# **PHS-100 STEAM STERILIZER**

Desktop steam sterilizer with rectangular chamber. The ideal solution for sterilization of medical tools and materials in medical clinics including stomatology, laboratories and pharmacies.

#### **Features**



Table top version

Sliding door

Sterilization chamber, steam jacket and steam generator are made of high-quality 316L stainless steel

रिं Built-in vacuum pump and water pump

[4] Low electricity and water consumption reduces costs

(w) 7" color touch-screen display for entering and monitorig parameters of sterilization process

Data archiving of sterilization parameters

(Bowie-Dick test and Leak test)

Built-in printer to print out process parameters, identification number of the operator



#### **Technical data**

Parameter	Value
Chamber volume, l	100
Chamber dimensions (D × W × H), mm	650×400×400
Power, kW	8
Water consumption, I/cycle	50

# Scope of delivery

- Table with wheels
- Air compressor
- Water softener
- Sterilization platform and baskets

# **PHS STEAM STERILIZERS**

Modern steam sterilizers manufactured in Russia and created on the basis of cooperation with European manufacturers within the localization program fully comply with standards of the Russian Federation as well as international and European standards.

They are designed for the steam sterilization of surgical instruments, textiles, clothes, rubber items, metal, plastic and glassware as well as solutions.

PHS steam sterilizers can be used in hospitals, including CSSD, operating rooms, kitchens, laundries, as well as pharmaceutical and other industries, the additional programs enable them to sterilize medical solutions, microbiological cultures and mediums.

#### **Features**

- Vertical sliding door saves space in the sterilizer loading/ unloading area
- Sterilization chamber, steam jacket and steam generator are made of high-quality 316L stainless steel in accordance with European standards
- Built-in steam generator with automatic blow down
- ત્રિં Double stage vacuum pump
- Fully automatic control based on Siemens controller
- 7" color touch-screen display for entering and monitorig parameters of sterilization process
- Confirmation screen to start the program
- Automatic door seal removal/installation to facilitate maintenance
- Maintenance reminder on the LCD screen
- Built-in printer to print out sterilization parameters
- 15 integrated programs, including programms for solutions
- Test modes (Bowie-Dick test and Leak test)
- The automatic data archiving of sterilization process allows controlling parameters of sterilization
- USB-port on the front panel of the sterilizer
- [[0]] Water saving system
- [4] Low energy consumption
- Sterilizer factory settings saving in the absence of power



# Scope of delivery

- Transport trolley
- Loading cart with 2 shelves
- Sterilization baskets
- Air compressor
- Water softener

#### **Technical data**

Parameter	PHS 300	PHS 400	PHS 600	PHS 800
Chamber capacity, STU*	4	6	8	12

<sup>\*</sup> STU – sterilization unit (1 STU = 600 × 300 × 300 mm)

# PHS sterilization programs

- Program for sterilization of heat-sensitive packaged goods and textiles
- Program for sterilization of instruments and accessories packaged in composite bags made of paper and film
- 3 programs for solution sterilization
- Program for sterilization of packaged rubber or plastic materials
- 7 user programs
- Leak test
- Bowie-Dick test





#### **Standards**

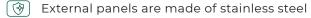
• EN 285:1996 Steam large sterilizers. General technical requirements and test methods

# **GK AND GKD-100-4 STEAM STERILIZERS**

GK and GKD-100-4 steam sterilizers are designed for the steam sterilization of surgical instruments, textiles, clothes, rubber items, metal, plastic and glassware as well as solutions.

GK and GKD-100-4 sterilizers can be used in hospitals, including CSSD.

#### **Features**



Sterilization chamber is made of AISI 316L stainless steel

Built-in steam generator made of stainless steel

Jacket keeps the chamber warm during cycles

રિટ Built-in vacuum pump

Fully automatic control based on Siemens controller

7" color touch-screen display for entering and monitorig parameters of sterilization process

Onfirmation screen to start the program

Maintenance reminder on the LCD screen

Built-in printer to print out sterilization parameters

Safety device prevents the operator to open the door when the chamber is pressurized

X START A cycle cannot start if the door is open or not properly locked

Electric heaters turning-off when water level in the steam generator is low

Multiple access levels and user passwords to control operation of the sterilizer

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# Scope of delivery

- Loading frame
- Sterilization baskets
- Water softener

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## **Technical data**

Parameter	GK-100-4	GKD-100-4
Version	single-door	double door
Chamber volume, l	100	100
Chamber capacity, STU	1	1

# **Sterilization programs**

- 5 integrated sterilization programs and wide range of customizable ones, allowing to select sterilization time and temperature, drying and cooling
- 2 test programs (Leak test and Bowie-Dick test for control of steam penetration into porous materials)





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## **Standards**

• EN 285:1996 Steam large sterilizers. General technical requirements and test methods

# **GP AND GPD STEAM STERILIZERS**

GP(D) Steam sterilizers are cost-effective, user-friendly, ensure the highest reliability and safety.

GP(D) Sterilizers are used in hospitals, CSSD, kitchens, laundries, as well as pharmaceutical and other industries.

#### **Features**

- Hinged door with automatic locking mechanism
- Sterilization chamber made of high-quality 316L stainless steel
- Built-in steam generator with the automatic blow down
- રિટ Double stage vacuum pump
- Fully automatic control based on Siemens controller
- 7" color touch-screen display for entering and monitorig parameters of sterilization process
- Onfirmation screen to start the program
- Automatic door seal removal/installation to facilitate maintenance
- [4] Low energy consumption
- wide range of sterilization programs, including for solutions
- (TEST) Test modes (Bowie-Dick test and Leak test)
- The automatic data archiving of sterilization process allows controlling parameters of sterilization
- Built-in printer to print out sterilization parameters



# **Scope of delivery**

- · Built-in shelves
- Air compressor
- · Water softener
- Transport trolley
- · Loading cart
- Sterilization baskets

#### **Technical data**

Parameter	GP-400-2	GPD-400-2	GP-560-2	GPD-560-2
Chamber volume, l	350		650	
Number of doors, pcs	1	2	1	2
Baskets' capacity (575 x 280 x 260 mm / 575 x 260 x 130 mm), pcs	3/3		3/6	

#### **Standards**

• EN 285:1996 Steam large sterilizers. General technical requirements and test methods

# **VK-75-01 STEAM STERILIZER**

VK-75-01 steam sterilizers are designed for the steam sterilization of surgical instruments, textiles, clothes, rubber items, metal, plastic and glassware.

#### **Features**

- The preset mode is performed automatically
- [ ↓ ] Top loading
- Cylindrical chamber
- Easy quick locking mechanism of the sterilizer lid
- ર્ટે Vacuum drying with ejector
- Operator panel displaying cycle parameters
- (⟨⟨ Warm-up mode
- Sterilization modes:
  - 132 °C 0.2 MPa 20 min.
  - 120 °C 0.11 MPa 45 min.
- (-/+) Connection to single-phase power supply
- Sterilizer is equipped with automatic steam suppression system
- Automatic or manual water filling of steam generator
- Swivel wheels for easy installation and maintenance



#### **Technical data**

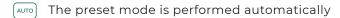
Parameter	Value
Chamber volume, I	~75
Chamber dimensions (diameter × depth), mm	400×600
Power, kW	8
Voltage, V	220±10%

Automatic steam sterilizers 15

# **GK-100-3 STEAM STERILIZER**

GK-100-3 steam sterilizers are designed for the steam sterilization of surgical instruments, textiles, clothes, rubber items, metal, plastic and glassware.

#### **Features**



→ Front loading

Cylindrical chamber

Operator panel displaying cycle parameters

ि Warm-up mode

Sterilization modes:

• 132 °C — 0.2 MPa — 20 min.

• 120 °C — 0.11 MPa — 45 min

રિટ Vacuum drying with a condenser

-∆+ Connection to three-phase power supply

Electric heaters turn-off when water level is below the minimum level

Swivel wheels for easy installation and maintenance



#### **Technical data**

Parameter	Value
Chamber volume, l	100
Chamber dimensions (diameter × depth), mm	400×762
Power, kW	10
Voltage, V	380

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# PHS-100

Tabletop Steam Sterilizer

The ideal solution for sterilization of medical tools and materials in medical clinics including stomatology, laboratories and pharmacies.



Tabletop: a rectangular chamber volume is 100 liters



High-quality: sterilizing chamber, steam jacket and steam generator are made of high-quality stainless steel AISI 316L



Cost-effective: low electricity and water consumption reduces costs



User-friendly: easy to operate using 15 programs of sterilization and 7" multi-color touch-screen

Models	Chamber volume, L	STU capacity	External dimensions (D×W×H), mm	Power, kW
PHS-100	100	1	960×840×730	8



# DGM AND

For Hospital CSSD and Medical Centers

DGM AND Steam sterilizers are produced in Europe following CE standards and meet the world`s toughest quality and safety standards.



Wide range of volumes: From 1 to 18 STU



Vertical sliding door(-s); Single or double-door version



High-quality, including chamber made of stainless steel AISI 316L and a full steam jacket



Cost-effective: low electricity and water consumption



Safe and environmental friendly



DGM AND Series are designed for the steam sterilization of surgical instruments, textiles, clothes, rubber items, metal, plastic and glassware. Used in hospitals, including CSSD, operating rooms, kitchens, laundries, as well as pharmaceutical and other industries, the additional programs enable them to sterilize medical solutions, microbiological cultures and mediums. DGM AND Sterilizers are automatically controlled, user-friendly, excellent production efficiency, with a wide range of capacities. Created to reduce energy and water consumption these sterilizers are economic and eco-friendly.

#### Compact size

The DGM AND has a compact design and vertical sliding door(-s).

#### **Advanced Control System**

The automatic data archiving of sterilization process allows controlling parameters of sterilization. There is opportunity for remote monitoring and control of the DGM AND sterilizer. It is also possible to store cycle reports during the lifetime of a sterilizer and reminders for service appear on the LCD screen.

#### **User-friendly**

7" colour touch screen display; 15 integrated programs; a wide range of parameter adjustment is available for each program, etc.

#### Safety

Chamber door cannot be opened when chamber is pressurized. A cycle cannot start if the door is open or not properly locked. Anomalies, alarms, main components maintenance status are indicated in real time.

#### **Options**

A wide range of options including Bio-seal, Validation IQ/OQ, Quick cool-down system, etc.

Models	Chamber volume, L	STU capacity	External dimensions (D×W×H), mm	Power, kW
AND 100-1 (-2)	100	1	900×800×1615	20
AND 150-1 (-2)	150	1.5	1200×800×1615	20
AND 300-1 (-2)	300	4	1060 (970)×1170×1900	38.5
AND 400-1 (-2)	400	6	1315 (1225)×1170×1900	38.5
AND 600-1 (-2)	600	8	1615 (1525)×1170×1900	38.5
AND-700-1 (2)	700	10	1925 (1835)×1170×1900	56.5
AND 800-2	800	12	2125×1170×1900	56.5
AND 1100-2*	1100	18	2182×1860×1900	72

<sup>\*</sup> DGM AND-1100-2 has horizontal sliding doors

#### **EUROPEAN STANDARD**

EN 285:2006 + A2:2009 - Sterilization - Steam sterilizers - Large sterilizers; EN ISO 17665-1:2006; 93/42/EEC Directive - Medical Device; 97/23/EC (2014/68/EU) Directive - Pressure Equipment; EN 61010-1:2010; EN 61010-2-040:2005; EN 61326-1:2013



DGM ANDS

For Hospital CSSD and Medical Centers

Steam Sterilizers DGM ANDS are an indispensable tool in all Health Institutions where high levels of sterilization are required. They are the perfect choice for CSSD and can also be used in laboratories, pharmaceutical and other industries as the additional programs enable them to sterilize medical solutions, microbiological cultures and mediums.



Wide range of volumes: from 1 to 12 STU including models with non-standard chamber dimensions



Vertical sliding door(-s); Single or double-door version



High-quality: the sterilizers are fully controlled by the PLC, the chamber and doors are made of AISI 316L



Safety: doors are equipped with a safety device, the temperature on the surface of the external panels and doors never exceeds 45°C



#### Versatility

The DGM ANDS are suited for hospitals including CSSD and OR and also available with options for more demanding applications (laboratories, pharmaceutical and other industries). Optional features are possible: software for monitoring and archiving all parameters of sterilization programs; additional temperature sensor in chamber to sterilize liquids; FO calculation; bio-barrier (Bio-seal).

#### Flexibility and Efficiency

The DGM ANDS will help to use all your resources with the highest efficiency. Equipped with water and energy saving systems, the DGM ANDS also feature a preheating program to save process time.

#### **Security System**

DGM ANDS have a security system that stops the door lock if there is interposition of objects. The sterilization program does not start when doors are open. Doors cannot be open when the sterilizer is under pressure.

Models	Chamber volume, L	STU capacity	External dimensions (D×W×H), mm
DGM ANDS-100	110	1	1000×900×1800
DGM ANDS-150	160	1.5	1300×900×1800
DGM ANDS-250	250	*	1300×1000×1800
DGM ANDS-300	320	4	1000×1200×1900
DGM ANDS-400	460	6	1300×1200×1900
DGM ANDS-600	600	8	1600×1200×1900
DGM ANDS-800	740	10	1900×1200×1900
DGM ANDS-900	930	12	2200×1200×1900

 $<sup>\</sup>ensuremath{^{\star}}$  Dimensions of the chamber are not standardized for the container system

#### **EUROPEAN STANDARD**



DGM

## For Hospital CSSD and Medical Centers

DGM Steam sterilizers are cost-effective, user-friendly, ensure the highest reliability and safety.



Wide range of volume: from 360 to 2000 liters



The best price-quality ratio



Single or double-door version



Rectangular chamber is completely made of stainless steel AISI 316L and entirely covered with a full steam jacket



Safety and user-friendly



#### Reliability

The DGM Series has a hinged door with automatic locking device. The unique design of the door guarantees complete safety during operation. The DGM Series is equipped with stainless steel pipes with Tri-Clamp fittings.

#### **User-friendly**

The DGM Series has user-friendly HMI (Human Machine Interface). All cycle information is easy-to-read even from a long distance with 7" colour touch-screen.

#### Large Volume

Models with large capacity are available (up to 2000 L).

#### **Options**

Various options are available for DGM Steam Sterilizers, including additional temperature sensor for liquids sterilizing, Validation IQ/OQ, Bio-seal, etc.

Models	Chamber volume, L	External dimensions (D×W×H), mm	Power, kW
DGM-360-1 (-2)	360	1310 (1520)×1275×1880	23.5
DGM-600-1 (-2)	600	1510 (1650)×1330×2100	43
DGM-800-1 (-2)	800	1650 (1700)×1330×2100	57
DGM-1000-1 (-2)	1000	1990 (2040)×1330×2100	57
DGM-1200-1 (-2)	1200	1710 (1760)×1470×2000	*
DGM-1500-1 (-2)	1500	2080 (2130)×1470×2000	*
DGM-2000-1 (-2)	2000	1764 (2014)×1745×2010	*

<sup>\*</sup>External steam generator