

CHAMBR PRESS. (bar)

JACKI

OT 300/430/570

STEAM STERILIZERS



DOOR

Open

Close

OT 300/430/570

More than 15 years had passed since the very first steam sterilizer manufactured by Nüve. In course time, we had developed and been manufacturing thirteen different sizes steam sterilizers including bench top and vertical models.

Our continuous investments in research and development have enabled us to develop our new steam sterilizer series with innovative Air Cooling System: OT 300 / 430 / 570 Steam Sterilizers.



The reliability, performance, ease of use and safety features of OT Series Steam Sterilizers optimize the steam sterilization process and they are convenient for steam sterilizing packed or unpacked surgical and dental instruments, operation linen, glass, plastic, rubber and silicon materials, infusion liquids, microbiological cultures and medical waste.

The chamber, steam jacket, door and the steam generator are made of 316L stainless steel and they are tested according to EN 285, European Standard for Large Steam Sterilizers, and PED 93/72/EC Pressure Equipment Directive. The chamber, jacket, door are insulated with rock wool and generator is insulated with glass wool.

The door is operated with a pneumatic system and has required safety system. The programs can not be operated if the door is not closed properly. In case of an obstruction on the door closing direction, the door stops automatically. The door is prevented from opening unless the safe unloading temperature has been reached and the pressure has dropped to atmospheric pressure at the end of the sterilization cycle.

The chamber gasket is driven by steam and made of silicon as one piece. The sterilization cycle can only be started if the steam pressure under the gasket is adequate for the operations.

Vacuum function has great importance for steam sterilizers. The air should be removed for diffusion of the steam inside the chamber and the materials without air residual resistance. For OT 300 / 430 / 570, the air removal is done by pulsating steam and vacuum in sequential pulses. Pre-vacuum is also used for the pre-heating of the sterilization load. At the end of the sterilization phase, post-vacuum is needed to dry the sterilized load. For fast air removal from the chamber, a high capacity water ring pump is used. Low noise vacuum pump has a long service life, reliable functioning and low energy and water consumption.

EasyView

JACKET PRESS. (bar)

When the operation of a steam sterilizer is concerned, the components used in steam, air and water lines become more important. In OT 300 / 430 / 570, high quality valves, sensors and transmitters are used for a problem free and safe operation. The valves used in the steam lines are pneumatically controlled and they have longer service life than electrically operated valves.

Steam Sterilizers have high operational cost. Besides the power consumption, high amount of water is used to produce steam and to condense and cool down the steam at the end of the cycle. Steam Sterilizer with a chamber capacity of 500 liters, has approximately 500 liters water consumption per cycle in a classic system. Different than the classical method to condense and cool down the steam, an innovative system is used in OT series Steam Sterilizers: AIR - COOLING. The steam is condensed and cooled down while passing through a condenser which is cooled by ambient air. Thus, there is no water consumption to condense and cool down the steam for OT 300 / 430 / 570.



GENERATOR PRESS. (bar)

OT series steam sterilizers are equipped with PLC control system and 640x480 pixels 7,7" colorful touch screen. There are six preset programs which are as follows:

Preset Programs:

Program Name	Sterilization Temperature	Sterilization Time
Wrapped porous materials	134°C	7 minutes
Sensitive materials	121°C	20 minutes
Rubber materials	125°C	20 minutes
Heavy wrapped materials	134°C	7 minutes
Unwrapped materials	134°C	4 minutes
Liquid	121°C	Programmable



There are also two test programs which are: Bowie&Dick and vacuum leakage.

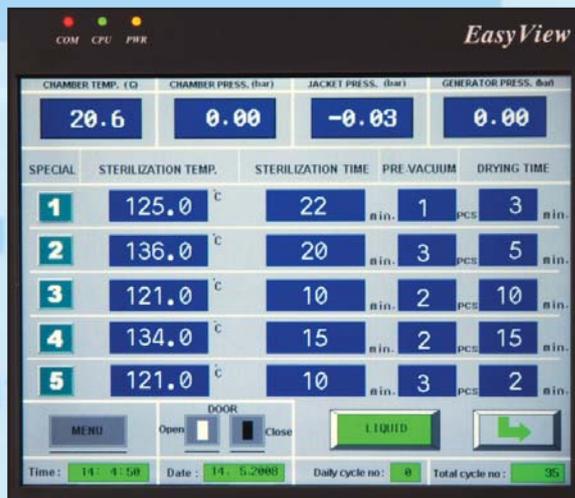
Besides the preset programs, the user can create his own program and there are fifty program memories for that purpose. For those custom made programs, number of pre-vacuum (1-3), temperature (121-125-134-136°C) and drying time (0-60 minutes) can be programmed.

CHAMBER TEMP. (C)

CHAMBER PRESS. (bar)

20.6

0.00



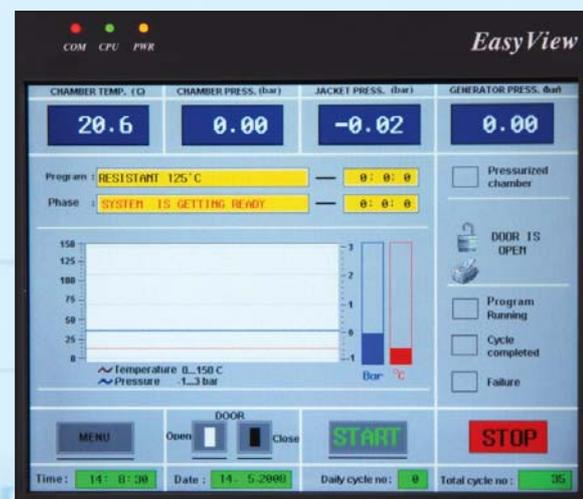
There is also a comprehensive self-diagnostic system to provide information regarding any system malfunction. The self-diagnostic system warns the user in case of the following conditions:

- Vacuum period is exceeded
- Steam discharging period is exceeded
- Door lock is released during a cycle
- Temperature or pressure sensor failure
- Heater failure
- Air detector failure
- Leakage in the vacuum system
- Power failure
- Low steam pressure in the chamber
- Low temperature in the chamber
- High steam pressure in the chamber
- High temperature in the chamber

To operate OT 300 / 430 / 570 via colorful video graphic touch screen is very easy. The wide screen allows monitoring all related information regarding sterilization cycle. During the operation of any program following information is displayed:

- Chamber Temperature
- Chamber Pressure
- Jacket Temperature
- Jacket Pressure
- Generator Temperature
- Generator Pressure
- Name of the operating program
- Program phase
- Graphic of temperature and pressure
- Time
- Date
- Number of operated programs in the same day
- Total time of the operated programs

As the requirement of EN 285 standard, there is also an independent control system besides the main control system. The main one controls the sterilization process and records characteristic operating parameters, while the second one controls and records only the data related to every cycle. The parameters of last 28 cycles are kept in the memory.



In addition to self-diagnostic system, the control system has a Service Menu, which helps the service technician to detect the problem in case of a failure. The control system also reminds the user to replace the gasket and the HEPA filter when the operating hour of both component is close to the end.

CHAMBER TEMP. (C)

CHAMBER PRESS. (bar)

20.6

0.00

OT 300 / 430 / 570 has a thermal printer as standard to record the temperature and pressure data of the cycle. It is also possible to connect external printer by means of the printer port offered as standard on the instruments which could be used with optional software.

OT 430 and OT 570 are also available as double door. There is LCD touch screen for the clean side and on this display, chamber temperature and pressure, name of the operating program, phase of the sterilization cycle, total elapsed time and elapsed time of the phase is displayed. Both doors can not be opened at the same time and if the sterilization fails, the door of the clean side can not be opened.

Optional RS 232 port and software allows OT series Steam Sterilizers to be connected to a PC. All the operating parameters can also be observed from a remote monitor.

OT 300 / 430 / 570 Steam Sterilizers ensure safe, economic and efficient sterilization and they are manufactured according to current European Norms and directives such as EN 285, EN 13445, EN 12953, EN 61326, EN 60601, EN 61010-2-040, MDD 93/42/EC and PED 97/23/EC under the quality management system ISO 9001:2008 and ISO 13485:2003.

OT series Steam Sterilizers have automatic water feeding system. 200 liters water tank is supplied with the units.



TECHNICAL SPECIFICATIONS

	OT 300	OT 430	OT 430D*	OT 570	OT 570D*
Chamber Capacity, liters	300	430	430	570	570
Capacity For STU	4 pcs.	6 pcs.	6 pcs.	8 pcs.	8 pcs.
I STU 300x600x300 (WxDxH) mm					
Control System	PLC				
Display	640x480 Pixels, 7.7" Colorful Touch Screen				
Preset Programs	5 Standard, 1 Liquid				
Memory For Custom Programs	50				
Test Programs	Vacuum Leakage Test / Bowie&Dick				
Sterilization Temperatures	121°C / 125°C / 134°C / 136°C				
Chamber Material	Stainless Steel 316 L				
Jacket Material	Stainless Steel 316 L				
Generator Material	Stainless Steel 316 L				
Printer	Standard Thermal Printer				
Chamber Dimensions (WxDxH) mm	635x722x655	635x1034x655	635x1064x655	635x1371x655	635x1401x655
External Dimensions (WxDxH) mm	1140x1290x1910	1140x1330x1910	1140x1410x1910	1140x1660x1910	1140x1740x1910
Power Consumption, kW	29	38	38	50	50
Power Supply	400 V, 50 Hz 3-Phase +N+G				

OPTIONS

OT XXX W RS 232 Port And Software

OPTIONAL ACCESSORIES

- A 08 080 Water Softening Unit
- A 08 097 Loading Chart for OT 300
- A 08 098 Loading Chart for OT 430
- A 08 081 Loading Chart for OT 570
- K 28 009 Air compressor, 10 bar 50 liters

* OT 430D - OT 570D: Double door models



**NUVE SANAYİ MALZEMELERİ
İMALAT VE TİCARET A.Ş.**

Esenboğa Yolu, 22 km.
Akyurt 06750 ANKARA TURKEY
Tel : (90.312) 399 28 30 (pbx)
Fax : (90.312) 399 21 97
http ://www.nuve.com.tr
e-mail : sales@nuve.com.tr

ISO 9001: 2008
ISO 13485: 2003

