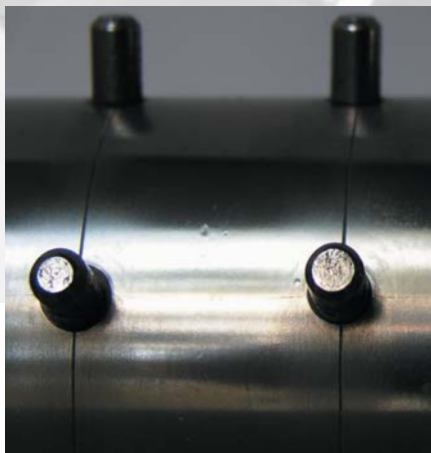
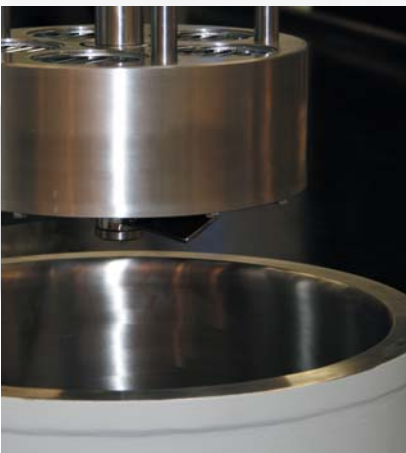


Wet Grinding Technology



Optimum Fineness with Minimal Wear

Wet Grinding Technology

For decades now, GRIESER has developed and produced machines for wet grinding, rubbing and emulsifying.

Our bead-mill mixers and basket mills are designed for the grinding of agglomerates and fine dispersing of solids in a carrier liquid.

Triple-Roller-Mills are a special type of wet mills for fine milling, dispersion and degassing of products of the medium to high viscosity range.

In addition there are also colloid mills for the production of stable compounds from heavy immiscible liquids, such as water/oil emulsions.

The reliable, safe and economic operation of our wet grinding mills in numerous industrial fields proves the quality of our machines and the flexibility of their application.


Together with our customers across various industries we are constantly working on new technologies and looking to improve steadily our existing products.

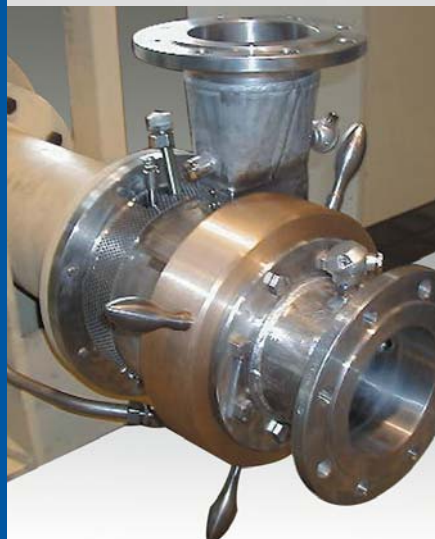
We will find the right solution for your requirements, whether it be a standard or customized configuration - from a single state-of-the-art machine to a fully integrated turnkey solution.

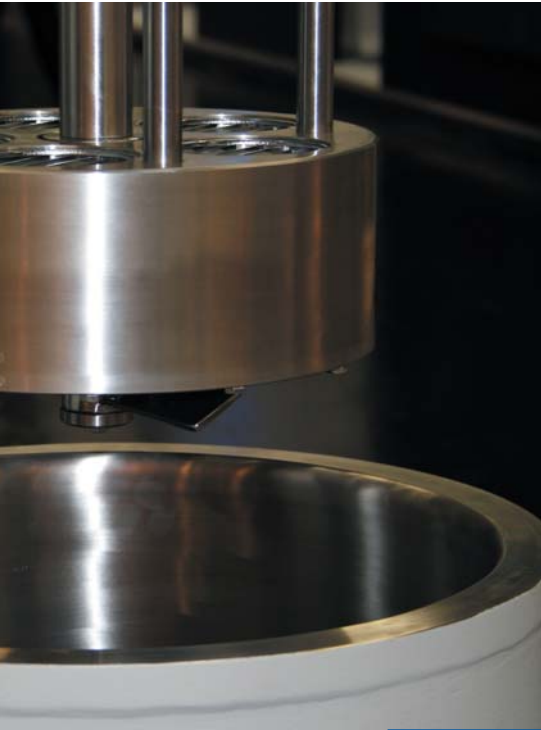
We are pleased to advise you.

**Designed and
Made in Germany**

System Benefits

- Wide product range for various kinds of wet milling.
- Outstanding product quality with high power density and high efficiency.
- Proven modular design.
- Effective cooling systems.
- Ease of use and good safety monitoring.
- Robust construction and easy to clean.
- Simple maintenance and low wear.
- Depending on requirements -protection available for all zones according to ATEX 94/9/EG.
- Safety standards in accordance with the current European Machinery Directives and safety standards.





Wet...

Applications

There are many possible applications in the paint and lacquer, cosmetics, pharmaceutical, food and construction materials industry.

Typically used for the production of:

- Paints
- Lacquers
- Chocolate
- Ointments, creams
- Sauces, fruit juices
- Bitumen emulsions, etc.



...Grinding

Your Specialist for Mixing and Grinding Technologies

Colloid Mill

- Our classic wet mill for emulsification, disagglomeration and dispersing.
- Ideally suited for products in the low- and pasty viscosity range, such as ointments, creams, sauces, fruit juices and bitumen emulsions.
- Rotor-stator milling system with its own pump action.
- Milling attachments in sizes between 40 and 200 mm for flow rates from 10 l/h to 30 m³/h.
- Variable milling slot distances from 40 µm to 2 mm. Adjustable during operation.
- Vertical or horizontal arrangement for batch- or continuous operation.
- Rotor and stator made of hardened and polished special steels, though stainless steel is also available.
- Standard size mills with power ratings up to 110 kW.
- Mixing shaft has individual bearing to absorb large axial forces.
- On demand with heat control for the casing and the rotor-stator milling system.
- Linearly adjustable speed control optional.

Pearl Mill /Bead Mill

- Provides continuous, micro-fine wet grinding or dispersing.
- Ideally suited for products in the low to high viscosity range such as paints, lacquers and chocolate. Also used for cell breakdown.
- Milling pearls available in steel, glass or ceramic in sizes ranging from 0.3 to 3 mm.
- Standard sizes with milling volumes of 0.5, 4, 7.5, 15, 35 and 60 litres available. Different sizes are possible.
- Optimal tuning of the milling slot, number of pins and the pin arrangement gives a dead space free movement of the beads, preventing sedimentation and jams.
- High wear resistance through special coating and hardened pins.



- Intensive cooling for temperature-sensitive products.
- Available with regulated feeder-pump.

Basket Mill

- Ideal machines for grinding and dispersing well flowing products from the paint, lacquer, cosmetic and pharmaceutical industry.
- Independent batch operation without the need for an external recirculating pump or additional piping system.
- Vessels up to 2,500 litres - though larger designs are possible.
- Dead space free, efficient circulation and intense bead movement give high milling and product quality. Optional with an oscillating basket.
- For temperature sensitive applications there are the options of a double jacket milling basket, mill pin casing and/or a double jacket vessel.



Laboratory

GRIESER has a well equipped laboratory at its Lampertheim site in Germany.

Here we offer the implementation of mixing experiments and the optimization of industrial processes. The results can be transferred to full-scale under real production conditions. Over decades we have established an extensive know-how in the areas of mixing and milling.

Our customers have the opportunity of borrowing a machine from our lab for a certain period of time, in order to study the advantages of our machines under their production conditions.

Wet...

...Grinding

Tripple-Roller-Mill


- Ideally suited for products in the medium to high viscosity range such as paints, lacquer, dental compounds, pastes, creams, gels, PVC compounds and coatings.
- Finely honed rollers from special steel, cast iron or with a ceramic coating available in lengths up to 1,000 mm.
- Linearly adjustable roller speed.
- Rollers can be adjusted manually or hydraulically.
- Highly effective roller cooling for temperature sensitive products.
- Rollers are sealed at the sides through chucks in various materials.
- Mechanical overload protection in the form of easily replaceable safety disks.

Service

We are your reliable, fast and professional partner for a variety of services and many companies are provided with maintenance services in six monthly or annual intervals. This also applies to any machines not manufactured by GRIESER.

The results are documented in accordance with DIN ISO 9001:2008. With this methodology any necessary repairs are spotted on time and cost as well as downtime can be kept at a minimum.

Should an operational problem occur, we will be on hand to fix it within 24 hrs (within a 1,000 km radius). We supply all kinds of spare parts, including those from other manufactures. In addition we are also specialised to refurbish and rebuild you existing machinery.



**A professional,
fast and reliable partner for the**

- **Paint and lacquer industry**
- **Adhesive and sealant industry**
- **Building chemicals industry**
- **Chemical industry**
- **Pharmaceutical industry**
- **Food industry**

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