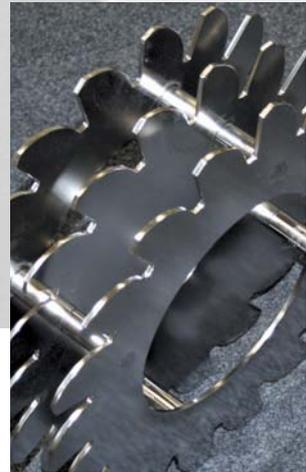


High Performance Dissolver



The Ideal Machine for Processing Flowable Products

High Performance Dissolver

Dissolvers are used for dispersing, disagglomerating, homogenising, suspending, dissolving and conditioning of free-flowing products.

It is the interplay of mass acceleration and friction, which provides the basis for the optimal, product-specific shear rate. Through proven configuration of the dissolver-disc geometry, rotating speed and vessel dimensions, a high level of mixing is achieved. A spacious recirculation ensures a rapid stir-in of solids.

The reliable, safe and economic operation of our High Performance Dissolvers 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

GRIESER high performance dissolvers are robust and valuable machines for many applications with numerous advantages:

- Effective process to stir-in solids into products with viscosities up to 100,000 mPas.
- Optimal set-up of the mixing tool and vessel geometry as well as adequate dimensioning of the drive power according to the product properties.
- Vibration-free operation through rigid design and a large bearing clearance.
- Higher product quality through optional vacuum operation and complete degassing of the product.
- GRIESER optimized process to suck in the product by vacuum below the product level.
 - Faster injection and incorporation of fillers leads to shorter mixing times and result in a gentle product treatment combined with a more efficient application of energy.
 - Lower particle size, as the filler agglomerates are broken up upon entry into the vessel by the expansion of trapped air. This immediately wets the primary particles.
 - Dust-free, as there is immediate contact with the liquid phase.
- Optional wall scraper ensures additional spacious recirculation of pasty and thixotropic products and constantly feeds the dissolver disc. Ideal for double jacket design as it increases the heat transfer and avoids potential separation of deposit at the inside vessel wall.
- Simple and rapid cleaning through smooth surfaces.
- Safe operation, robust design.
- Simple maintenance and repairs.
- Safety standards in accordance with the current European Machinery Directives and safety standards.



High Performance...

Applications

Various applications in the paint and lacquer, chemical, pharmaceutical, plastics processing and building chemical industry.

Typically used for the production of:

- Paints and lacquers
- Primers
- Inks
- Adhesives
- Coatings
- Plastic pastes
- Creams and ointments, etc.



...Dissolver

Your Specialist for Mixing and Grinding Technologies

Versions

Proven, modularised design that can be adapted to any customer requirement.

- Range of basic set-ups:
 - Laboratory dissolver (3 kW)
 - Wall mounted dissolver (3 - 45 kW)
 - Column dissolver in four standard sizes (5.5 - 200 kW)
 - Ceiling mounted dissolver with optional swivel
- Product specific use of the mixing tools
 - **Fine-Toothed Disc**
Standard mixing tool for generating a strong shear rate between the disk and vessel wall.
 - **Rough-Toothed Disc**
Similar to fine-toothed disc, though ideal for breaking up large agglomerates and for use with abrasive products.
 - **Combi Disc**
Like the rough-toothed disc, though with additional wings for increased axial recirculation.
 - **Multi-Suction Disc**
Maximum energy input through either two or three coupled discs. Strong pump-effect between the discs increases the large-volume recirculation. Minimum friction losses due to optimized disk joints.
- Mixing tools out of stainless steel as standard. With abrasive products, special materials or wear-protective coatings can be used.
- Optional vacuum system depending on applications with strainer, cyclone, fine filter or condenser.
- Option of a height-adjustable, oscillating dissolver-disc for better integration of the filler entering from the top.
- Optionally with dust protection cover and suction connection, or with ring-shaped suction nozzles for optimum protection of operating staff.
- Optional dust or vacuum cover with light and sight glass with either a filler lid or supply nozzle.
- Change vessel in different material qualities and different surface finishes either with double jacket or double bottom. Change vessel on wheels, with forklift tabs or floor stands. Sizes usually range from 0.5 to 2,500 litres, though other designs are possible.



- Collet chuck with wide adjustability and safety switches to allow for flexible use of different containers such as change vessel, barrels, buckets, etc. Execution with manual or automatic drive. A self retaining spindle ensures safe clamping.
- Depending on requirements -protection available for all zones according to ATEX 94/9/EG.



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.



High Performance...

...Dissolver

Operation and Monitoring

Safety and ease of use are of great importance to us.

- Maximum security through:
 - Self-fastening collet chuck
 - Safety switches for collet chuck and dissolver
 - Two-hand safety circuit for the hood/-lid displacement and the collet chuck
 - User protection through shaft protection sleeve
- Display of process parameter eg. power, speed, pressure, temperature, etc.
- Freely configurable machine monitoring with optional remote analysis for e.g. speed, torque, vibration, bearing-temperature, etc.
- Step-less speed control through use of frequency converters.
- Programmable mixing times on demand.
- PLC control with recipe management and connection to storage management systems.

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 your 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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