

Series

U

Sterilizing universal autoclaves

colussi



Series

U

CE  
0051



*Open door sterilizer*



*Easy access for maintenance*

### General Characteristics

The range includes:

- one-door models with a sterilising capacity of 2, 3, 4, 6 and 8 units
- double-door models (pass-through) with a sterilising capacity of 2, 3, 4, 6 and 8 units for installations in the wall between the sterile and non-sterile area

Among the peculiarities regarding these autoclaves we underline:

- completely insulated chamber with rectangular section to minimize the steam, water and energy consumption and to simplify the cleaning;
- sterilization cycle controlled by a double, digital microprocessor interfaced by one panel with “touch screen”, coloured, trans-illuminated, 6” display, which shows the different stages, the cycle parameters (chamber pressure and temperature and jacket temperature) - both by numerical and trend ways
- possible anomalies or failures, the story of the technical interventions, the conditions of the components, etc... The sterilization cycle is then printed in a graphic and/or alphanumeric form through a 112 mm printer in conformity with UNI EN 285 technical rule.
- double computer: the first one controls the sterilization process and records its characteristic parameters, while the second and independent one records only the data related to every cycle; the system corresponds to the UNI EN 285 technical rule;
- possible control and self-diagnosis of all the functions on the interactive control panel;
- programmable cycles allow the parameters modifications (the programming access is sheltered by a confidential code);
- ergonomic load height;

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N

CSQ  
MED  
ISO 13485

CSQ  
ISO 9001

IONet  
THE INTERNATIONAL COOPERATION NETWORK

## Building Characteristics

- load-bearing structure made of AISI 304 stainless steel, completed by outer covering panels made of AISI 304 stainless steel, “scotch-brite” finish;
- sterilising chamber with jacket, obtained by a AISI 316 or AISI 316Ti stainless steel panel, welded in inert gas atmosphere, 6 mm thickness, “scotch brite” finish;
- automatic, vertical sliding doors, made of AISI 316 or AISI 316Ti stainless steel “scotch brite” finish, equipped with a anti-crushing tile according to the IEC EN 61010-1 and IEC EN 61010-2-041 security rules.
- autoclave packing achieved through a silicon gasket, seated in a hollow obtained through precision works by a ring soldered on the body, pushed towards the door through steam injection;
- vacuum sterilization process split according to the EN 285 rules with high vacuum pump with liquid ring, protected against the direct steam inlets;
- hydraulic circuit completely made of stainless steel (pipe-line, pipe-fittings valves) with hose fitting by mechanic packing;
- fluids control by pneumatic valves settled with hose fitting by mechanic packing;
- the pipe-line with flowing steam and hot water is insulated. The temperatures of the inner, accessible parts fall within the limits imposed by the IEC EN 61010-1, IEC EN 61010-2-041 security rules and by the UNI EN 285 technical rule;
- steam production through self-contained steam generator (completely insulated) with control of electronic level (in the electric and indirect steam versions);
- temperature and pressure regulation through separate sensors, according to the requisitions of the UNI EN 285 technical rule, to avoid auto-evaluation situations;
- possibility to open the doors in case of block of the control system and possibility to manually open the doors in case of current lack;
- sleeves corresponding to the UNI EN 285 technical rule for the plugging in of further drills and for the connection of the instruments necessary to qualify the physic performance foresaw by the UNI EN 554 technical rule.

## Technical Characteristics

The autoclaves allow the development of 20 programmes (16 productive +4 functional ones and / or tests) totally automatic and perfectly reproducible, which allow the setting out of the following parameters: lasting of the pre-heating, number of the vacuum changes or of the steam injections, lasting of the pre-vacuum, sterilization temperature and lasting, speed of the exhaust chamber, drying time, steam injection speed, cooling time etc... 8 programmes are free and directly configurable by the customer.

The standard configured equipment allows the treatment of the following materials:

- 134°C for porous materials in general: clothes, fabrics, fibres, etc...
- 134°C for surgical instruments
- 121°C for gum materials: gloves, catheters, dummies, etc...
- 134°C for porous materials and instruments packed in bags
- vacuum Test programme
- Bowie and Dick programme

All the messages are visualised in perfectly readable writings.

The equipment could be configured while it is built, to treat liquids in open or also hermetically sealed containers.

## Control Devices

On the autoclaves there are:

- general keylock switch
- trans-illuminated “touch screen” display for insertion/visualisation of the parameters/data of the sterilization cycle.
- push-buttons for the doors closing/opening
- analogue gage to show the pressure/vacuum inside chamber
- analogue gage to show the pressure in jacket/generator
- 112 mm graphic printing-machine

## Security Devices

The autoclave is provided with several securities, which avoid:

- programme start with a door not perfectly closed;
- heating start without water in the generator;
- pressure raising in the generator/jacket and in the chamber over the exercise value;
- passage to a next phase of the programme if the operative parameters of the last phase haven't regularly developed;
- doors opening under pressure/vacuum inside chamber
- door opening on the sterile side following test cycles or cycles with negative results (pass-through version).

## Fittings

The autoclaves could be equipped by the following fittings:

- automatic water softner
- silenced engine-compressor
- loading and unloading trolleys and automatic systems
- measure of the death-rate of the process - Fo
- basin for water recovering which, further than allow a water saving, guarantees that too high temperatures don't come to the exhaust.
- STERICOLUSSI LT supervision programme: allows the remote supervision of the sterilisator and allows the recording and the visualisation on PC of temperature and pressure parameters connected to every sterilization load, pointed out by the 2 computers seated on the machine. For every sterilization cycle there is a file in a compressed and crypted format, therefore not tamperable.

It includes all the parameters relative to the sterilization cycle (also with the temperature and pressures values pointed out by th control system and the independent recording system). This file could be used for the paper-less running of the traceable of the sterilising cycle foreseen by the law in force.

- STERICOLUSSI managerial programme: further than all the functions of the STERICOLUSSI LT programme, it also allows the control of all the processes connected to the sterilization by drawing and storing all the responsibilities regarding the process itself (as per the law in force) and the labelling of the sterilised devices as per the 93/42/EC rule.

The programme runs a system of passwords and selective qualifications, which allows the recording of all the responsibilities related to the productive cycle of sterile devices. The programme allows the integration of the sterilisator in an integrated system for the sterilization of medical devices.

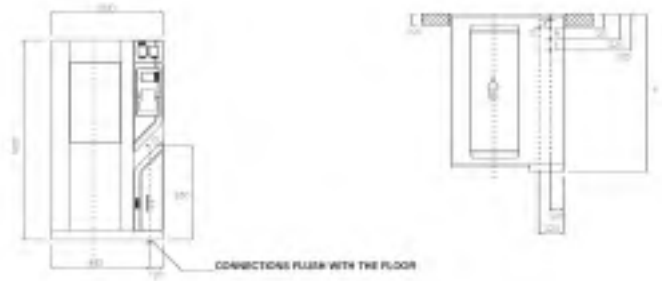
This systems in divided in: admittance, washing, packaging, sterilization, check certification, labelling, issue, delivery, set-patient society, etc.

*Unloading side for pass through version*



Planned and realized according to 93/42/EC rules, 97/23/EC rules complying with and bearing the NEMKO mark according to EN 285, EN 61010-1 and EN 61010-2-041 standards, tested as per the law in force regarding the pressure containers.

# U3



## Connections for U3 series

**A** - general free outlet 1 1/4" gas  
**C** - condensation outlet 3/4" gas  
**D** - steam inlet 3/4" gas

**E** - softened water inlet 10 l/min, 3 bar (± 10%) 1/2" gas  
**F** - compressed air inlet 5 l/min, 5 - 7 bar 3/8" gas  
**G** - electric cables outlet 3x380 +N+E

The connections must be flush with the floor.

**Notes:** The floor must be waterproofed. Install a four-pole magnetothermal differential cut out as near to the appliance as possible. The **A** outlet must be resistant to at least 140 ° C.

U3 MODELL	Doors number	Chamber dimensions (WxHxD) mm	Chamber volume		Overall dimensions (WxHxD) mm
			liters	s.u.	
U31N-V	1	440x700x850	245	2	1000x1800x1080
U31P-V	2	440x700x850	237	2	1000x1800x1100
U32N-V	1	440x700x1040	302	3	1000x1800x1265
U32P-V	2	440x700x1040	295	3	1000x1800x1290
U31N-E	1	440x700x850	245	2	1000x1800x1080
U31P-E	2	440x700x850	237	2	1000x1800x1100
U32N-E	1	440x700x1040	302	3	1000x1800x1265
U32P-E	2	440x700x1040	295	3	1000x1800x1290
U31N-I	1	440x700x850	245	2	1000x1800x1100
U31P-I	2	440x700x850	237	2	1000x1900x1290
U32N-I	1	440x700x1040	302	3	1000x1800x1265
U32P-I	2	440x700x1040	295	3	1000x1800x1290

U3 MODELL	U31N-V U31P-V	U32N-V U32P-V	U31N-E U31P-E	U32N-E U32P-E	U31N-I U31P-I	U32N-I U32P-I
FEED	direct steam	direct steam	electric	electric	indirect steam	indirect steam
ELECTRIC POWER [kW]	2	2	20	26	2	2
STEAM CONSUMPTION [kg/h]	50	50	-	-	60	60
WATER CONSUMPTION [l/min]	20	20	20	20	20	20
WEIGHT [kg]	680	730	750	800	750	800
AVERAGE STANDARD OF ACOUSTIC POWER (weighted A) [dB]	71,1	72,4	71,1	72,4	71,1	72,4

# U6



## Connections for U6 series

- A** - general free outlet 1 1/4" gas
- B** - safety valve outlet 1/2" gas
- C** - condensation outlet 3/4" gas
- D** - steam inlet 3/4" gas

- E** - softened water inlet 10 l/min, 3 bar (± 10%) 1/2" gas
- F** - compressed air inlet 5 l/min, 5 - 7 bar 3/8" gas
- G** - electric cables outlet 3x380 +N+E

The connections must be flush with the floor.

**Notes:** The floor must be waterproofed. Install a four-pole magnetothermal differential cut out as near to the appliance as possible. The **A** outlet must be resistant to at least 140 ° C.

U6 MODELL	Doors number	Chamber dimensions (WxHxD) mm	Chamber volume		Overall dimensions (WxHxD) mm
			liters	s.u.	
U61N-V	1	640x700x850	358	4	1300x1900x1080
U61P-V	2	640x700x850	346	4	1300x1900x1100
U62N-V	1	640x700x1040	442	6	1300x1900x1265
U62P-V	2	640x700x1040	430	6	1300x1900x1290
U63N-V	1	640x700x1340	575	8	1300x1900x1565
U63P-V	2	640x700x1340	564	8	1300x1900x1590
U61N-E	1	640x700x850	358	4	1300x1900x1080
U61P-E	2	640x700x850	346	4	1300x1900x1100
U62N-E	1	640x700x1040	442	6	1300x1900x1265
U62P-E	2	640x700x1040	430	6	1300x1900x1290
U63N-E	1	640x700x1340	575	8	1300x1900x1565
U63P-E	2	640x700x1340	564	8	1300x1900x1590
U61N-I	1	640x700x850	358	4	1300x1900x1080
U61P-I	2	640x700x850	346	4	1300x1900x1100
U62N-I	1	640x700x1040	442	6	1300x1900x1265
U62P-I	2	640x700x1040	430	6	1300x1900x1290
U63N-I	1	640x700x1340	575	8	1300x1900x1565
U63P-I	2	640x700x1340	564	8	1300x1900x1590

U6 MODELL	U61N-V U61P-V	U62N-V U62P-V	U63N-V U63P-V	U61N-E U61P-E	U62N-E U62P-E	U63N-E U63P-E	U61N-I U61P-I	U62N-I U62P-I	U63N-I U63P-I
FEED	direct steam	direct steam	direct steam	electric	electric	electric	indirect steam	indirect steam	indirect steam
ELECTRIC POWER [kW]	2	2	4	26	34	40	2	2	4
STEAM CONSUMPTION [kg/h]	45	60	70	-	-	-	60	75	90
WATER CONSUMPTION [l/min]	20	20	20	20	20	20	20	20	20
WEIGHT [kg]	850	980	1100	900	1000	1150	900	1000	1150
AVERAGE STANDARD OF ACOUSTIC POWER (weighted A) [dB]	77	77	77	77	77	77	77	77	77

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