Pharmaceutical industry equipment
The pharmaceutical and cosmetic industry requires complex process tanks and solutions consisting of different aggregated systems with various configurations.

Biomashinstroene AD has a wide product range of tanks and apparatuses for the pharmaceutical industry. We use the latest inventions in terms of engineering and production of such equipment.

The processes in the pharmaceutical industry have the highest and most precise requirements in terms of quality. In result, suppliers of pharmaceutical equipment should comply with the highest requirements in accordance with GMP. Biomashin produces and supplies pharmaceutical equipment in accordance with Good Manufacturing Practice (GMP) and accompanied by validating documentation IQ, OQ, FAT, SAT inclusively. For reactors with maximum allowable working pressure > 0.5 bar we offer product certification in accordance with PED 97/23/EC.

Reactors are used for heat treatment, stirring, mixing and treatment of liquid and creamy components, living organisms inclusively, as well as active biochemical ingredients. Leading producers in the pharmaceutical industry use our reactors to produce infusion solutions, gels, etc.

**Reactor, basic design**

- Made of stainless steel AISI 316L/AISI316Ti
- Wide range of volumes
- Surfaces in contact with the product Ra 1.6÷0.4 µm
- Ability to work under pressure and vacuum
- Heat-exchanging device – inner or outer serpentine
- Agitator/Stirring mechanism in accordance with the application of the reactor, viscosity and density of the product
- Insulation with mineral wool or PU-foam, covered with fully welded insulation cladding
- Safety armature and electro-sensors for control of the process
The application of the mixing & melting tanks is for heat treatment, mixing and treatment of liquid and creamy products. Melting tanks are used in the cosmetics industry to melt aqueous and oil phase when producing cosmetic products.

Mixing and melting tanks, basic design

- Made of stainless steel AISI 316L/AISI304
- Volumes from 100l to 1000l
- Surfaces in contact with the product Ra 1.6-0.4 µm
- Ability to work under pressure and vacuum
- Heat-exchanging device – dimple jacket or outer serpentine made of half pipe
- Agitator/Stirring mechanism in accordance with the product
- Insulation with mineral wool or PU-foam, covered with fully welded insulation cladding
- Armature and electro-sensors for control of the process

Biomashin offers tanks for homogenizers for cosmetic emulsions used for production of creams, gels, tooth paste, cleansing milk, etc.

Tanks – Homogenizer, basic design

- Made of stainless steel AISI 316L/AISI316Ti
- Surface in contact with the product Ra 1.6-0.4 µm
- Volume from 100l to 1000l
- Ability to work under pressure and vacuum
- Heat-exchanging device – outer serpentine
- Insulation with mineral wool or PU-foam, covered with fully welded insulation cladding

The term “homogenization” means a process of emulsification of the fluid in another or uniform dispersion of solids in a liquid to increase density, stability, durability, aroma and other qualities of the products.
The containers that Biomashin offers and produces have various applications – servicing, storage, stirring/mixing, and transportation of pharmaceutical products. They could be used for powdered products, granules, capsules, or tablets.

We offer a variety of types and volumes that correspond to the different needs. Our containers are designed in such a way, so that they could be serviced by pallets or forklifts with maximum solidity, precision and durability.

Biomashin produces and supplies pharmaceutical containers in accordance with Good Manufacturing Practice (GMP) and accompanied by validating documentation IQ, OQ, FAT, SAT inclusively.

S&T heat-exchangers are widely spread. Their simplified design makes them a perfect solution when it comes to heating or cooling processes for wide application.

Biomashinostroene AD is equipped with up-to-date machines suitable for the production of S&T heat-exchangers made of stainless steel. We have highly efficient equipment for the production of plates. To fix the tubes to the plates, we use specialized instruments as well as automatic orbital welding heads.

Biomashin’s equipment and technologies, as well as experience, allow us to cover all hygiene standards for heat-exchangers used in the pharmaceutical and food industries.

For heat-exchangers working under pressure we offer product certification in accordance with PED 97/23/EC. During their construction we apply the European norm for design EN 13445 or AD -2000 Merkblattter.

Biomashinostroene AD covers the highest levels of quality of welded joints with the support and supervision of our welding control and quality control.

Containers, basic design

- Made of stainless steel AISI 316L/AISI 304
- Surfaces in contact with the product Ra 1.6÷0.4 µm
- Ability of insulation with mineral wool and fully welded insulation cladding
Quality and Environment

The management of Biomashin builds a corporate culture aimed at creating quality products and mentality towards meeting customers' needs and bringing satisfaction. Consequently, the following certificates are implemented in the company:

- System for Quality Control ISO 9001:2008 which is permanently and precisely controlled and upgraded
- Product certification in accordance to the Pressure Equipment Directive EC 97/23/EG – PED
- A system for Occupational Health & Safety Advisory Services: BS OHSAS 18001:2007
- GOST-R – a quality certificate in accordance to the requirements of the Russian Federation
- RTN (Russian Technnadzor) for producing vessels under pressure in accordance to the requirements of the Russian Federation

These certificates allow Biomashin to export and legitimize its products on the territory of the European Union, Switzerland, Russia and the countries from the former Soviet Union, as well as many others.

Excellent performance.