mixing Mechanism

- The first mixing zone utilizes sharp stator teeth to mill the fluid
- Next, fine serrations accelerate the fluid between the ultra-smooth, hardened surfaces of the spinning rotor and stator gap
- Finally, centrifugal forces impinge fluid on stator wall for additional refinement



## Applications

- Emulsification
- Solids incorporation
- Homogeneous dispersions
- Solids deagglomeration
- Rapid blending
- Particle size reduction
- Pre-packaging product refinement

Aerosols • Antacids • Antibiotics • Antiperspirants • Bacterial Slurries • Biologicals • Cell Rupturing • Coatings • Cold Creams • Color Dispersion  
• Flavor Syrups • Fluxes • Gum Dispersions • Hair Gel • Herbicides • Hormone Emulsions • Injectables • Insecticides • Liquid Make-Up • Lotions  
• Printing Inks • Refractory Dispersions • Salad Dressing • Sauces • Serums • Shampoo • Shaving Cream • Silicone Emulsions • Sulfur Dis

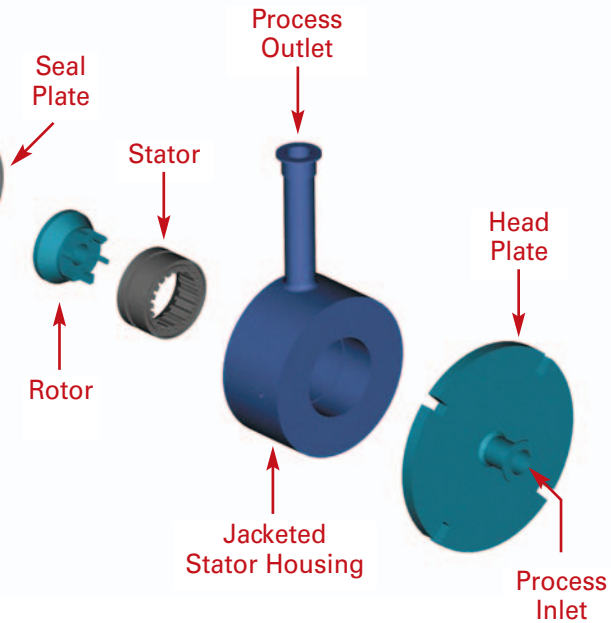
**With over 67 years of experience servicing the needs of the high shear market and its custom**

## Standard Mill Construction

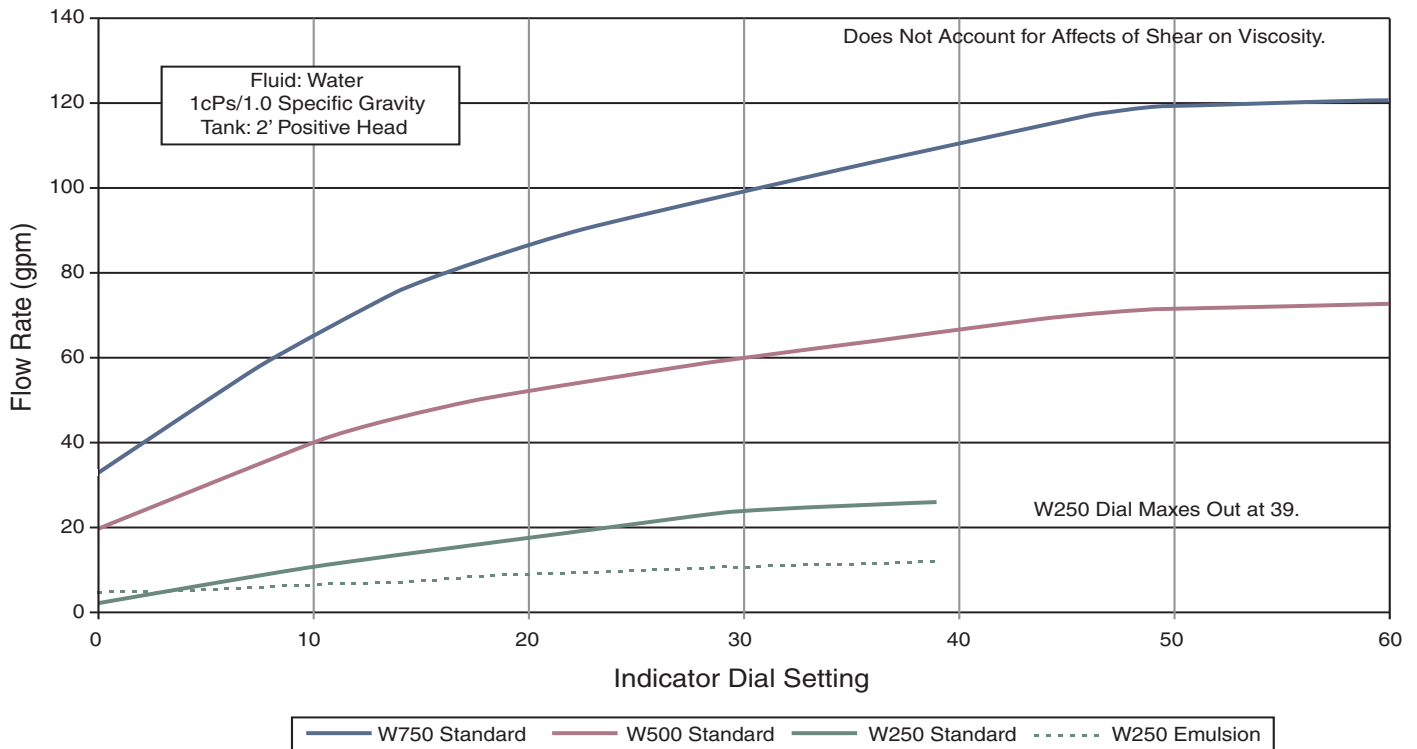
- 316 SS wetted parts impregnated with Stellite® for high wear resistance
- Jacketed stator housing with SS connections
- Lip seal shaft sealing
- Explosion-proof motors
- Painted base and supports
- Viton® elastomers
- Sanitary, tri-clamp connections

## Optional Features

- Alternate rotor-stator design
- Mechanical seals
- 440 hardened SS rotor-stator
- Alternate motor enclosures
- All stainless steel supports and base
- Push cart with casters for mobility
- Macerating knife



## Flow Rate vs. Gap Setting Horizontal Colloid Mills



s • Cosmetics • Deodorants • Depilatories • Drug Dispersions • Dye-stuffs • Essential Oils • Eye Make-Up • Fertilizers • Foods • Flavor Emulsions  
 • Lubricants • Mascara • Mayonnaise • Medicinals • Mineral Oil Emulsions • Ointments • Pharmaceuticals • Photographic Emulsions • Pigments  
 • Dispersions • Syrups • Textile Emulsions • Toiletries • Vaccines • Vitamins • Wax Emulsions • Welding Fluxes • Yeast • Zinc Oxide Ointment

ers, today's Greerco technology has also been known as Gifford Wood and Eppenbach mixers.

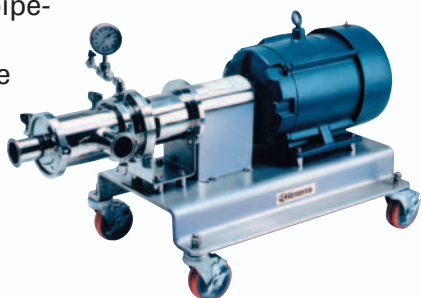
## Homogenizers

Greerco offers a full line of tank homogenizers for use with small R&D or full-scale batch operations. Homogenizers may be used to replace or supplement common agitators in operations where de-agglomeration and dispersion operations are critical.



## Pipeline Mixers

Greerco offers a complete line of in-line high shear mixers for both sanitary and industrial applications. Available in single or tandem shear configurations, the pipe-line mixer is perfect for continuous in-line emulsification, dispersion and de-agglomeration.



## Greerco Factory Services

### Machine Rebuild Programs:

The Greerco factory offers a total equipment service program, where for the cost of replacement parts and a small fee, the customer will receive a machine rebuilt to factory specifications complete with a mechanical warranty on parts and labor. Emergency, same day turn around available on most models.

### Flexible, Low-Cost Rental Program:

All lab models and most full scale units are available for rental. The program includes two free weeks and credit towards the purchase of either the rental unit or new equipment. The rental program can often be tailored to meet your specific needs.



**Chemineer, Inc.**  
5870 Poe Avenue  
Dayton, Ohio 45414  
Telephone: (937) 454-3200  
Email: chemineer@nov.com

**Chemineer, Ltd.**  
7 Cranmer Road, West Meadows  
Derby DE21 6XT, England  
Telephone: 44-1-332-546700  
Email: chemineeruk@nov.com

**Chemineer China**  
Room 2005, Tower 1, Plaza Morden  
369 Xianxia Road  
Shanghai 200336 China  
Telephone: 86-21-61240001  
Email: chemineercn@nov.com

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**Chemineer, Inc.**  
125 Flagship Drive  
North Andover, MA 01845  
Telephone: (978) 687-0101  
Email: navinfo@nov.com  
www.kenics.com  
www.greercomixers.com

## Chemineer International Sales Offices:

Brazil  
Mexico  
Singapore

### Your Local Contact:

#### ENTORNO INDUSTRIAL, S.A. DE C.V.

Juan Sarabia No. 205. Col. Nueva Santa María. 02800 México, D.F.  
Tels.: (55) 5356-7206 • Fax: (55) 5356-7209  
e-mail: ventas@entorno-industrial.com • direccion@entorno-industrial.com www.entorno-industrial.com

For the nearest sales office call 1-800-643-0641 or go to [www.chemineer.com](http://www.chemineer.com)

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