

## **Systec waste-water sterilizer for the inactivation of large quantities of liquids**

Waste-water is produced in various working environments. Especially in laboratories or quarantine facilities, it cannot easily be disposed of via the domestic water network. The waste-water may contain potentially hazardous substances that are not inactivated by normal waste-water treatment plants or may destroy the bacterial cultures present there. A waste-water sterilizer ensures that even large quantities of waste-water can be quickly, safely, and certifiably inactivated. For this purpose, the Systec Mediaprep-120 was further developed and specially redesigned as a Systec waste-water sterilizer.

### **Where are sterilizers needed for waste-water?**

The current legal situation prohibits the introduction of potentially infectious, genetic, or generally harmful substances into the water network because these substances could have a negative effect on the drinking water of entire cities or even regions. Waste-water sterilization is therefore crucial for the following facilities in particular:

- laboratories (especially security levels S2, S3, and S4)
- medical and veterinary establishments
- laboratories in the pharmaceutical industry

Potentially contaminated water was previously typically collected in such facilities and transported to central disposal points. However, this approach created additional transport costs, uncertainty during transport, and delays in handling major sterilization operations. For this reason, increasingly more facilities are attaching importance to their own waste-water sterilizer in order to be able to sterilize the liquid reliably, quickly, and as locally as possible.

## **Waste-water sterilization – the solution from Systec**

In order to inactivate large quantities of contaminated water as quickly and easily as possible and to obtain certifiable sterilization results at the same time, the Systec Mediaprep-120 was converted into a waste-water sterilizer by making a few adjustments.

The advantage of this device is that it already has a large filling volume as well as a cuvette and a nozzle for filling. The Systec waste-water sterilizer can thus be used to draw off and sterilize waste-water from a collection container using a hose and integrated pump. Manual filling via the open lid is still possible. But automatic filling saves a lot of time:

- with 100 litres filling quantity, less than 10 minutes filling time
- approx. 120 minutes for the sterilization run
- less than 10 minutes to empty the unit

The integrated sterilization programs of the Systec waste-water sterilizer and its ability to fill and empty liquids independently on request allow large quantities of waste-water to be sterilized and validated. The disposal takes place without physical exertion, directly on site, into the sewage network, and without additional costs for transport and disposal.

## **The further development of the Systec Mediaprep-120 to the Systec waste-water sterilizer**

The Systec Mediaprep-120 comes with a number of useful components that not only make it a practical media preparator but are also ideal for sterilizing large quantities of liquids such as waste-water. The flexible PT-100 temperature sensor and the integrated agitator are also used in the Systec waste-water sterilizer, for example.

Elements such as touch display and USB port for documentation ensure that the sterilization processes are easy to control and can be validated.

The following enhancements were also made to the Systec Mediaprep-120:

- Reconstruction of the container door in order to be able to automatically fill or empty large quantities of water
- optional: installation of an exhaust air filter
- installation of a powerful water ring vacuum pump for the automatic filling of the Systec waste-water sterilizer
- filling and draining program for contactless waste-water sterilization

The further developed form of the Systec Mediaprep-120 to the Systec waste-water sterilizer is able to sterilize aqueous solutions. For this, no solids or suspended matter (e.g. cellulose, textiles, glass, and plastics) may be contained in the solution. Systec will be happy to assist you in performing these steps with the necessary adapters. In the case of new devices, the corresponding changes can also be made directly ex works.

A Systec waste-water sterilizer is the ideal way to inactivate larger amounts of waste-water – quickly, reliably, conveniently, and directly on site.

### **About Systec GmbH**

*Systec GmbH is a leading manufacturer of autoclaves (steam sterilizers), in particular laboratory autoclaves, media preparators and filling devices for liquid media as well as microbiological nutrient media. Systec develops and manufactures (certified to ISO 9001 and ISO 14001) a wide range of products for the modern laboratory in science and research, as well as for biotechnology, pharmacy, quality control and production.*