

MM

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Unisteri FL

Great technology
Compact design



- Minimum space required
- High efficiency
- Easy installation

MMM.
Protecting
human
health.

Unisteri FL

Great technology - compact design

The compact steam sterilizer Unisteri FL with a chamber volume of 1 StE was designed to meet the demands of surgeries, outpatient clinics, polyclinics and central sterile supply departments (CSSD). Unisteri FL provides gentle and economic sterilization of instruments, textiles, heat resistant rubber and similar medical devices.

Conforming to standards

Despite its compactness, Unisteri FL is equipped with the same reliable technical features as large-scale sterilizers. With an autoclave of this category, operators are well prepared for the future and meet all requirements of EN 285 and Medical Device Directive (MDD).

Easy installation

Installation sites such as day care or outpatient clinics often do not provide clean steam supply or demineralised water. That is why the Unisteri FL can be equipped with an electrical steam generator. Also, a water treatment device can be supplied. As Unisteri FL can be easily installed, costs for any constructional preparation of the installation site are reduced to a minimum. Only a fresh water supply, an electrical outlet for high voltage, and a drain are required for installation.



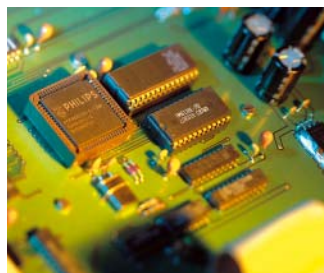
Unisteri FL single door

Easy operation

The compact sterilizer Unisteri FL excels in its ease of operation. A touch of a button initiates a sterilization program stored in the control system. The electronically controlled cycle then runs automatically. The operating panel is ergonomically tilted towards the user and its two-line LCD display shows the data selected by the operator. During program run, the individual stages of the sterilization cycle are displayed. Any possible deviation from preset values is displayed as clear-text message.



Unisteri FL



Unisteri control system



Chamber equipment with basic insert



Chamber equipment for sterilization container



Operator panel on loading side

Safe sterilization

For a maximum of process safety, the steam pressure is controlled by absolute pressure transducers independent of fluctuations of the atmospheric pressure. The temperature course in the sterilization chamber is measured by PT100 sensors. Each value measured is continually compared with the preset values stored in the control system in order to check for any deviation. The control and recording of the process parameters is done by a double set of pressure and temperature transducers, working independently from each other.

Reliable documentation

Duplicate microprocessors are working separately from each other: one is responsible for unit control and monitoring of the process parameters, and the other for recording and documentation of cycle data. The integrated batch printer prints the key data of each cycle. The printout allows to check and to furnish proof of a successful sterilization result as required by the European and international standards.

Individual and flexible

Unisteri FL is available as single door or double-door pass-through unit. Pass-through units can be integrated into a full scale sterilizer row in a CSSD.

Comprehensive accessories, such as transport trolleys or various chamber inserts, allow for optimum versatility of the sterilizer to be adapted to different installation sites and customer specific sterilization needs.



Unisteri FL double door version integrated into a sterilizer row.

Environment and service

Low heat emission and reduced noise levels, the possibility to recycle all essential components and last not least the integrated water saving device: all combine to make MMM sterilization systems extraordinarily environmentally friendly. Plus, service is made comfortable: the integrated self-diagnostics and service program make for easy maintenance and saving costs.



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Model	Number of doors	Outer dimensions	Chamber inner dimensions	Chamber volumes
		(H x W x D in mm)	(H x W x D in mm)	Liter
336-1	1	1500 x 640 x 840	340 x 340 x 640	73
336-2	2	1500 x 640 x 920	340 x 340 x 620	71

Technical changes reserved.

Standard equipment

- Single door or double door
- Sterilization chamber, doors and heated chamber jacket are made of high quality CrNiMo steel (AISI 316 TI)
- Automatic door sealing
- 4 sterilization and 3 test and service programs
- Connection to external steam supply
- Integrated waste water cooling
- Integrated water saving device
- Integrated data logger printer
- LC display
- Chip card reader
- RS 232 interface
- Self-diagnostics
- Loading systems basic insert or chamber rails
- Ni-chrome steel sheet panelling
- Set of castors

Optionen

- Electric steam generator with automatic desalting device
- Change-over switch from external to internal steam supply
- Chamber insert rack (for basic insert)
- Loading accessories such as shelves and racks
- Customer specific program
- Chip card
- Loading cart (for chamber rails)
- Transport trolleys

Sterilization programs

P1 Preheating 134° C

Fast preheating program
Instruments not wrapped

P2 Universal 134° C

Wrapped devices
sterilization time: 5 min

P3 Universal Container 134° C

Wrapped devices with super drying
sterilization time: 5 min

P4 Rubber 121° C

Wrapped devices made of glass, rubber or plastics,
sterilization time: 20 min

P5 Special (optional):

Any program parameters can be entered according to customer requirements, sterilization safety provided.

Customer specific programs can be stored on a chip card and entered into the sterilizer via chip card reader. When sterilizing medical devices, it must be ensured, that the program can be validated.

Test programs

P6 BD test 134° C

Steam penetration test
holding time: 3.5 min

P7 Vacuum test

Air leakage test

P8 Service

Service program for easy control and maintenance



Advantages

- Forward-looking technology complying with EN 285 and MDD
- Can be validated according to EN 17665-1
- Easy operation
- Integrated batch documentation
- Energy and water saving
- Quiet and can be recycled



MMM Group

As one of the world's leading suppliers of sterile processing systems, MMM has been working actively to promote good health since 1954. With a full range of sterilization and disinfection products and services – that can be found in every branch of health-care from hospitals and scientific institutes, to laboratories and the pharmaceutical industry – MMM, has over the years, consolidated its position as a pioneer of quality and innovation both in the German and international market. In our two production facilities based in Stadlern, Germany, and Brno, in the Czech Republic,

we manufacture products that meet the highest demands of our customers world wide. The depth and precision of production standards at both plants ensure that we accomplish the rigorous quality requirements of medical engineering.

900 competent employees work together as a committed and enthusiastic team, dedicated to achieving the mission of the MMM Group.

Protecting human health.

MMM Münchener
Medizin Mechanik GmbH
Sammelweisstraße 6
D-82152 Planegg / Munich
Tel.: +49 89 89918-0
Fax: +49 89 89918-118
www.mmmgroup.com

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