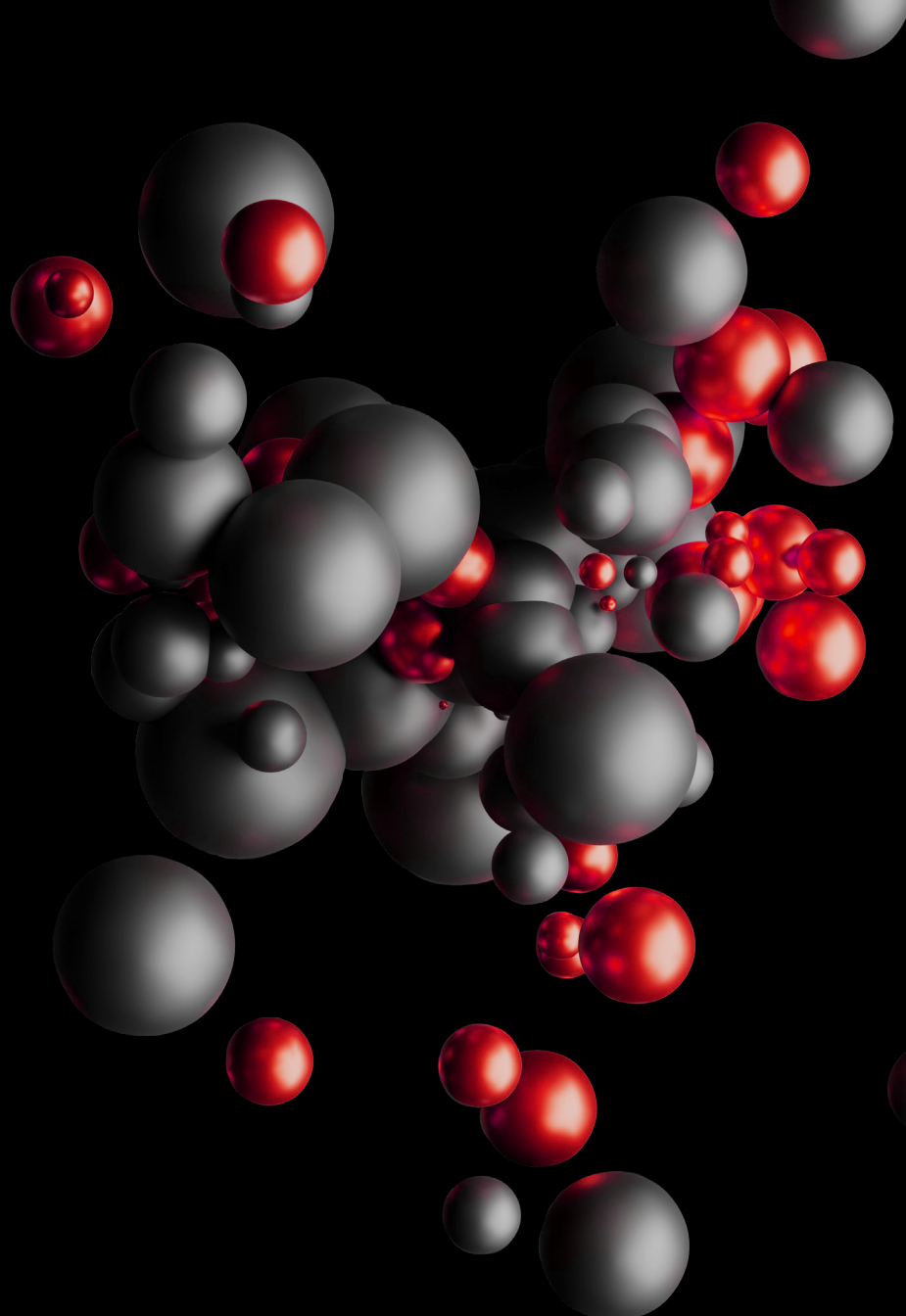


**EMI**mills  
A SCHOLZ COMPANY



# MINI MILLS

**SMALL SAMPLE PROCESSING** | Mini Mills are self-contained bead mills designed for wet milling, fine grinding, and fluid dispersions. Available in various model sizes with chambers ranging from 25-2,000 mL, these mills can produce sub-micron particles. They utilize grinding media to generate high-shear impact forces, reducing agglomerates or finite particles, making them ideal for product research, quality control, and technical service applications.

**FEATURES & CAPABILITIES** | Mini Mills feature a built-in, two-stage internal pumping mechanism and offer variable speed agitators for precise control. With options for general-purpose, explosion-proof, or intrinsically safe electrical controls, they ensure safe operation in any environment. Quick-release latches enable easy removal of components for cleaning. Designed with water-jacketed chambers and optional additional end plate cooling, temperature control is seamless. Cleaning is achieved by simply passing a compatible solvent through the milling system.



*Above: EMI Model M250 with PLC Controls*



*Left: Explosion-Proof Electrical Controls*

# PILOT MILLS

**SCALE TO PRODUCTION** | Pilot Mills are ideal for laboratory research, small batch production, and product development. These mills offer wet milling, fine grinding, and dispersing capabilities for fluid or paste-type viscosities. They operate on a continuous basis or by recirculation milling, providing precise control of variables to mimic production equipment. Available in various models with chamber volumes from 400-2,000 mL, Pilot Mills are versatile tools for predicting production expectations and achieving batch-to-batch consistency.

**CONTROL & EFFICIENCY** | Pilot Mills can be equipped with different feed pump systems and feature variable speed agitators and variable flow rates. PLC control options are available for enhanced control and monitoring. These mills are designed for easy maintenance with quick release chamber closures and piping. Capable of producing sub-micron particles, Pilot Mills enable efficient dispersion using a variety of grinding media. Obtain valuable information for scale-up to production and monitor process functions for reliable results.

*Right: EMI Model Pilot Mill with PLC Controls*



# PRODUCTION MILLS



**STREAMLINED MILLING** | Designed for wet milling, fine grinding, and dispersing of liquid and paste-type viscosities, these horizontal mills offer continuous or recirculation operation. Precise control of agitator speed and pump flow rate ensures the production of uniform results.

**FEATURES & OPERATION** | Production Mills feature a direct drive system for simplicity and energy efficiency. Variable speed agitators provide control of energy input, with water-jacketed chambers and end plates for temperature regulation. Explosion-proof motors and operator controls are available, along with safety switches and high-flow screen media separation. Complete basic systems include pump and motor controls. Mills can be upgraded with a PLC system for monitoring, data recording, and diagnostics.

*Left: 40 Liter Mill with PLC Controls*

*Below: Stainless 40 Liter Milling Discs*





# GRINDING MEDIA



*Above: Ceramic Grinding Media*

*Right: Steel Grinding Media*



**COMPREHENSIVE SELECTION** | EMI offers a wide range of grinding media to meet all applications:

- Glass: 2.5 sg
- Zirconium Silica: 3.8 sg
- Cerium Stabilized Zirconia: 6.2 sg
- Yttrium Stabilized Zirconia: 6.0 sg
- YTZ: 6.0 sg
- Steel: 7.2 sg

Selecting the appropriate media is based on the desired fineness of particles and viscosity of the product being milled. Smaller beads offer greater count per volume, leading to excellent dispersion and particle polishing forces. Larger beads provide higher impact for faster reduction rates. Rheological properties, composition, and abrasiveness of the product are considered during selection, as well as the need for product purity and compatibility with the media.

**MANAGEMENT & SUPPORT** | Along with the grinding media itself, EMI provides technical support and media management guidance from years of processing experience. Performance relies on using the correct media type, size, and mill loading, along with proactive management. On all fronts, EMI is an extension of your team to ensure maximum longevity and processing efficiency.

# LABORATORY DISPERSERS



Above: Standard Electric Lift with PLC Controls

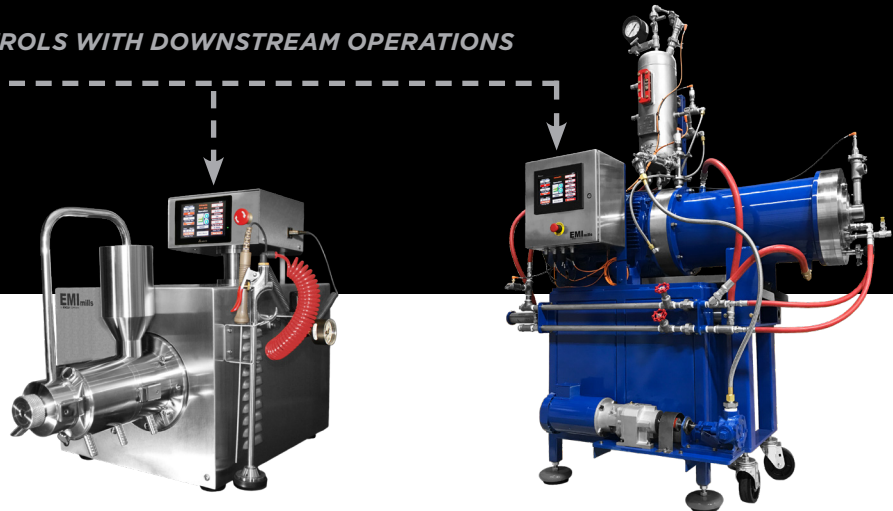
**SIZED FOR YOUR PROCESS** | Our laboratory and pilot scale dispersers and mixers offer versatile processing for various materials, ensuring uniform results. Choose from two standard sizes:

- Small (1-2 gallons)
- Standard (3-5 gallons)

These adaptable mixers feature high shear capabilities and compatibility with rotor stator mixing heads and batch bead mill systems, providing control for a wide range of applications.

**CUSTOM FEATURES** | With variable speed and heavy-duty motors, our mixers deliver consistent performance. Optional features include digital gauges, PLC controls, and interchangeable blades to meet specific process requirements. Safety features like head lift systems, shaft guards, and sensors ensure secure operation. Constructed with stainless steel contact parts, these units are durable and available with explosion-proof options for hazardous environments.

**INTEGRATE CONTROLS WITH DOWNSTREAM OPERATIONS**



# ADDITIONAL PRODUCTS

**STIRRERS** | Laboratory bench stirrers are versatile variable speed mixers designed for small volumes. With electronic control and digital display of shaft RPM, these units offer reliable and consistent batch-to-batch results. They are suitable for use in any location with 120-220-volt power and feature a manually adjustable mixing head and interchangeable shafts for different blade types.

Additional options include various horsepower ratings, speed ranges, mixing blades, and vessel clamps to meet specific application requirements.

*Right: EMI Bench Stirrer with Paddle Blade  
Far Right: EMI Laboratory Chiller*



**CHILLERS** | Chillers offer a reliable and efficient alternative to tap water, providing clean and precise temperature-controlled fluid for closed-loop cooling. With advantages such as powerful pumping, no scale build-up, constant cooling, and precise temperature control, these chillers are suitable for various laboratory and production applications. With EMI's expertise in chiller selection, finding the right one for your application is a simple, straightforward process.

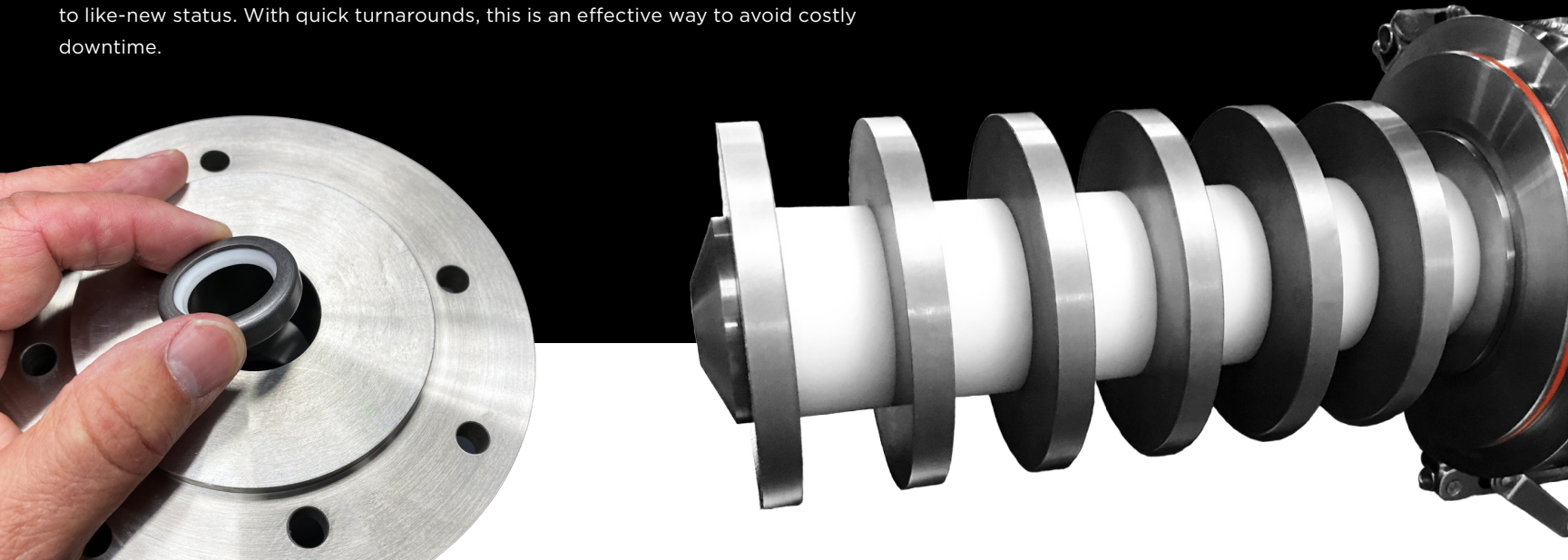
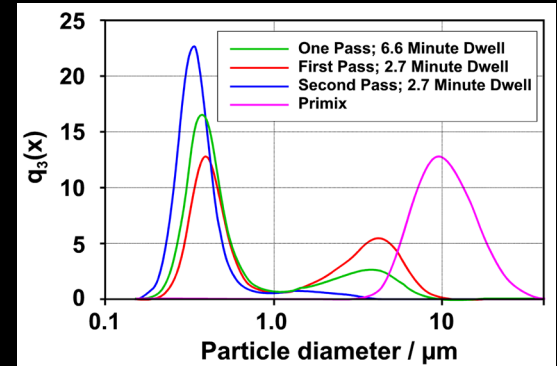


# ADDITIONAL SERVICES

**TEST LABORATORY** | The EMI Test Lab provides an opportunity to validate the effectiveness of our technology. We encourage customers to submit their samples for evaluation or attend a trial process in person. With the availability of a particle size analyzer and other tools, we ensure thorough analysis of the results, enabling accurate and reliable data.

**PARTS & SERVICE** | EMI offers comprehensive parts and service support, including an extensive inventory of on-site spare parts and knowledgeable technical assistance for your equipment and process technology. With a commitment to quality and global reach, EMI products are proudly made in the USA and available worldwide.

**REFURBISHING** | Worn out machine? Broken or missing components? Send us your unit and our expert assemblers will inspect, diagnose, and repair it to like-new status. With quick turnarounds, this is an effective way to avoid costly downtime.





# CONTACT US

**EMI**mills  
A SCHOLD COMPANY



**888 E BELVIDERE RD #214**  
GRAYSLAKE, IL 60030



**847-548-0044**



**EMIMILLS.COM**



**SALES@EMIMILLS.COM**

**A SCHOLD COMPANY** | In 2023, EMI Mills was acquired by Schold Manufacturing, a leading provider of industrial liquid and solids processing equipment worldwide. This strategic partnering bolsters Schold's product offering in fine particle technology, specifically with lab/ pilot batches where uniform dispersions and narrow particle distribution is critical. For equipment complimentary to EMI, Schold has you covered. From bench-top to large-scale production, we have a solution to elevate YOUR process. Call 1-800-4MIXERS or visit Schold.com to learn more.

*VIM Immersion Mill with  
Helical & Scrapers*

*LMX Bench-Top  
Disperser*

*Left: VRS Dual Rotating Rotor Stator  
Below: VHS High-Speed Disperser*

*ILD Inline Disperser with  
Powder Induction System*

