



SUPRATON® INLINE- HOMOGENISIERER

Standard machines • Bitumen machines
Sanitary machines • Laboratory machines



BWS Technologie

EXPERIENCE AND INNOVATION

Supraton® Inline homogenisers have been successfully employed worldwide in a broad range of applications for decades. From automobile paints to toothpastes, our homogenisers meet the requirements for first-class process results. New developments, such as the use of new materials or new types of tool coatings, have continuously expanded the range of applications for our machines. Today, they are used for more than 400 different applications.

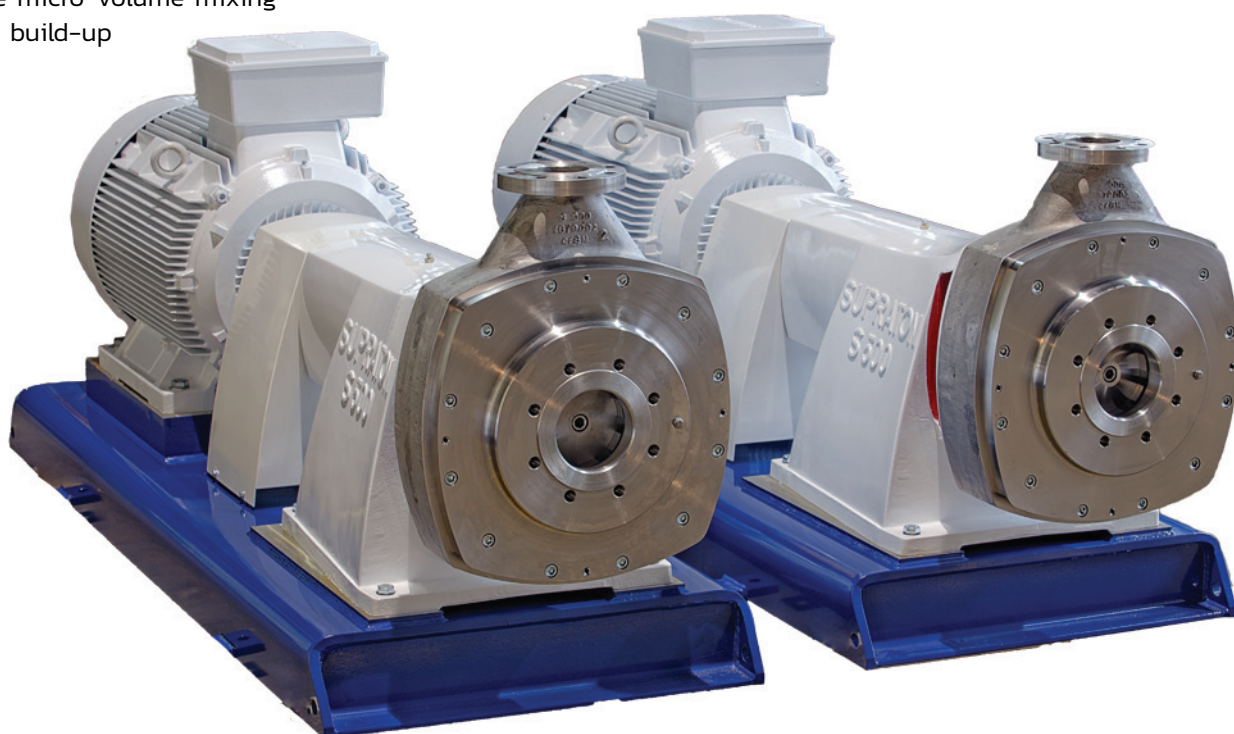
Supraton® machines are dynamic rotor-stator homogenisers with multi-stage tool sets. The rotor and stator consist of concentric tool rings that are radially slotted or feature an axial milling surface. The rotors reach circumferential speeds of up to 57 m/s. The axial shearing gap can be adjusted with extreme precision to settings of less than 1 mm.

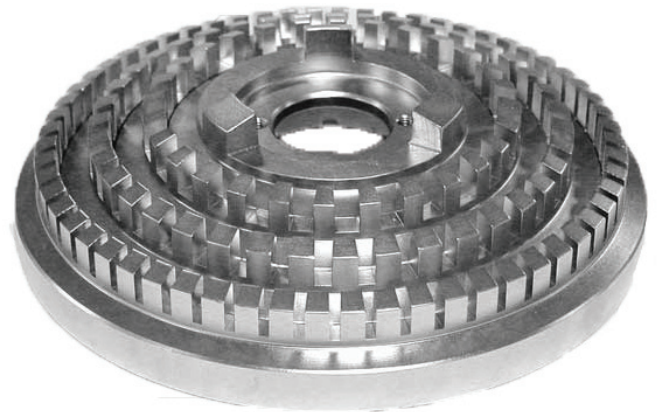
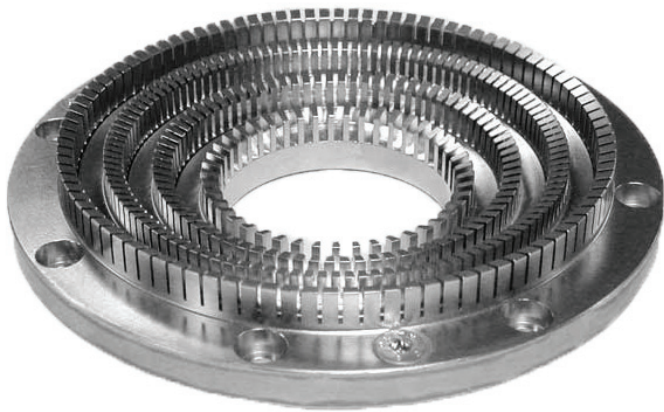
During the homogenisation process, the products are subjected to various physical effects:

- ▶ Multi-stage cutting in hydrodynamic high shear fields
- ▶ High-frequency oscillating forces
- ▶ Intensive micro-volume mixing
- ▶ Pressure build-up

Due to their special rotor-stator tools, Supraton® inline homogenisers achieve high throughput, an especially strong shearing of the product and excellent material exchange rates. This makes them the first choice for use in dynamic inline processes such as:

- ▶ Homogenisation
- ▶ Mixing
- ▶ Dispersion
- ▶ Disintegration
- ▶ Emulsification
- ▶ Dissolving
- ▶ Reacting
- ▶ Grinding





Optimal tool configuration

Material, geometry and surfaces of the tool can be precisely adapted to various products and process conditions.

Maximum lifetime

All tools are manufactured from metal alloys or ceramic materials and achieve maximum service lives when processing abrasive and corrosive products.

Quick tool exchange

The single-ring construction of the multi-stage tool set allows an easy and economical tool exchange of individual rings and facilitates the optimisation of the process result.

Bitumen

- ▶ Homogenisation of polymer bitumen
- ▶ Production of bitumen emulsions

Chemistry

- ▶ Homogenisation of chemical intermediate products
- ▶ Dispersion of TiO_2 , pigments, paint, etc.
- ▶ Emulsification of waxes, creams, polishes, plastics, etc.
- ▶ Dispersion, disagglomeration of highly abrasive media
- ▶ Dispersion and emulsification of polymer melts (285 °C)
- ▶ Homogenisation of lined adhesives and multi-component adhesives
- ▶ Saponification and neutralisation reactions
- ▶ Preparation of organometallic compounds

Food

- ▶ Production of juices, nectars, syrups
- ▶ Production of creams and fillers
- ▶ Homogenisation of milk, curd, and cheese products
- ▶ Dispersion of cocoa slurry

Paper

- ▶ Grinding and disintegration of rejects, repulping
- ▶ Deflaking, preparation of coating colours

Mineral oil

- ▶ Homogenisation of oil and grease products

Construction industry

- ▶ Production of bentonite/clay slurry

Renewable resources

- ▶ Production of biodiesel and bioethanol
- ▶ Starch disintegration



SERVICE UNLIMITED

Supraton® inline homogenisers are at work for our customers around the world. And our service is there as well: We are at your side with consultation and service to help and give advice throughout your project.

Our Services

- ▶ Process consultation for the engineering and operation of plants
- ▶ Test and rental machines
- ▶ Assembly and commissioning
- ▶ 24-hour spare part service
- ▶ Service and repair

Our market is the world

BWS Technologie GmbH is a globally active, owner-managed company with a long tradition specializing in special machinery. We are experts in industrial mixing and separation processes for a variety of applications. We offer our customers the reliability of a supplier that has been established for decades, modern control technology, competent staff and flexible service.

Whether with spare parts, maintenance, inspection, security conversions or rental machines - **qualified, reliable and flexible.**

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