

Plasma Low Temperature Sterilization

With vaporized hydrogen peroxide





Low Temperature Sterilization

For heat and moisture sensitive equipment

💮 PlazMax Line

PlazMax provides an efficient sterilization solution for heat & moisture sensitive equipment in CSSDs and Gastroenterology & Respiratory Endoscopy Clinics.

PlazMax will give you the lowest rate of failed cycles than any other hydrogen peroxide plasma sterilizer on the market. You get increased productivity, reduced risk of work stoppage, and efficient supply of sterilized equipment where it's needed.

In operating rooms PlazMax benefits you with almost immediate access to sterilized equipment. Simple to install and control, only requiring 1-phase electricity and Hydrogen Peroxide (H_2O_2) packs to operate. No need to send equipment to a CSSD, eliminating the risk of damage and contamination in transit.







Advanced and Flexible Control System

Take Advantage of Tuttnauer's state-of-the-art control system with multicolor touch screen display. Includes equipment tracking and maintenance notification features.



25 minutes Fast and Productive

PlazMax cycle times are as low as 25 minutes (P50 normal cycle).



Wide Range of Chambers

Don't over pay for two small sterilizers when you can buy one large sterilizer. Choose from 3 models with chamber sizes from 47 to 109 liters.



Keep Running Costs Low

Keep you consumable costs low

With PlazMax you have the freedom to use commonly available market accessories such as indicators, pouches & rolls, etc. that are suitable for sterilization with vaporized hydrogen peroxide. Tuttnauer also sells sterilant, and biological & chemical tape indicators.



Clean Technology

- Non-toxic sterilizing agent
- Minimal utility requirements low electricity consumption, no water consumption
- The sterilization process results in water and oxygen by-products



Vertical Sliding Door

Automatic Vertical Sliding Door (P110 model only) with built-in foot operated device for hands-free door operation.

Tough Challenges – PCD

By challenging the PlazMax sterilizer with our Process Challenge Device (optional) you will be confident that it does its job at the highest sterilization levels.









- 47 Liter Chamber
- Single or Double door
- Chamber Dimensions (WxHxD) 420 x 180 x 624 mm







PlazMax P110



- 109 Liter Chamber
- Single or Double door
- Chamber Dimensions (WxHxD) 420 x 420 x 624 mm



Technical Specifications

Model	Volume Liters	Chamber Dimensions (WxHxD) mm	External Dimensions (WxHxD/D 2-doors) mm	No. of Baskets 40x60 (WxD) cm	Power (W) Current (A)	Voltage V 1-Phase 50-60 Hz
P50	47	420 x 180 x 624	702 x 1528 x 729 / 736	1	670W 2.9A	230 V
P80	83	420 x 320 x 624	702 x 1668 x 729 / 736	2	690W 3.0A	230 V
P110	109	420 x 420 x 624	702 x 1768 x 729 / 736	2	1150W 5.0A	230 V

Sterilization Cycle and Test Programs

	-			_		
Model	Normal Cycle (Non-hollow loads)	Advanced Cycle (Hollow loads)	Endoscope *		Test Cycles	Description
	Cycle Time (min.)	Cycle Time (min.)	Cycle Time (min.)		Test I	Penetration Test
P50	35	40	25		Test II	Leakage Test
P80	35	40	25			
P110	45	50	30			

* Endoscope cycle temperature: short heating time and reduced H₂O₂ exposure time

Advanced Control System for Your CSSD

Take advantage of Tuttnauer's sophisticated user-friendly control systems for repeatable high performance. Choose either Tuttnauer's sophisticated Bacsoft controller or the Allen-Bradley (AB 1400 PLC) controller.

Standard Features

- 7" Multi-color touch screen panel (also on second door of two door configurations)
- Stores the last 200 cycles in built-in memory
- Multiple access levels and user passwords to control access/
 operation of the Plazmax
- Diagnostic In/Out test (enables technician to check each system component separately)
- Sterilization Temperature range 50°C to 55°C
- Thermal Printer
- USB and Ethernet connection port

Sophisticated Touch Screen HMI

The HMI (Human Machine Interface) has been designed with the following considerations:

- Multi-color display for easier reading from a distance
- Multilingual (26 languages)
- Dynamic graph displaying the chamber pressure and the cycle process
- Displays process info pressure, temperature, vaporizer temp.



Equipment Tracking & Maintenance Notification

Equipment tracking software provides a detailed sterilization history of each endoscope tracked. The software will notify when equipment needs to be returned back to the original equipment manufacturer for maintenance.

D	Name	Max	Current	Total	Last Init	
1	BF 1 T 160	70	10	100	2/SEP/2013	SELE
□ 2	BF 160	70	15	150	2/SEP/2013	
3	CF Q 160 AL	100	12	224	2/SEP/2013	INI
4	CF 2 T 160 L	70	18	321	2/SEP/2013	
□ 5	PCF 160 AL	100	10	154	2/SEP/2013	REMO
6	GIF Q 160	70	15	117	2/SEP/2013	
7	GIF XP 160	100	10	258	2/SEP/2013	NEV
8	GIF PQ 20	70	13	132	2/SEP/2013	



R.PC.R Software

Automatic Recording of Cycle Information to Your PC

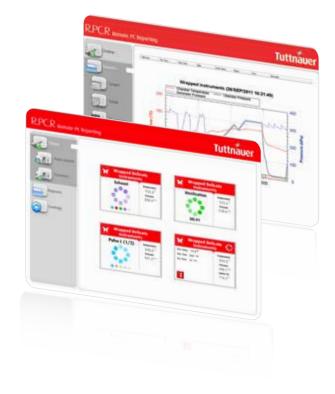
Reporting You Can Rely On

- Automatic recording of cycle information to any PC on your network
- · Convenient access to graphs and tables that are easy to understand
- Easily generate PDF reports
- No need to file printouts, saving you time

Be in Control with Real-Time Remote Monitoring

- See the real-time autoclave display on your PC
- Monitor all activity for up to 8 autoclaves

With R.PC.R you can see: Graphs of the cycle data, Numeric cycle data, cycle print-outs, measured values table, parameter table.



Software and Hardware

Standard



Remote network access for technical Support (requires R.PC.R) (requires local SIM card for Internet connection)



R.PC.R software for access from PC or network

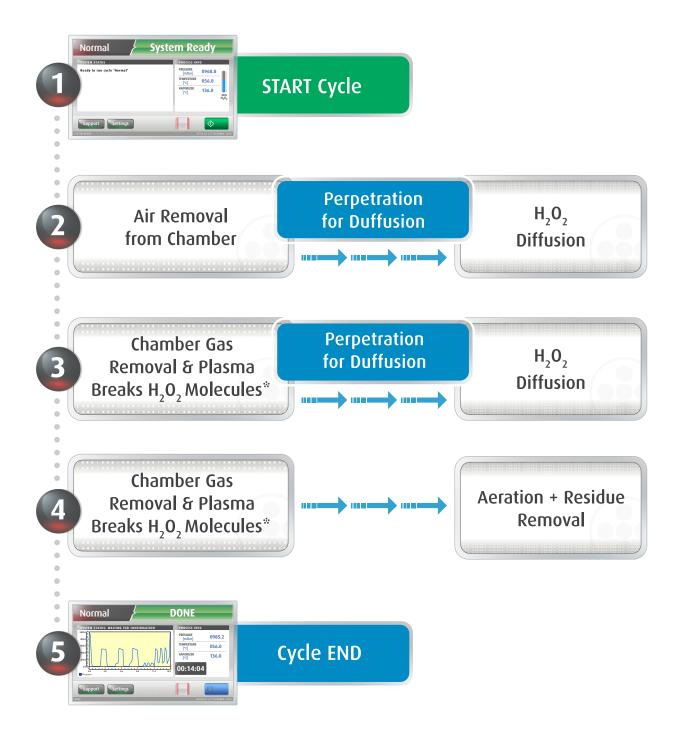


USB Digital Cycle Data

Connect a USB memory device to the PlazMax and you can download a soft copy of cycle printouts and all cycle data history stored in the sterilizer's memory.



Sterilization Cycle Process



^{*} Plasma breaks down H_2O_2 molecules into H_2O and O_2 outside the chamber

How can you be sure your hollow instruments have been 100% penetrated?

Use Tuttnauer's Process Challenge Device (PCD)

Tuttnauer's PCD kit includes lumens that are more difficult to penetrate than your loads. With the PCD you can be certain your lumen loads are fully exposed to the vaporized hydrogen peroxide sterilizing agent.

The PCD kit includes long lumen configurations that cannot be successfully sterilized in competing devices.

The PCD Kit includes 1mm diameter lumens with lengths of 4m (both sides open) and 1.4m lumens (one side open).









Chemical indicators are used every cycle and in each package item to validate penetration and to ensure vaporized peroxide has made contact with the load.



Biological indicators are used according to a schedule required by a hospital's policy and require an incubator (optional) to facilitate the detection of micro-organisms. Biological indicators validate sterilization by helping determine that the sterilizer effectively kills the micro-organisms.

Safety Features

Tuttnauer strives to provide sterilizers that ensure safety for patients, staff, and the environment. Safety features include:

• No hazardous or odorous emissions • Low temperature and low pressure during sterilization • Door is locked during cycle operation

Non-Hollow Loads

Non-hollow loads are sterilized with the "Normal Cycle".



Hollow Loads

Hollow loads are sterilized with the "Advanced Cycle".



• The instruments and equipment presented are only a partial list of the wide range that can be safely sterilized in PlazMax

• Only use PlazMax with equipment authorized by original manufacturer to be sterilized with plasma sterilizers.



Endoscopes

Endoscopes and similar equipment are sterilized with the "Endoscope Cycle".

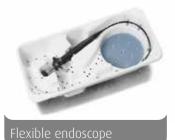




Rigid scope



Flexible endoscope







Standards and Directives

PlazMax has been developed according to the following international standards and directives (partial list):

- ISO 9001:2008 ISO 13485:2003 ISO 14937 EN 61010-2-040:2005 EN 60601-1:2006/AC:2010
- Directive 2006/95/EC Directive 2004/108/EC Directive 2006/42/EC 93/42/EEC Directive 2007/47/EC:2007
- CE Medical Device Mark 0344

Your Sterilization & Infection Control Partners

Company Profile

For over 88 years, Tuttnauer's sterilization and infection control products have been trusted by hospitals, universities, research institutes, clinics and laboratories throughout the world. Supplying a range of top-quality products to over 100 countries, Tuttnauer has earned global recognition as a leader in sterilization and infection control.

Global Partnership

At Tuttnauer we feel that business means people dealing with people. We pride ourselves on our reputation for having long-lasting relationships with our customers based on commitment and trust, spanning over decades and distances.

Our Flexibility is Your Advantage

Beyond our wide range of products and ability to customize products to customer requirements, we also manage complete turnkey solutions, including planning, design and installation of equipment, as well as consultation and feasibility studies, for projects of all sizes.



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