

# Low temperature peroxide-plasma sterilizers

**PLASTER-Med TeCo** 

Product catalogue



medteco.ru

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# Universal low temperature sterilizers of the Plaster series

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# **Special features** of plasma sterilization



# Fast cycle of sterilization

Sterilization is carried out in a dry atmosphere at a temperature not exceeding 55 °C. Vapor of 60% aqueous solution of hydrogen peroxide  $H_2O_2$  and its low-temperature plasma are used as a sterilizing agent. The combination of these factors provides the sterilization process is carried out quickly, starting from 17 minutes.



# Wide range of medical devices that can be sterilized

Almost the entire range of medical devices can be sterilized in a low temperature sterilizer. This method is particularly effective for sterilizing devices made of thermolabile materials, as well as of the materials prone to active corrosion. The technology makes it possible to sterilize medical devices containing narrow channels, for example: endoscope channels with a diameter of from 0,7 mm and a length of up to 2000 mm.



# Low wear of medical device when sterilizing

Low temperature sterilization of medical devices with thin and sharp work surfaces provides their wear reduction and prolonged lifetime, compared to medical devices sterilized in autoclaves.



## Mobility of sterilization

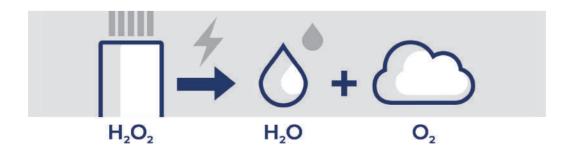
The compact size and operational ease of the sterilizer enable its installation in the Central Sterile Supply Department (CSSD) or operational unit. The simplicity of the design and operational technology of the sterilizer ensure sterilization of medical devices in stationery and field conditions.

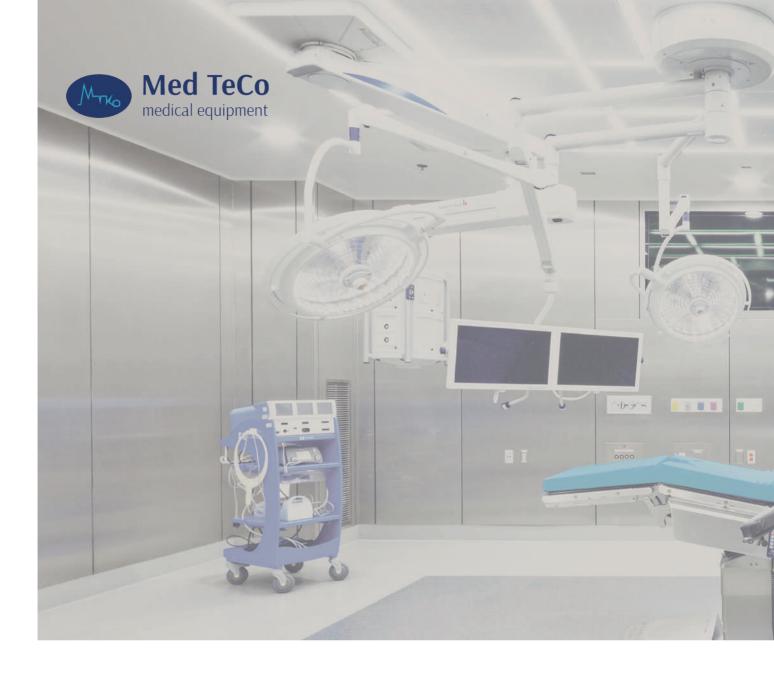


## Safe and environmentally friendly process of sterilization

Low temperature sterilization is not harmful to the environment or personnel as the process does not require the use of any reagents or waste disposal. The use of air in the sterilization process does not generate significant amount of any harmful oxygen or nitrogen compounds.

# The principle of peroxide-plasma **sterilization**





# Plaster-30K-Med TeCo

# plasma sterilizer for low temperature sterilization

## Description

**Plaster-30K-Med TeCo** sterilizer is a universal Russian-made peroxide-plasma low temperature sterilizer. It provides sterilization of a wide range of medical devices quickly, safely, and efficiently.



# Plasma sterilizer for low temperature sterilization **Plaster-30K-Med TeCo**



Effective sterilization technology



# **Technical specifications**

	usable chamber volume, l		30	
	constructive chamber volume, l	45		
	dimensions of the chamber (LxWxH	307x609x260		
Sterilization	chamber material and shape sterilization temperature		corrosion-resistant steel or aluminum, rectangular	
chamber			50 °C	
Sterilization	number of modes	3	«Standard»	23 - 38 min
modes	«Express»	13 - 23 min	«Extended»	32 - 52 min
	sterilizing agent		«ST-60 Med TeCo» hydro	gen peroxide
Sterilizing	packaging form		bottle (100 m	nl)
agent	amount per 1 diffusion		1,8 ml	
	basket position		bottom	top
Sterilization	number		1	1
baskets	number of basket slats		12	6
	control	color touch screen display, 7" diagonal	remote operation monitoring	~
	integrated thermal printer	~	notification of the need for maintenance	~
	touch foot pedal	~	self-diagnosis/ preventive mode	~
	automatic removal of peroxide after expiry date	~	thermostating function	*
Additional options	monitoring of vapor concentration in the chamber	~	pass-through type	×
	material of sterilizer frame and casir	ng	carbon steel with pro and decorative co	
	overall dimensions (LxWxH), mm	486x742x1140	power consumption, VA	2500
General	weight, kg	142	supply voltage, V	230
description	continuous mode operation	not less than 6 hours	supply frequency, Hz	50

### **Delivery set:**

plasma sterilizer - 1 pc, «ST-60-Med TeCo» sterilizing agent - 1 package, grips for carrying the sterilizer - 2 sets, set of operating documentation - 1 pc.



# Plaster-50-02-Med TeCo

# plasma sterilizer for low temperature sterilization

### Description

**Plaster-50-02-Med TeCo** sterilizer is a universal Russian-made peroxide-plasma low temperature sterilizer. It provides sterilization of a wide range of medical devices quickly, safely, and efficiently.



# Plasma sterilizer for low temperature sterilization **Plaster-50-02-Med TeCo**





Effective sterilization technology



# **Technical specifications**

	usable chamber volume, I constructive chamber volume, I dimensions of the chamber (LxWxH), mm		50	
			88	
			648x400x340	
Sterilization	chamber material and shape		corrosion-resistant steel or aluminum, rectangular	
chamber	sterilization temperature		50 °C	
	number of modes		4	
Sterilization	«Express»	17 - 24 min	«Extended»	41 - 45 min
modes	«Standard»	29 - 35 min	«Combined»	46 - 52 min
	sterilizing agent		«ST-60 Med TeCo» hydro	gen peroxide
Sterilizing	packaging form		bottle (100 ml)	
agent	amount per 1 diffusion		2,2 ml	
	basket position		bottom	top
Sterilization	number		1	1
baskets	number of basket slats		12	12
	control	color touch screen display, 7" diagonal	remote operation monitoring	~
	integrated thermal printer	~	notification of the need for maintenance	~
	touch foot pedal	~	self-diagnosis/ preventive mode	~
	automatic removal of peroxide after expiry date	~	thermostating function	~
Additional options	monitoring of vapor concentration in the chamber	~	pass-through type	×
	material of sterilizer frame and casir	ng	carbon steel with pro and decorative co	
	overall dimensions (LxWxH), mm	790x600x1460	power consumption, VA	2500
General	weight, kg	240	supply voltage, V	230/400
description	continuous mode operation	not less than 6 hours	supply frequency, Hz	50

### Delivery set:

plasma sterilizer - 1 pc, «ST-60-Med TeCo» sterilizing agent - 1 package, grips for carrying the sterilizer - 4 sets, set of operating documentation - 1 pc.



# Plaster-120-01-Med TeCo Plaster-120P-01-Med TeCo

low temperature peroxide-plasma sterilizers

Description

**Plaster-120-01-Med TeCo** and **Plaster-120P-01-Med TeCo** are universal Russianmade peroxide-plasma low temperature sterilizers providing sterilization of a wide range of medical devices quickly, safely, and efficiently





# Plasma sterilizers for low temperature sterilization **Plaster-120-01-Med TeCo Plaster-120P-01-Med TeCo**



Effective sterilization technology



# **Technical specifications**

	usable chamber volume, l	usable chamber volume, l		120	
	constructive chamber volume, l	constructive chamber volume, l		155	
	dimensions of the chamber (LxWxI	dimensions of the chamber (LxWxH), mm		760x510x400	
Sterilization	chamber material and shape	chamber material and shape		corrosion-resistant steel or aluminum, rectangular	
chamber	sterilization temperature	sterilization temperature		50 °C	
	number of modes		4		
Sterilization	«Express»	17 - 24 min	«Extended»	41 - 55 min	
modes	«Standard»	29 - 45 min	«Combined»	46 - 62 min	
	sterilizing agent		«ST-60 Med TeCo» hydr	ogen peroxide	
Sterilizing	packaging form		bottle (100 ml)		
agent	amount per 1 diffusion	amount per l diffusion		3,2 ml	
	basket position	basket position		top	
Sterilization	number	number		1	
baskets	number of basket slats	number of basket slats		12	
	control	color touch screen display, 10" diagonal	remote operation monitoring	~	
	integrated thermal printer	~	notification of the need for maintenance	~	
	touch foot pedal	~	self-diagnosis/ preventive mode	~	
	automatic removal of peroxide after expiry date	*	thermostating function	~	
<b>Additional</b> options	monitoring of vapor		pass-through type in Plaster-120-01	×	
	concentration in the chamber	¥	pass-through type in Plaster-120P-01	~	
	material of sterilizer frame and casi	material of sterilizer frame and casing		carbon steel with protective and decorative coating	
	Plaster-120-01 overall dimensions (LxWxH), mm	975x730x1605	continuous mode operation	not less than 6 hours	
	Plaster-120P-01 overall dimensions (LxWxH), mm	975x747x1604	power consumption, VA	3000	
General	weight of Plaster-120-01, kg	330	supply voltage, V	230/400	
description	weight of Plaster-120P-01, kg	330	supply frequency, Hz	50	

### Delivery set:

plasma sterilizer - 1 pc, «ST-60-Med TeCo» sterilizing agent - 1 package, grips for carrying the sterilizer - 4 sets, set of operating documentation - 1 pc.



# **Plaster Prime**

# low temperature peroxide-plasma sterilizer

### Description

**Plaster Prime** sterilizer is a universal Russian-made peroxide-plasma low temperature sterilizer. It provides sterilization of a wide range of medical devices quickly, safely, and efficiently.

# NEW PRO



# Plasma sterilizer for low temperature sterilization **Plaster Prime**





Effective sterilization technology



### **Technical specifications**

	usable chamber volume, l		120	
	constructive chamber volume, l dimensions of the chamber (LxWxH), mm		155	
			760x510x400	
Sterilization	chamber material and shape		corrosion-resistant steel or aluminum, rectangular	
chamber	sterilization temperature		50 °C	
	number of modes		4	
Sterilization	«STANDARD»	17 - 24 min	«INTENSIVE»	41 - 55 min
modes	«OPTIMA»	29 - 45 min	«COMBINED»	46 - 62 min
	sterilizing agent		«ST-60 Med TeCo» hydrog	gen peroxide
Sterilizing	packaging form		bottle (100 ml) and (250 ml), cassette with cells (70 ml)	
agent	amount per 1 diffusion		3,2 ml	
	basket position		bottom	top
Sterilization	number		1	1
baskets	number of basket slats		12	12
	control	color touch screen display, 10" diagonal	remote operation monitoring	~
	integrated thermal printer	~	notification of the need for maintenance	~
	touch foot pedal	~	self-diagnosis/ preventive mode	~
	automatic removal of peroxide after expiry date	~	thermostating function	~
	monitoring of vapor		integrated incubator for biological indicators	~
Additional options	concentration in the chamber	•	pass-through type	×
	material of sterilizer frame		carbon steel	
	overall dimensions (LxWxH), mm	1000x770x1745	power consumption, VA	3000
	weight, kg	380	supply voltage, V	230/400
<b>General</b> description	continuous mode operation	not less than 6 hours	supply frequency, Hz	50

### Delivery set:

plasma sterilizer - 1 pc, «ST-60-Med TeCo» sterilizing agent - 1 package, basket - 2 pcs., aluminum shelf\* - 2 pcs., drum No.1 for thermostat - 1 pc, drum No.2\* - 1 pc, drum mounting screw - 1 pc, grips for carrying the sterilizer - 4 sets, set of operating documentation - 1 pc.

\*on request



# TBI-36-Med TeCo

# thermostat for biological indicators

### Description

**TBI-36-Med TeCo** thermostat for biological indicators is designed for obtaining and maintaining a stable temperature inside vials with reaction mixture required for bacteriological studies. The thermostat is used for thermostating biological indicators with temperature in the range from +35 °C to +60 °C.



# NEW PRODUCT

# Thermostat for biological indicators **TBI-36-Med TeCo**



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# Technical specifications

	number of cells for placing biological indicators		
	number of sections	3 pcs.	
	cell chamber dimensions in drums, mm	drum No. 1 drum No. 2 45x11 56x14	
	drum dimensions (HxØ), mm	65x160	
Incubation	drum material and shape	aluminum, round	
chamber	temperature setting range	35-60 in steps of 1 °C	
	control	electromechanical	
	thermostat housing material	impact resistant polystyrene sheet with glossy polystyrene surface	
	overall dimensions (LxWxH), mm	303x253x150	
	weight, kg	2,8	
	continuous mode operation, hours	72	
	power consumption, VA	170	
	supply voltage, V	230	
	supply frequency, Hz	50	
General	timer setting range, hours	0÷72, with a discreteness of 1 hour	
description	time of continuous mode operation, hours	72	

### Delivery set:

electronic unit - 1 pc, drum No. 1 - 1 pc, drum No. 2\* - 1 pc, set of operating documentation - 1 pc.

\*on request

# Advantages of **Plaster-Med TeCo sterilizers**





Med TeCo LLC manufactures the sterilizing agent used in Plaster's operation independently. The volume of one 'ST-60-Med TeCo' bottle for peroxide-plasma sterilizers is counted for 10-15 standard cycles, which provides a minimum cost of one cycle.

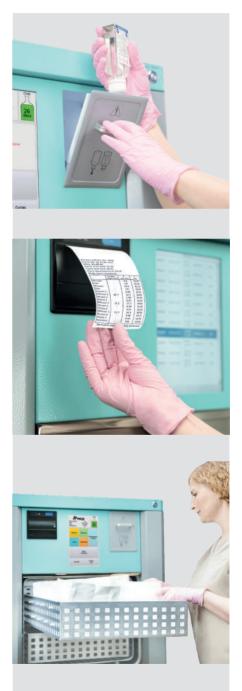




# **Plaster-Med TeCo**

low temperature sterilizer – effective sterilization technology





# Automatic peroxide removal system



The sterilizers have a built-in system for removing the sterilizing agent after its expiration date in a separate compartment without additional manual manipulation and contact with personnel. That guarantees safety during the operation of the machine.

	1
	1

<u>///</u> ~	KO	CT-60
Cycle number:		
Date:	26	$\leq$
Time:	22-03-2023	
Temperature:	02:27:14 52.4	26 days
Steri	lizing agent contai is opened.	ner
	Open chamber	



# Advantages of **Plaster-Med TeCo sterilizers**

# Absolute sterility of goods



The Med TeCo Plasters have a function of direct hardware measurement of the sterilizing agent vapor concentration in the chamber during the entire sterilization cycle. The information is monitored on a screen and available via the integrated printer's reports.

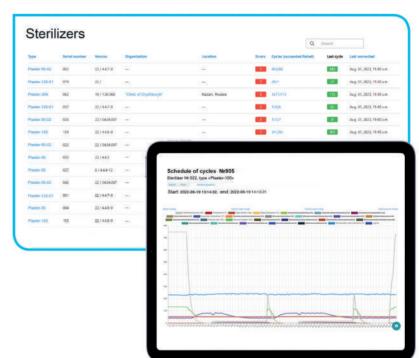


# Advantages of **Plaster-Med TeCo sterilizers**



Remote operation control

The sterilizers are equipped with a system for remote monitoring of the machine working capacity. Data from built-in sensors provide supervisory monitoring of the equipment status. The program allows to analyze malfunctions, plan the engineer's on-site arrival, and reduces the risk of breakdowns.





# Self-diagnosis, preventive mode



In order to prevent malfunctions in the sterilizer operation it is recommended to perform preventive maintenance of the air supply and exhaust system at least once a month, which is realized in the option «Preventive mode» («Profilacticheskiy»). At the end of the mode, an audible signal is sounded and a corresponding message is displayed.



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# **Extended set** of sterilization modes

The standard software of Med TeCo Plasters includes from 3 to 4 sterilization cycles, which allows choosing the optimal mode that meets the requirements for cycle time and specifications of the medical devices to be sterilized.



# Sterilization modes



# **«Express»** mode («Ekspress»)

Designed for sterilization of the following types of medical devices: simple general purpose medical devices requiring only surface sterilization: surgical instruments, electric accumulators, ophthalmic instruments without lumens, ultrasonic sensors. Rigid or semi-rigid endoscopes without lumen (blind).

# **«Combined»** mode («Combinirovannyi»)

Designed for sterilization of endoscopic equipment, its instruments and complex medical equipment listed for «Extended» mode: tubular-hollow metal products with an inner diameter of 0.7-1 mm and a length of not more than 500 mm (only for conductive tubes), tubular-hollow metal products with an inner diameter of at least 1 mm and a length of not more than 1000 mm (only for conductive tubes), tubular-hollow polymeric products with an inner diameter of not less than 1 mm and a length of not more than 2000 mm (only for conductive tubes), tubular-hollow polymeric products with an inner diameter of not less than 2 mm and a length of not more than 1500 mm (only for blind, nonconductive tubes).

\* the number of endoscopes is not more than 6 in the sterilization chamber, 3 on each shelf.

\* this mode is necessary if some moisture may have remained in the sterilized products after pre-sterilization preparation.

# **«Standard»** mode («Standartnyi»)

Designed for sterilization of medical devices made of metal, plastics, glass, latex, without threaded joints and extended narrow channels, including: medical devices, including most flexible endoscopes without lumen, single channel flexible endoscopes made of polyethylene and Teflon (polytetrafluoroethylene) with an inner diameter of at least 1 mm and a length not more than 850 mm, stainless steel tubes with an inner diameter of at least 1 mm and a length of no more than 300 mm (only for conductive tubes), polymer tubes with an inner diameter of 1-2 mm and a length of no more than 500 mm (only for conductive tubes), polymer tubes with an inner diameter of at least 2 mm and a length of no more than 1000 mm (only for conductive tubes).

# **«Extended»** mode («Udlinennyi»)

It is intended for sterilization of endoscopic equipment, its instruments and complex medical equipment made of metal, plastics, glass, latex: tubular-hollow metal products with an inner diameter of not less than 1 mm and a length of not more than 500 mm (only for conducting tubes), tubular-hollow polymer products with an inner diameter of 1-2 mm and a length of not more than 2000 mm (only for conducting tubes), tubularhollow polymer products with an inner diameter of not less than 2 mm and a length of not more than 1500 mm (only for blind, non-conducting tubes).

\* number of endoscopes is not more than 4 in the sterilization chamber, 2 on each shelf.



# «Thermostating» additional option



It allows to perform preheating of medical devices placed in the chamber, which helps to avoid failures during the sterilization cycle associated with condensate formation in the form of hydrogen peroxide drops on the surfaces of the packaging material and the devices themselves.





# Integrated thermal printer

The performed sterilization cycle is monitored by viewing the information on the screen and in the printed receipt. The printer automatically prints a report including information on the parameters and cycle time.



# Advantages of **Plaster-Med TeCo sterilizers**



# User-friendly interface and control



A russified touch screen with at least 7-inch diagonal provides easy and fast control at the touch of a finger. The screen displays the available sterilization modes, the list of medical instruments for the selected mode, and basic cycle parameters. The service menu contains the information needed to ensure convenient operation.





# **Touch foot pedal** for automatic door opening

Opening and closing of the sterilizer door can be done via the corresponding «Open Chamber» (Otkryt cameru) button on the screen, as well as via the contactless way using the touch foot pedal, which greatly simplifies the work of medical staff when placing medical instruments in the basket. The service menu contains the information needed to ensure convenient operation.



# **Delivery** set







Tyvek packaging rolls for







Biological and chemical indicators

plasma sterilization

\*Depends on the selected sterilizer model.



\*Please note that the color of the product on the monitor screen and in printed materials may differ from the actual color.



Sterilizer panels can be painted according to the RAL catalog colors.

# Optional





Indicator tape

Receipt tape



Non-woven material



Cutting machine with roll holder



Automatic sealing machine

# About us



Med TeCo is a Russian medical equipment brand since 2001, offering customers cuttingedge equipment of the highest quality for physiotherapy, low temperature sterilization and air disinfection.

Med TeCo – medical equipment for a healthy life

Med TeCo is a synthesis of high technology, research and development and a great experience in manufacturing medical equipment. The company has its own manufacturing facilities, a pool of scientists and engineers to design and introduce high-tech equipment to the market. Over 70 types of medical equipment, some of which have no analogues in the Russian Federation, have been produced during two decades of successful work.

Med TeCo products have registration certificates of the Federal Service for Surveillance in Healthcare, RF and CE certificates, are manufactured in strict compliance with the highest requirements of Russian and international standards (QMS GOST R ISO 9001-2015 and GOST ISO 13485-2017).

Med TeCo medical equipment has been clinically tested in the leading medical institutions of Russia: N.N. Burdenko Main Military Clinical Hospital, I.M. Sechenov First Moscow State Medical University, A.A. Vishnevsky Central Military Clinical Hospital.

### Med TeCo is a reliable partner in the Russian and global markets

To date, the company is one of the industry leaders in the development and sale of cutting-edge medical equipment to medical institutions across the country through a specialized dealer network. The deliveries are made all over the Russian Federation, as well as to Belarus, Kazakhstan, Uzbekistan, and Kyrgyzstan. The export deliveries to Eastern Europe, Southeast Asia, Latin America and India are being actively developed.

# Notes






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