

Product application for hygiene technology

Sterilisation system for medical equipment



Application

As well as sterile operation instruments, hospitals and medical facilities need a whole host of hygienic aids and containers. For this purpose, the soiled / contaminated items are sorted in transport cars and driven into the washing/aseptic machine. During the first phase, they are pre-washed using specially treated water at a temperature of 55° C. The second phase at the same temperature is the main wash. A cleaning additive is added to the DI-water. Following this, the third phase is the rinsing process at 85 – 90°C. Here, too, treated water with a sterilisation additive is used. Following this process, the devices are sterile/hygienic and ready for further use. The transport car can then be driven out of the other side of the machine.

Plant design

The 4-metre long cleaning sluice offers space for two 1.5 m long transport cars so that they can run through the three cleaning phases one after another. The respective cleaning agent store for the three phases is located in the tanks attached to the side. The tanks' filling levels are monitored, feeding is made using a central low-pressure filling system which is controlled by butterfly valves. Water input to the respective sluice sections is made under increased pressure and using nozzle distribution: a pump provides the respective performance for this purpose, globe valves control the nozzles. The cars are automatically moved using a transport system. Globe valves are also used to control the tank heating.



Solution

GEMÜ 554 pneumatic angle seat globe valves with plastic actuators are used to control the heating medium. The cleaning and rinsing nozzles are controlled by GEMÜ 514 pneumatic globe valves with a metal actuator. The water is fed into the tanks using GEMÜ Desponia butterfly valves. They are activated pneumatically and flanged directly between the piping. GEMÜ **LevelLine**® level measuring transducers/measurement devices can be used to monitor the tank levels.



GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS

Gebr. Müller Apparatebau GmbH & Co. KG · Fritz-Müller-Str. 6-8
D-74653 Ingelfingen · Tel. +49 (0)7940/123-0 · Fax +49 (0) 7940/123-224
<http://www.gemue.de> · e-mail: info@gemue.de