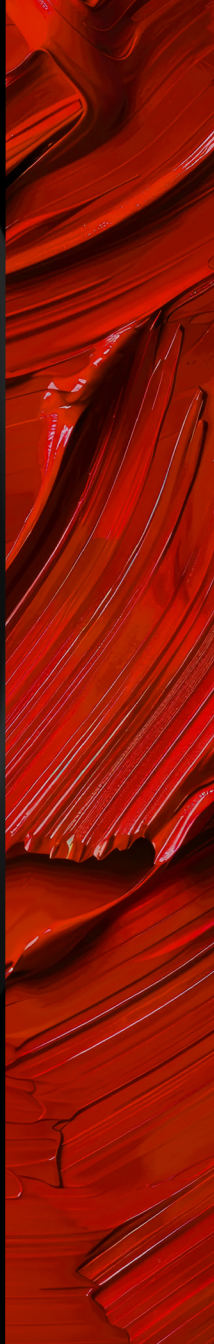
SCHOLD

DISPERSING | MILLING | MIXING

COMPLETE PROCESS SYSTEMS



BENCH-TOP DISPERSERS/MIXERS

LMX - LAB MIXER | The benchmark for laboratory mixing and ideal for small scale production or pilot batches. The LMX is designed with versatility in mind, allowing operators to process batches from one gallon up to ten gallons in volume. It is robust, simple to use, and easy to clean. With a direct-coupled mixer shaft design, responsive power and torque is on demand.

Customizable options: Motor horsepower, gearing, environmental ratings, blade types, LH/RH configuration, full-air operation, and more.

Left: Sanitary LMX with Touchscreen

Right: Explosion-Proof LMX

POST-MOUNT DISPERSERS/MIXERS

VHS - HIGH-SPEED DISPERSER | The VHS is ideal for dispersing, grinding, and letting down batches of products up to 50,000 cP. Multiple blade options are available, including high-shear, pumper, polyblades, and more.

VLS - LOW-SPEED MIXER | The VLS is designed to blend and incorporate the entire range of product viscosities when grinding is not necessary. Choose from various blade options to process the toughest applications, or work with Schold to custom design a blade for your specific application.

Left: VHS with High Shear Blade

Right: VLS with Bow-Tie Blade and Wall Scrapers

MULTI-SHAFT
DISPERSERS/MIXERS

CO-AXIAL | The co-axial design integrates both a high-shear and low-speed blade combination, with the low-speed sweep blade circulating product towards the high-shear work zone. This dual configuration is ideal for higher viscosity products.

TWIN-SHAFT | Designed for high to extremely high viscosity formulations, the high-speed disperser and/or rotor stator is offset from a low-speed anchor agitator or sweep blade, allowing for multiple high-speed blade configurations.

TRIPLE-SHAFT | Alongside a central sweep blade, the triple-shaft includes both a disperser and/or rotor stator to disintegrate large solids at the start of a cycle and eliminate lumps to improve homogeneity of the mixture. A lifting screw/auger may also be incorporated to help suspend agglomerates in the batch.

Twin-Shaft Disperser with Wall Scrapers and Vacuum/Pressure Capability

TANK-MOUNT
DISPERSERS/MIXERS

When a removable process vessel is not required, post-mounted designs can be configured as tank-mounted models, saving floorspace and simplifying maintenance with fewer mechanical parts.

FLANGE-MOUNT | Flange-mounted tank dispersers/mixers are ideal for applications where pressure or vacuum is required to process a batch. The flange mount allows the equipment to sit on a tank with a heavy-duty flange that can be fitted with an appropriate O-ring, mechanical seal, and gasketing to maintain an air-tight process.

BRIDGE-MOUNT | Bridge-mounted tank dispersers/mixers are common in many industries and applications. They are ideal for placing over tanks where the application does not require vacuum or pressure to be held during the dispersing, mixing, blending, or let-down process.

Far Right: Flange-Mounted Disperser with Lifting Helix and Wall Scrapers

Right: Bridge-Mounted Disperser

LABORATORY MILLS *by* EMImills

EMI Mills, a division of Schold, has been a worldwide leader in fine particle technology since 1979. Their wide variety of media mills and mixers are ideal for applications that require stable, uniform dispersions and narrow particle distribution. Ask us about the expanded range of options!

EMI - MINI MILL | Self-contained bead mill designed for wet milling, fine grinding, and fluid dispersions. Available with chambers ranging from 25-2,000 mL, this mill can produce sub-micron particles. Grinding media generates high-shear impact forces, reducing agglomerates or finite particles. Ideal for product research, quality control, and technical service applications.

EMI - PILOT MILL | This mill offers wet milling, fine grinding, and dispersing for fluid or paste-type viscosities. It operates on a continuous basis or by recirculation via an external feed pump, providing precise control of variables to mimic production equipment. Available in various models and ideal for laboratory research, pilot batches, and product development.

Left: EMI Mini Mill with Recirculation Capability

Right: EMI Pilot Mill with External Feed Pump

PRODUCTION MILLS

VSM - VERTICAL MEDIA MILL | The VSM is designed for deagglomerating, grinding, and milling a wide range of materials. Operating under internal pressure, this mill can handle materials with high viscosities or thixotropy, as well as moisture and air-sensitive products.

HSM - HORIZONTAL MEDIA MILL | Similar to our vertical mill, the HSM is designed for deagglomerating, grinding, and milling a wide range of materials. Its self-supporting, quick-extract chamber and filter allow for easy clean-out, making it a popular option for customers with multiple product runs.

Left: 60L VSM

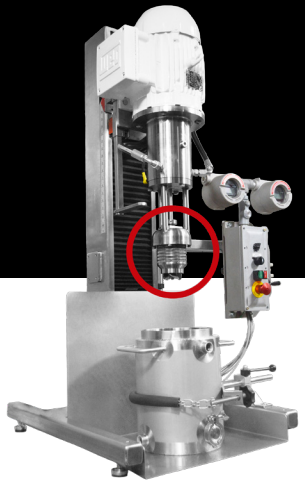
Right: 20L HSM with Jacketed Chamber and XP Configuration

IMMERSION MILLS

VIM | The Variable Speed Immersion Mill (also known as a basket mill) provides rapid and efficient milling for a variety of applications. It creates a vortex to pull product into the “work zone”, where media is agitated to break up and disperse particles. The ease of cleaning and minimal use of griding media makes the VIM a popular choice.

CUSTOMIZATION | The VIM can be fit with scraper arms, helical arms, or any other low-speed blade. It can also be provided sans low-speed blade in applications where vessel diameter versatility is required. Whether you prefer manual control with push buttons or fully automated control with touchscreen HMIs and programmed recipes, we have a solution.

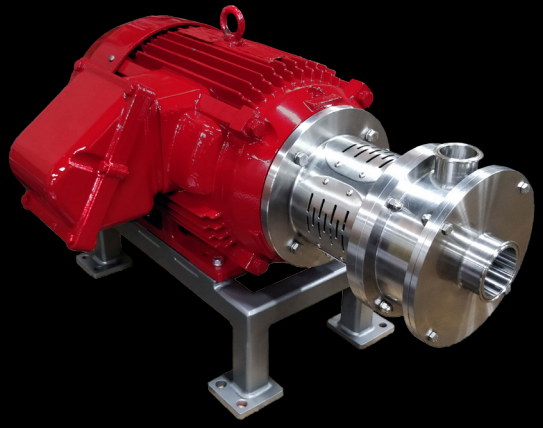
EASE OF USE | The modular design of the VIM allows for easy component replacement, meaning less downtime. Change-over for most applications simply involves running the unit in a cleaning tank with detergent or solvent to flush the mill head, rendering it ready to process the next batch.



Right: VIM 20 with Sweep Option

Below: LMX with Immersion Mill Attachment

INLINE DISPERSERS



ILD | Disperse, grind, mix, emulsify, or homogenize with this inline disperser. The ILD processes one-pass or recirculating batch applications quickly and efficiently. With multiple configurations available, the ILD is an extremely versatile and highly customizable piece of equipment. Whether you are processing chemicals, pigments, food products, pharmaceuticals, or cosmetics, the ILD's compact footprint allows for simple integration with existing systems or as a brand-new process.

Available options include different rotor/stator configurations for high shear, sanitary/food grade construction, stainless motor, powder induction port, full system options for recirculation, and more.

Upper Left: ILD 600

Bottom Left: ILD Cart System for Powder/Liquid Processing

Bottom Right: Sample Configuration with Powder Induction

DISCHARGE PRESSES

STATIONARY | The Stationary (or Fixed-Mount) Discharge Press is an extrusion press with a large O-ring seal design. Sizes range from lab scale to 10,000 lb. batches, with a hydraulic system design to match your specific application. This unit will produce a constant flow-out of the vessel to sync with your critical downstream processes.

PORTABLE | The Portable Discharge Press is a self-contained, hydraulic press for discharging high viscosity, poor-flowing products. Once the unit is placed onto the vessel and secured, it can be transported in combination to the packaging/filling area. This model is excellent for batches consisting of multiple cans or vessels of similar products.

Left: Stationary Discharge Press

Right: Portable Discharge Press

COMPLETE PROCESS SYSTEMS

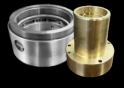
TURN-KEY PROCESSING | With extensive systems design and engineering experience, we offer complete turn-key solutions, large and small. Whether it is a complete greenfield project, the addition of a production line, or modification of an existing process, Schold is the partner to deliver on your vision. Customize the layout, equipment, controls, and automation to align with your production goals.

1. ***LAB/PILOT*** **2.** ***PRE-MIXING*** **3.** ***MILLING*** **4.** ***BLENDING***

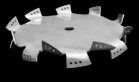
Schold can complete your turn-key system with all complimentary equipment (entry feed systems, dust collection, tanks, pumps, discharge presses, tank washers, etc.) to suit your specific requirements. Contact our team for questions and to get started!

PREMIER SUPPORT

PARTS & ACCESSORIES | Replacement part? We have you covered with an extensive inventory of spare machinery components to fulfill your need. Our parts team will work with you to identify the correct part and ship it from our facility to get you back in business immediately.



CRITICAL COMPONENTS | We are a single-stop for all replacement components. Bearings, belts, bushings, mechanical seals, and more are ready when you need it, contact our team with the machine serial number.



BLADES | We offer a wide variety of replacement blades specific to your operation. From high-speed, high-shear to low-speed, bow-tie designs, we have the proper blade to tackle your application.

GRINDING MEDIA | Batch time increasing? Particle quality diminishing? Might be time to replace your media. Our experts can help you select the correct type, size, and loading to maximize your milling efficiency.

TANKS | Whether your process involves drawing vacuum on your product, heating/cooling of an in-process batch, or press-out capability, we have a solution. All tanks are fit to our equipment for quality assurance.

PM PROGRAM | The Preventative Maintenance Program is designed to keep your fleet running like new. Along with **priority service**, our technicians perform routine maintenance, repair any issues, and provide strategies for eliminating costly downtime and bottlenecks.

ADDITIONAL SERVICES | Lab testing is available with Schold equipment and application engineers to ensure batch predictability and proof of concept. Factory acceptance testing is also offered on new machinery, along with on-site installation, trouble-shooting, and routine maintenance (see PM Program). Additional services include equipment refurbishing, equipment rental, and VFD retrofitting/machine conversion.

SCHOLD.COM **1-800-4MIXERS** **SCHOLD@SCHOLD.COM**

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