# SM5



## **Steam Sterilizers**

Reliable and reproducible results for your CSSD, hospital or medical center

### **About SMS**

#### **OVER 70 YEARS OF EXPERIENCE**

SMS was established in 1946 and has been a reputable Polish manufacturer of sterilizers ever since. In 2019 we opened a brand-new state of the art manufacturing facility, just outside of Warsaw.

Our portfolio of sterilization and disinfection control solutions is trusted by hospitals, scientific institutes, laboratories and the pharmaceutical industry. At SMS we are driven by a passion for Quality. Both for our products and our services. Our attention to detail, from Research and Development through to manufacturing, and up to installation has been recognized by many customers, making SMS a leading producer not only in Poland but also worldwide.

Besides our Infection Control devices we offer complete turnkey solutions, consultation and feasibility studies for our partners.



## **Quality Management**

SMS introduced a Quality Management system based on ISO 13485:2016 and ISO 9001:2015. Our devices comply with European standards and directives (CE).

We are continuously monitoring and seeking opportunities to optimize our processes, products and performance. Our employees are educated to follow process and product specifications, recognize risks and possible improvements.

## Sustainability

Sustainability at SMS focuses on the areas where opportunities for our business intersect with social and environmental impact.

We aim to achieve sustainable growth, deliver life changing technology and recreate value in communities in the world.



## **Fully integrated CSSD solutions**

Our equipment and services enable our customers to confidently and efficiently deliver reprocessed medical instruments to the operating rooms. We can assist you in developing an efficient and cost effective workflow as well as secure patient safety.



#### **SOILED ZONE**

### From the OR to cleaning and disinfection

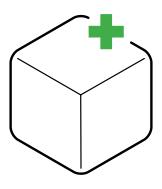
Unclean instruments arrive in the decontamination zone to be disassembled, sorted, manually pre-cleaned, washed in ultrasonic washers before being loaded into the washer disinfector.



#### **CLEAN ZONE**

### From cleaning and disinfection to sterilization

In this zone, clean and disinfected instruments are inspected, set aside for maintenance or repair, reassembled and wrapped for sterilization in a steam or low-temperature sterilizer.



#### STERILE ZONE

#### From sterilization to storage

After sterilization the sterile packed instruments and instrument sets are ready for storage. SMS offers racked sets and various distribution trolleys for internal transport.

#### **HOW WE CAN SUPPORT YOU?**

SMS provides professional support and advice throughout the planning process. From the earliest conceptual stages, through design and construction. We'll help you gain an understanding of capacity need, discover the optimized logistic flow of instruments, equipment and staff. Our designers from the architectural planning department are available to help you with your project.

### **SMS Steam Sterilizers**

Our sterilizers are designed for a wide range of hospitals, CSSD and medical centers. All sterilizers are equipped with reliable non-proprietary European components, maximizing "uptime" while providing an ultra-low total cost of ownership. Sterilizers continue to be the first line of defense against infection and SMS takes this responsibility seriously.



**AS 366** 2 STU





**SMS 100** 

## A flexible range of Models

SMS offers an unmatched range of models that are available in the AS series.

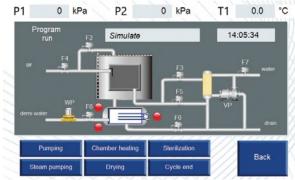
The chamber sizes range from 100 to 900 liters. In addition, we can accommodate your special requirements and design tailor-made solutions. Models are available in either single or double vertical sliding door configuration.

## **Our Advanced Control System**

Our user-friendly control system with Multi-Color Touch Display features:

- Sterilization temperature between 110°C and 136°C
- Multiple access levels to control access / operation
- Diagnostic In / Out test which enables the technician to check each system component separately
- Independent Recording for cross-checking temperature and pressure measurement
- Data archiving to integrated memory (option)
- Parameters adjustment for each program
- Output of sterilization parameters on the built-in printer
- Storage of most important cycle information (option)
- · Service parameters settings
- Ethernet connection port PC and network access (option)
- Off-site remote service access (only with network access)
- Remote parameters adjustment for each program (only with network access)





Our HMI has the following standard features:

- Multicolor display
- Easy operation and quick access to important information
- Two chosen interface languages installed
- · Built-in view historical data
- Graphical display of the process (including schemes and graphics)
- Confirmation screen to start the process



## **Process cycles**

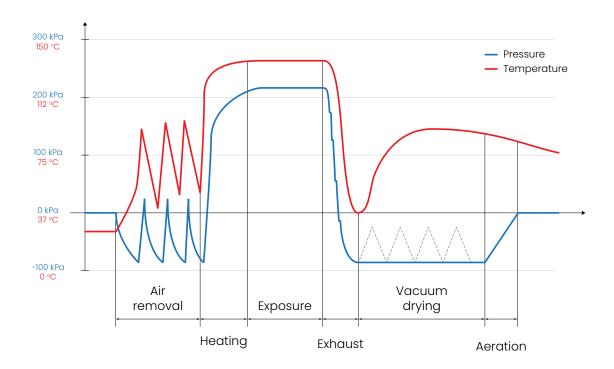
Multiple programs, factory pre-defined and customizable

SMS has pre-defined process cycles according to EN 285. Standard programs include: textiles, instruments, liquids and rubber.

Additional programs are available and can be programmed according to customer specifications.

The display shows the cycle status and alarms whereas the data is stored on the PLC and available from the printer.

The jacketed chambers ensure uniform heat distribution to ensure consistent serialization conditions for all loads in chamber.



## **Test cycles**

- · Bowie Dick for steam penetration testing
- Leak test to check vacuum integrity

## Remote access & monitoring

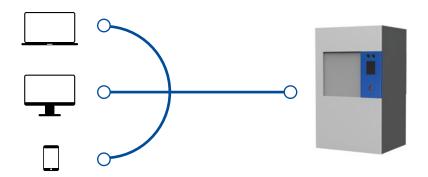
SMS sterilizers can be equipped with remote access and monitoring only if network access is installed. This enables the user to access the sterilizer's control panel over a local network or from any place using an internet connection.

Depending on the type of network the sterilizer can by equipped with a router for a wireless connection or a switch if the sterilizer is supposed to use a wired network. Additionally, sterilizers with a router can be used to create a local Wi-Fi network, allowing direct access from a smartphone or tablet.

For security reasons each control panel will be registered and activated by SMS before it can be accessed and controlled.

#### Local access

To use the remote access the user must install a VNC application on their smartphone or tablet. We recommend using VNC Viewer - Remote Desktop, available as a free download from Google Play store. This kind of software can also be installed on smartphones or tablets running iOS and computers with a variety of operating systems.



When connected over a LAN/WAN the user can see the control panel as if standing in front of the sterilizer. Every function available from the sterilizer's control panel can be performed from the connected device.

#### Internet access

To connect and monitor sterilizers over the internet, an additional Windows application can be installed – EasyAccess 2.0. This software enables users to monitor a large number of sterilizers. That is why it is mainly intended for service purposes, meaning this will increase your up time!



## **AS 44**

Designed for small spaces, our sterilizers provide quick inversion for Operating Rooms, Ambulatory Surgery Centers, and Satellite Locations.

The AS 44 Series combines reliability and a low total cost of ownership (TCO).





AS 446	AS 4
7.0 1.10	, ,,,,

#### Chamber volume

double door version single door version

#### Sterilization temperature range

#### Electric power

with an external steam generator with an integrated steam generator

#### Overall dimensions

width height depth

Weight

149

103	150
109	156

110 - 136°C

2 kW
20 kW

800	) mm
1615	mm
900 mm	1200 mm
460 kg	500 kg



## **AS 366**

Patient care is your first priority. You need a reliable and effective steam sterilizer. The new AS-366 small steam Sterilizer will help you keep your patients protected.

Our AS-366 steam sterilizer is utilized best in the CSSD. Available as double door version and with built in steam generator with 2 STU, the AS-366 provides high-quality sterilization workflows in no time.





	AS 366
Capacity in sterilization units	<b>2</b> STU
Chamber volume	
double door version	150
Sterilization temperature range	110 - 136°C
Electric power	
with an external steam generator	2 kW
with an integrated steam generator	20 kW
Overall dimensions	
width	800 mm
height	1900 mm
depth	975 mm
Weight	600 kg



## **AS 66**

The perfect solution for large clinics, hospitals and CSSD. Our high-end large AS66 steam sterilizers provide the best condition for professional sterilization, continuously and in a short period Our five models cover a range between 4 and 12 STU, single and double vertical sliding doors. Take advantage of optimal safety standards, innovative product features and intuitive operation.





	AS 666	AS 669	AS 6612	AS6615	AS 6618
Capacity in sterilization units	<b>4</b> STU	<b>6</b> STU	<b>8</b> stu	<b>10</b> stu	<b>12</b> STU
Chamber volume					
double door version	334	459	605	756	897
single door version	375	499	646	-	-
omigie deel versien	3/51	4991	0401		

2,5 kW

38,5 kW

Sterilization temperature range

Electric power

with an external steam generator with an integrated steam generator

Overall	dimensions
Overan	an richisioni

width height

depth – double door version depth – single door version

Weight

		1170 mm		
		1900 mm		
970 mm	1225 mm	1525 mm	1835 mm	2125 mm
1060 mm	1315 mm	1615 m m	-	-
760 kg	840 kg	930 kg	1030 kg	1130 kg

110 - 136°C

2,5 kW

56,5 kW

## **SMS 100**

Our SMS 100 steam sterilizer has a chamber capacity of 100 liter with low water and energy consumption, saving your practice time and money.

For small and medium medical, dental or veterinary practices with a higher throughput, or those using larger or specialized instrument kits, we recommend the SMS 100 as your reliable, high performance instrument processing solution.





	SMS 100
Capacity in sterilization units	<b>1</b> STU
Chamber volume	102
Sterilization temperature range	110 - 136°C
Electric power with an integrated steam generator	<b>7</b> kW
Overall dimensions width	845 mm
height	730 mm
depth	935 mm
Weight	150 kg



## **Technical data**

	SMS 100	AS 44	AS 366	AS 66
Compliance with standards			ı	1
EN 285				
93/42/EC	•		•	•
2014/68/EU (Pressure Equipment Directive)	•	•	•	-
Chamber			ı	,
Type (rectangular)				
AISI 316 L	•		•	•
AISI 316 Ti	×			
Mirror polishing	•			
Jacket				
Jacket system for efficient heat distribution				
AISI 316 L				
AISI 316 Ti	×			
Door(s)				
Door opening (horizontal, vertical)	$\rightarrow$	↓	↓	↓
Single or double door	1	1/2	1/2	1/2
AISI 316 L				
AISI 316 Ti	×			
Steam Source				
Built-in steam generator				
Automatic blow down				
External steam supply	×			
Dual steam source valve switch	×			
Technical area				
Configuration (left or right)	R	L/R	L/R	L/R
Service access (front, left, right)	ALL SIDES	F / L or R	F / L or R	F / L or R
oad capacity			'	•
Number of STU	1	1/1.5	2	4/6/8/10/12
Number of loading levels	1	1/2	1/2	1/2
Loading cart				
Transport trolley				
Automated loading / unloading	×	×	×	
Control system and traceability				•
Touch screen graphic LCD display	7"	7"	5.7"	9.7"
Integrated printer			•	
Data logger				
Ethernet port			×	
Process cycles				
Process cycles	•	•	-	•
Test programs (Bowie Dick / Leak)	•			
Custom cycles	•			
Number of cycles (process + test)	19 + 2	19 + 2	18 + 2	19 + 2
/ 4/			I	1

lacksquare Standard  $\Box$  Optional imes Not available



## **Water quality**

Water softener and reverse osmosis systems

To ensure proper steam generator operation and effective steam sterilization, purified water should be used (reverse osmosis water, distilled water etc.). SMS offers a wide range of water treatment solutions.

- · Water softeners
- RO and DI water systems

### **Accessories**

Loading and unloading accessories

Our loading and unloading systems have been developed in order to create a more effective handling of goods at the CSSD, without creating a burden on your staff.

SMS has a large variety of different loading and transport solutions. From manual pull out trays, loading and unloading carts and transport trolleys to full automated solutions.



### Standards and directives

Our steam sterilizers meet all necessary standards and directives and not less than below

#### Europe

EN 285:2015 – Sterilization - Steam sterilizers – Large sterilizers EN ISO 17665-1:2006

#### **Directives**

93/42/EEC Directive – Medical Device 2014/68/EU Directive – Pressure Equipment

## Pressure vessels and steam generator construction

WUDT/UC/2003 - Pressure devices

#### **Quality System Compliance**

EN ISO 9001:2015 - Quality Management Systems

EN ISO 13485:2016-04 Quality Management System - Medical Devices

### Safety and EMC Standards

EN 61010-1:2010 EN 61010-2-040:2015 EN 61326-1:2013

## UM 642

### Ultrasonic cleaner



The UM 642 ultrasonic cleaner is intended for washing surgical instruments and other medical equipment in the sterile supply department (CSSD).

It is designed as an independent washing unit, with a fixed connection to a water and sewerage system, a power supply and a compressed air source.

The manual washing side has a stainless-steel sink equipped with a single-handle faucet combined with a pull-out sprayer and washing gun. Additionally, the gun has a set of 6 attachments which make it a very versatile tool for rinsing and drying. The ultrasonic washing chamber is made of stainless steel.

Combining a manual washing station and an ultrasonic chamber into one device makes the UM 642 a very compact and complete preliminary cleaning unit. It is a great addition to any CSSD.

	UM 642
Overall dimensions	
width	1400 mm
height	850 mm
depth	600 mm
Chamber dimensions	
width	600 mm
height	400 mm
depth	250 mm
volume	50
Working frequency	<b>40</b> kHz
Temperature range	20 - 80°C
Washing time range	0 - 99 min
Ultrasonic power	1 kW
Heating power	1,6 kW
Power supply	230 V, 50 Hz
Weight	85 kg

## **WPT**

## Steam generators



Currently, steam sterilizers have built-in steam generators. We are aware that many medical facilities still use sterilizers without this option or need steam for other applications, which is why we offer WPT steam generators. These are modern, highly efficient, freestanding steam generators producing dry, saturated, clean, high quality steam.

If the parameters of the water supply are not adequate to obtain the necessary steam quality, it is possible to install an additional water treatment system. We are happy to help with the selection.

#### Characteristics

- entirely made out of stainless steel
- microprocessor based control system

#### **Options**

- increase the operating pressure maximally to 0,6 MPa (temp. 165°C)
- automatic cleaning system (option)

	WPT 1	108 WPT 16	2	
Steam				
output	108 kg	g/h   162 kg/H	٦	
pressure		0,29 мРа		
temperature		142°C		
Overall dimensions				
width		1300 mm		
depth	820 n	mm 930 mr	n	
height		1335 mm		
Electric power	72,5	kw   108,5 k\	N	
Weight	275	kg 295 kg	ı	

## **SMS Service and Support**

We are here for you worldwide!

Whenever our customers are in need of answers we are available. In cooperation with our business partners we can solve every problem within a short time. We support our national and international network via phone and mail.

















