

# BENCH TOP STEAM STERILIZERS

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T  
B  
V  
S



*müve*  
*steamArt*

# OT

# B / VS / S Series

## BENCH TOP STEAM STERILIZERS

Small steam sterilizers are widely used for the sterilization of the products used for medical purposes, e.g in general medical practices, dentistry, facilities for personnel hygiene and beauty care and also veterinary practices.

EN 13060, European Standard for small steam sterilizers, defines the general requirements for small steam sterilizers and test methods for specified sterilizer loads.

The sterilization of the loads are classified in three classes of cycles: B, N and S.

The vast experience of Nüve for the manufacturing of steam sterilizers created new steam sterilizers which totally satisfy all requirements of EN 13060 for B and S type sterilization cycles with some more technical advantages : OT 18B, OT 23B, OT 23VS, OT 32VS and OT 23S.

### STERILIZATION LOADS

Three different models can sterilize different types of loads and can be chosen according to the needs.

**OT 18B/23B :** All wrapped or unwrapped, solid, hollow load products of Type A and porous products

**OT 23VS/32VS :** Unwrapped solid products, porous products, small porous items, hollow load products of Type B, single wrapped products, multiple-layer wrapped products.

**OT 23S :** Unwrapped solid products and single wrapped products.

### VACUUM SYSTEM

Because of the types of the loads which will be sterilized in B and VS series, the vacuum has a great importance. For a correct sterilization, air bubbles should be eliminated in all types of materials and steam should reach every point on and inside of the materials.

In OT 18B/23B and OT 23/32VS, fractionated pre-vacuum system is used for the safe and correct sterilization. The vacuum process is carried out by a vacuum pump which is specially designed for steam.

Because of the types of the loads which will be sterilized, OT 23S does not need pre-vacuum or post-vacuum. To evacuate the air in the chamber and allow the saturated steam to penetrate on the sterilization load effectively, fractionated gravity system is used with alternating inflow and outflow of steam.

### CHAMBER

The chamber is made of stainless steel and it is seamless for 18 and 23 liter models. The shelf carrier in the chamber is reversible and standard shelves or sterilization cassettes can be used.





## CONTROL SYSTEM

For conformance to the requirements of EN 13060, all new bench top steam sterilizers are equipped with advanced microprocessor control system with 128x64 pixel display. Easy to use control system has a main menu which appears as :

### B and VS Series

- PROGRAMS
- TEST PROGRAMS
- MEMORY
- CLEANING & MAINTENANCE
- INSTALLATION SETTINGS
- PRINTER & PC
- SERVICE

### S Serie

- PROGRAMS
- MEMORY
- CLEANING & MAINTENANCE
- INSTALLATION SETTINGS
- PRINTER & PC
- SERVICE



## PROGRAMS

There are pre-set programs which guarantee safe sterilization of the treated materials

### VS Serie

Universal	134°C	4 minutes
Wrapped materials	134°C	4 minutes
Quick	134°C	4 minutes
Gentle	121°C	20 minutes
Prion	134°C	20 minutes

### B and S Series

Universal	134°C	4 minutes
Quick	134°C	4 minutes
Gentle	121°C	20 minutes
Prion	134°C	20 minutes

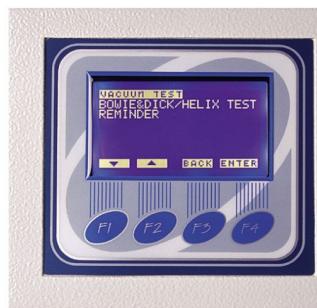
There is also a preheating option to shorten the sterilization cycle period.

## TEST PROGRAMS

There are two test programs for B and VS Series:

### OT 18/23B

Vacuum Test  
Bowie & Dick / Helix Test



### OT 23/32VS

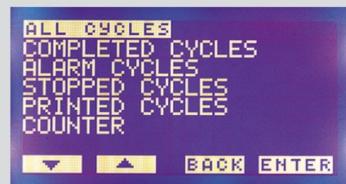
Vacuum Test  
Bowie & Dick

There is also a test reminder to warn the user to repeat the tests periodically.

## MEMORY

Last 52 cycles are kept in the memory and classified as :

- All cycles
- Completed Cycles
- Alarm Cycles
- Stopped Cycles
- Printed Cycles



There is also a cycle counter to keep the number of the operated cycles in the memory.

# CLEANING AND MAINTENANCE

For periodical cleaning, user is warned to clean the chamber, lid and gasket and to empty the tanks. For general maintenance, user is warned to replace the bacteriological filter and the gasket.



## INSTALLATION SETTING

Below written parameters can be programmed:

- Company name
  - Address
  - Telephone
  - Language
  - Date and time

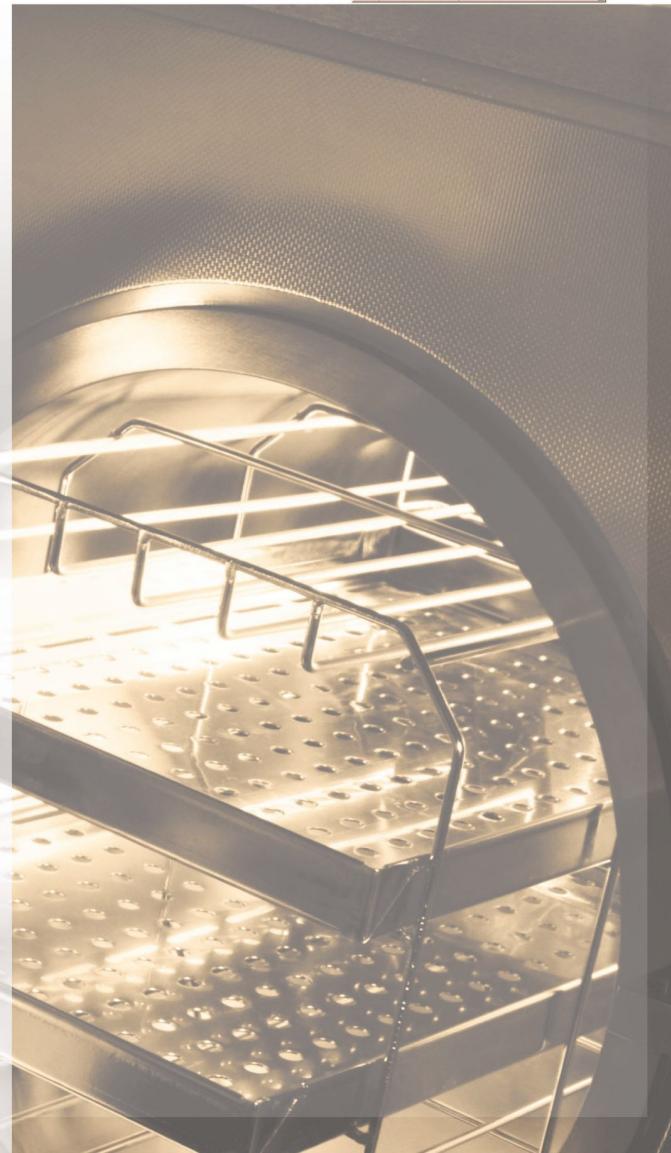
WAVE STEAMER - B			
SERIAL NO: 0000000001			
CAMPYLO A.S.			
ADDRESS: ANDORRA			
CITY: ANDORRA LA VELLA			
DATE: 10/09/2002			
TIME: 16:35:24			
Program: GENTLE 127°C			
Preheating: 63.0 °C			
Program phase	pres.	temp.	time
	Bar	°C	min
Start	-0.09	43.2	00:00
Pre-vacuum	-0.94	47.1	03:38
Steam charge	-0.26	99.4	04:00
Steam charge	-0.04	99.4	14:24
Steam charge	-0.26	103.8	14:24
Pre-vacuum	-0.71	59.4	16:28
Steam charge	-0.26	103.8	19:13
Heating	-1.56	122.4	21:24
Sterilize Start	-0.04	121.1	21:24
Sterilize End	1.09	121.1	41:24
Steam discharge	0.09	109.3	47:06
Water drying			
Drying start	-0.22	100.0	42:16
Drying cont.	-0.71	71.5	43:01
Drying end	-0.79	34.9	53:01
Cycle end	-0.19	45.1	64:07
Cycle end	-0.19	45.1	64:07
1000 STERILE			

PRINTER & PC

An external printer can be connected to new bench top steam sterilizers to record all the data of cycle. That serial port is also used to connect a PC to the instruments for storage of the sterilization data by means of Nuve SteamArt software.

## **SERVICE**

In case of any failure, the instruments should be repaired by an authorized service technician. The instrument can not be operated unless the right service code is entered after servicing.



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## PROCESS EVALUATION AND SELF-DIAGNOSTIC SYSTEM

The control system includes process evaluation system. The operating parameters are permanently compared with the preset values. If the operating parameters do not match the preset values, the sterilization cycle is not completed and the user is warned.

As another advantage of microprocessor control system, there is a comprehensive self-diagnostic system to provide the information regarding any system malfunction. The self-diagnostic system warns user in case of :

- Vacuum period is exceeded \*
- The period to reach to the right pressure is exceeded
- Steam discharging period is exceeded
- Low air velocity during air intake phase\*
- Operating time does not match te preset time
- Open lid
- Overheated steam generator
- Lid locking problem
- Water pump failure
- Temperature or pressure sensor failure
- Preheating failure
- Overheating during the preheating phase
- Difference between two temperature sensors
- Power failure
- High temperature
- Low temperature
- High pressure
- Low pressure
- High difference between measured and preset temperature

\* Not valid for OT 23S

Besides all the technical advantages, new bench top steam sterilizers are user friendly with maximum safety and they conform all European Standards related with small steam sterilizers and pressure vessels.

## TECHNICAL SPECIFICATIONS

	OT 18B	OT 23B/23VS/23S	OT 32VS
Chamber Capacity, liters	18	23	32
Chamber Dimensions (ØxD) mm	260 x 350	260 x 450	320 x 420
External Dimensions (WxDxH) mm	525 x 640 x 525	525 x 685 x 525	581 x 688 x 571
No Of Shelves (Standard/Max.), pcs.	3/6	3/6	3/8
Capacity for sterilization cassettes, pc	3	3	3
Power Consumption	2500 W		3000 W

	OT 18B/23B	OT 23VS/32VS	OT 23S
Number of programs	4	5	4
Test Programs	Vacuum Test, Bowie & Dick / Helix Test	Vacuum Test, Bowie & Dick	N/A
Minimum vacuum level	100 mbar	300 mbar	N/A
Power Supply	230 V, 50/60 Hz	230 V, 50/60 Hz	230 V, 50/60 Hz
Sterilization Temperature	121°C – 134°C		
Water Tank Capacity	5 liters		

## OPTIONS

Y 07 008 Thermal printer

Y 07 004 NüveStore™ SD Card writer

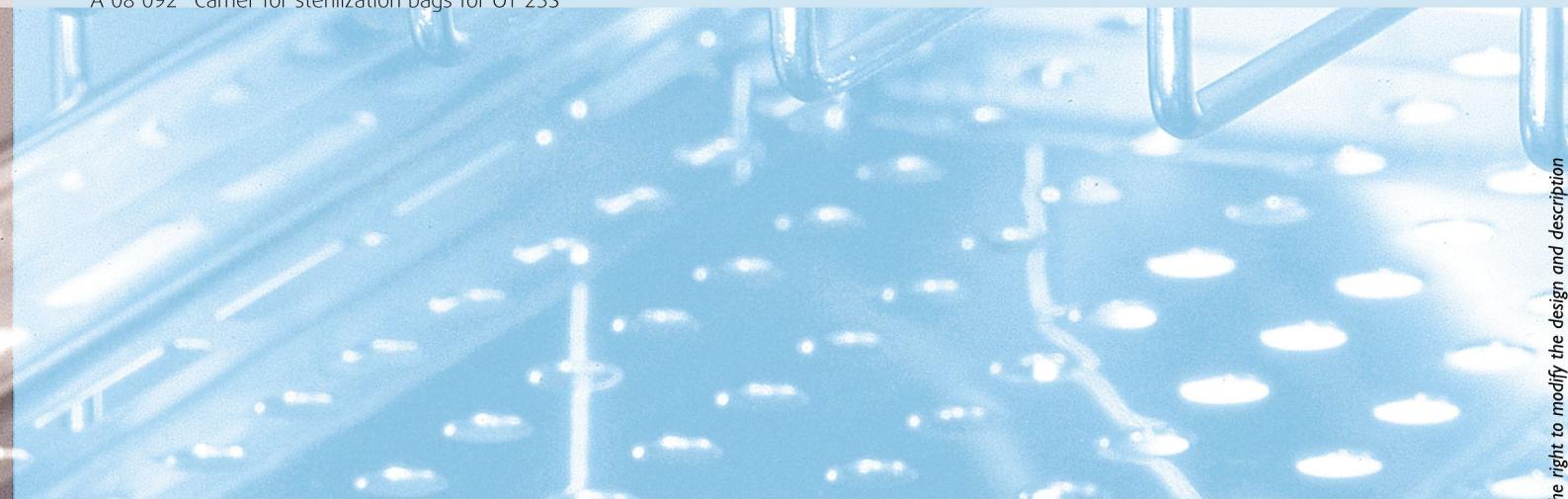
## OPTIONAL ACCESSORIES

R 01 122 Aluminum shelf for OT 18B

R 01 123 Aluminum shelf for 23 liters models

R 01 125 Aluminum shelf for OT 32VS

A 08 092 Carrier for sterilization bags for OT 23S



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İMALAT VE TİCARET A.Ş.**

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