



Steam sterilization of solids

Reliable and customized GEMÜ valve designs for steam sterilization of tools and components.

Process description

The sterilization of goods and media plays a significant role in the medical industry, pharmaceutical industry and biotechnology industry. The driving force behind this process is the condensation of the steam on the item to be sterilized. After inserting the item to be sterilized into the sterilization chamber, the chamber is vented and filled with steam in substeps. If the saturated steam condenses on the item to be sterilized, the micro-organisms are killed or irreversibly inactivated due to the high temperatures. Once this process is completed, the steam is suctioned and the item to be sterilized is dried. Before discharging, the chamber is cooled and pressurized with cooling water via the sheath. The advantages of steam sterilization lie in its high effectiveness, lack of toxicity and favourable cost-benefit ratio.

Depending on the application, the employed valves are subjected to stringent requirements in terms of steam resistance, temperature and pressure resistance, a long service life and conformity with standards.

For special applications, valves for sterile steam, contact with foodstuffs and with defined grades of surface finish are also available.

Suitable GEMÜ product range

Globe valves

- GEMÜ 530, GEMÜ 534

Angle seat globe valves

- GEMÜ 505, GEMÜ 507, GEMÜ 550, GEMÜ 554, GEMÜ 555

Check valves

- GEMÜ 560

Ball valves

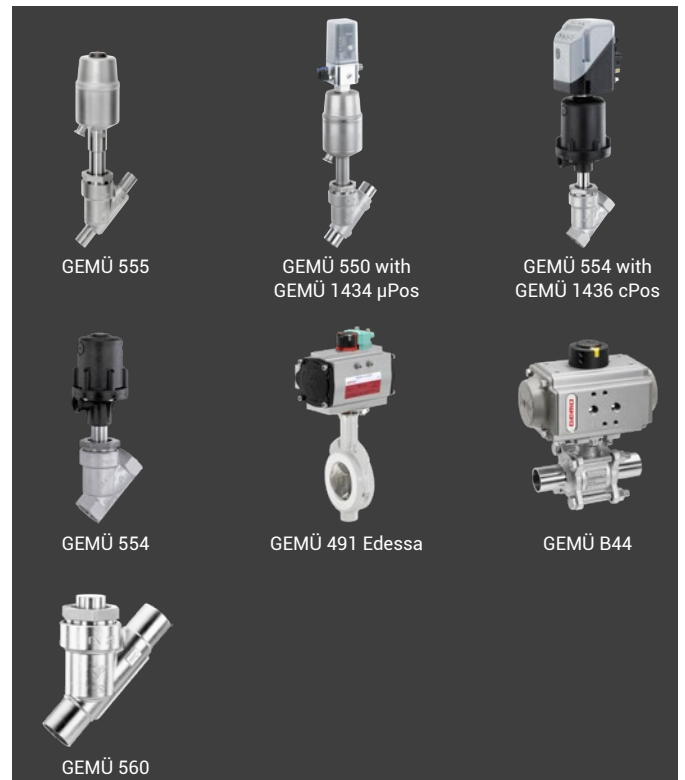
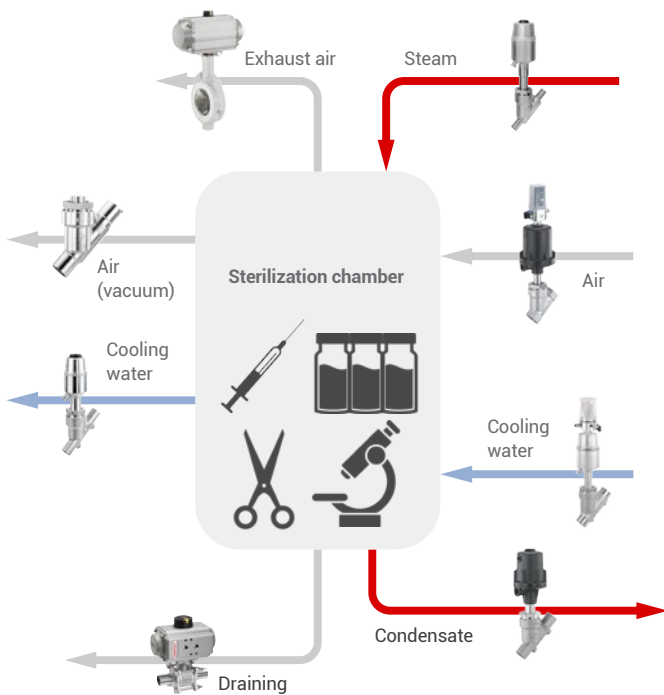
- GEMÜ B24, GEMÜ B44

Butterfly valves

- GEMÜ 481 Victoria, GEMÜ 491 Edessa

Application examples

- Medical tools
- Nutritive media
- Labware
- Process engineering plant components
- Sensors



Why GEMÜ?

GEMÜ offers the appropriate solutions for valve fittings in the sterilization process, for each process step and each application. With a wide range of valve types and accessories with various properties, approvals and certificates, GEMÜ delivers complete valves as well as measurement and control systems from a single source.

We are your strong partner if you're searching for a competent provider as a system supplier. We can also supply you with the technical expertise relating to the procedures applied. For supply and auxiliary processes in particular, we offer a

variety of tried and tested valve fittings manufactured by us in-house with the highest standards of quality. The wide variety of control valves and quarter turn valves is particularly noteworthy here. As are the space-saving possibilities of block solutions, even for complex applications, and the planning and production of entire subsystems via GEMÜ Systems.

We ensure optimal support, including of end users on site, through a worldwide sales and service network via subsidiaries and distributors.

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