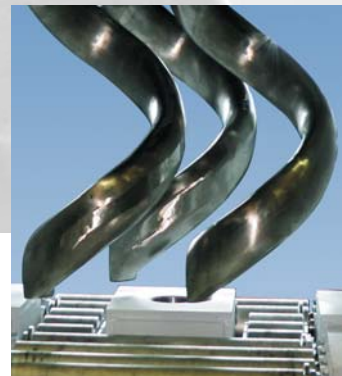


Planetary Mixer/Planetary Dissolver



Ideal Machines for Pasty and Kneadable Products

Planetary Mixer Planetary Dissolver

Planetary mixers and planetary dissolvers are the right machines for stirring, dispersing and kneading pasty to plastic products.

GRIESER has reached an outstanding position in the market thanks to its constant stream of innovations.

Planetary mixers superimpose two rotary movements, where the mixing tools all move on a circular path and rotate in addition around their own axes. This creates an uniform and entire mixture in the vessel.

Planetary dissolvers include also a high-speed dissolver disc for an extended use on liquid products. This allows a faster stir-in and dispersion of fillers.

The reliable, safe and economic operation of our planetary mixers and planetary 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

Due to their variety of functions and outstanding performance, our planetary mixers and planetary dissolvers have numerous advantages:

- Efficient process for mixing pastes with viscosities up to several million mPas.
- Combined process steps as stirring, dispersing and kneading are all possible in one single machine.
- Machine operation can be adjusted from "high-intensity" to "gentle to the product". Depending on the product requirements bar, wing, mesh or coil agitators can be used.
- GRIESER coil agitators enable excellent incorporation of fillers in pasty and kneadable products resulting in drastic shortening of the mixing time compared to wing-type agitators or traditional Z-kneaders.
- Patent-pending temperature controlled agitators enables so far unmatched heat transfers.
- Optional vacuum operation for complete degassing of the product.
- GRIESER optimized process to suck in the product by vacuum below the product level available with planetary dissolvers.
 - 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.
- No sealings of the mixing shaft within the product area.
- 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.



Planetary...

Applications

The machines have various applications in the building chemicals, chemical, plastics, dental, paint- and lacquer, pharmaceutical and food industries.

Typically used for the production of:

- Sealants
- Adhesives
- Silicone and rubber compounds
- Filler compounds
- Colour batches
- Ointments
- Salads, Gelatine masses, etc.



...Dissolver

...Mixer


Your Specialist for Mixing and Grinding Technologies

Versions

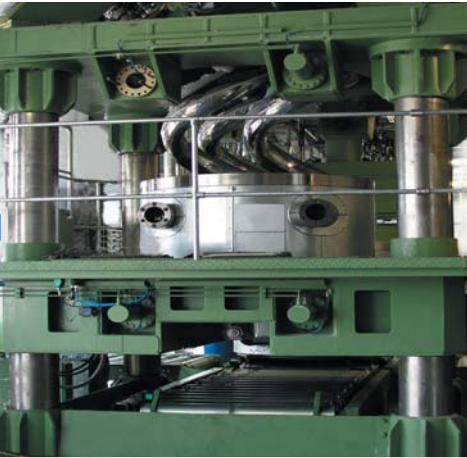
A good concept is the core of any process machine. Individual advice and highest quality in fabrication form the basis of our standard products and customized solutions.

- Up to four agitators per machine, while the rotation direction of both the planet and the agitators can be defined individually. On demand with wall scraper.
- Optional use of two rotating dissolver-discs for higher energy input.
- Optional vacuum system depending on applications with strainer, cyclone, fine filter or condenser.
- Telescopic hood for extension of the agitators under vacuum.
- Hood with light and sight glass with either a filler lid or supply nozzels.
- Change vessels from 0.5 to 2,000 litres and frequency converter power up to 1,200 kW possible. Large sizes are possible.



- Reinforced vessels for squeezing purposes and for connection to filling and dosing stations.
- Change vessels in different material qualities and surface finishes - either with double jacket or double bottom. Change vessels on wheels, with folk lift tabs or floor stands. Options for plastic coating or hard chrome.
- Product outlet with either ball valve or plug.
- Depending on requirements -protection available for all zones according to ATEX 94/9/EG.





Planetary...

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.



...Dissolver

...Mixer

Operation and Monitoring

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


- Maximum security through:
 - Form-closed vessel lock
 - Safety switch for vessel lock and column lift
 - Two-handed safety switch for column lift
 - All rotating parts are covered
 - Flap for manual intervention with security monitoring or safety mesh
- Optional dust-free bagging with extractor.
- Display of process parameter:
eg. power, speed, pressure, temperature, etc.
- Freely configurable machine monitoring with optional remote analysis for e.g. speed, torque, vibration, 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 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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