Medical Waste Treatment

TRUSTER SERIES

INSTALLATION MANUAL

(Revision 1 of 22/7/2024)

SMI MEDICAL SRL
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CE

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ATTACHMENTS

REVISION INDEX

Revision	Date	Descriptio
1	22/07/2024	First emission

1.0 - Preparation for shipment

The device can be shipped as a single piece or in separate pieces (sterilisation chamber and module). The separated equipment can be moved through doors with a minimum width of 900 mm.

1.1 - Packaging

Two packaging solutions can be provided, depending on transport requirements: a simple cellophane film or a wooden case. The latter can be prepared for shipment by sea. The wooden case bears the conventional transport symbols and our company logo on all four sides. In addition, it also shows the symbols to hoist it using cables and automatic forklift trucks. The base is made like a pallet in order to be able to slip the hoist forks inside.

1.2 - Handling

You can use automatic or manual forklift trucks, hooks or cables to move and raise the steriliser. If the machine is wrapped in cellophane film, it must be raised from the ground using no. 8 (no. 4 per chassis) adjusting screws, which enable automatic or manual forklift trucks to be used, whereas at the top there are 4 nuts to fasten the eye-bolts outside the chamber in order to use cables or hooks (see figure “A” in the drawing on the follow page).

If it arrives packed in a wooden case, it can be raised by following the procedures given in figure “B” of the drawing on the following page. Use automatic or manual forklift trucks, or follow the instructions on the same drawing to use cables.

1.3 - Putting into position

You will need to prepare the installation site for the steriliser according to the installation drawing in order to facilitate connections with mains supplies.

Furthermore, it is of major importance for safety to scrupulously comply with the instructions in the drawing to avoid hazardous situations arising from the failure to apply the necessary protections. The steriliser must, therefore, be taken to the site established for installation and placed in such a position that the chamber is perfectly horizontal to allow for drainage.

In order to give the device the ideal conditions in which to operate, the ambient temperature in which it is installed must not exceed 25°C.

1.4 - Electrical connection

Description of incoming connections

Power connection
The device is supplied with an input terminal block for connecting the electrical power supply. Based on the indications in the electrical diagram, specialized personnel must connect a cable equipped with L1, L2, L3, neutral and earth terminals to the terminal block permanently.

Data line connection
The device is supplied with an Ethernet connection for connection to the RJ45 LAN network. The port features a passive ethernet isolation device with a DI (250 VAC / 300 VDC) isolation rating tested at 5 kVAC.
The connection can be made with a category 5 (Cat5) cable.

Insulation classification
The external circuit according to IEC 61010-1 must have basic insulation.

Environmental conditions:

Type of use	Internal use
Maximum altitude	2000 mt
Temperature	From 5 to 40°C
Humidity	max. 85% RH
Maximum input voltage fluctuation	+/- 10%
Overvoltage category	II
Pollution degree	2

Permanent link
The device must be connected to an external differential circuit breaker. This protective device must comply with IEC947-1 and IEC947-3 and installed in proximity to the device in an easily accessible point

Checks at first startup
After powering up the autoclave, check the direction of rotation of the vacuum pump and water pump motors). If the direction of rotation is opposite to that indicated, invert the L1 cable with the L2 cable.

Correlation between machine models and selection of the correct section of the protective line and ground input cables
The electrical connection of the device must be carried out by a professional electrician who has been appointed by the customer.

We recommend the type of H07N-F cables
Verify the laying of cables conforming to CPR 305/2011

The electrician who performs the system must certify that the earthing will comply with national plant engineering laws or the place of installation.

Cable sections required for devices with independent electric heating

Series	**Model**	**Elecrtic power** (kVA)	**Max. Phase current** (A)	**Voltage Frequency** (V)(Hz)	**Wire section 3P+N** (mm^2)	**Wire sectione PE** (mm^2)
T10	T10.E/SE	25	37	400V 50/60Hz	6	6
T25	T25.E/SE	60	87	400V 50/60Hz	25	25
T50	T50.E/SE	100	145	400V 50/60Hz	50	50
T100	T100.E/SE	130	188	400V 50/60Hz	70	70

1.5 - Hydraulic connection

The specialised personnel will prepare pipes and connect them to the steriliser via the fittings or hose pipes supplied with the machine, according to the instructions in the installation diagram. All mains' supplies must satisfy the requests for flow rate and pressure to carry out the sterilisation cycles correctly.

1.6 - Assembly and disassembly of steriliser

In the event of shipments of the steriliser in separate chassis parts (chamber and installation), follow the disassembly instructions below:

To disassemble the bioseal on the loading side:

- Open the door.
- Remove the fastening screws to disassemble the casing.
- Shut the door again.
- Screw the block bolts so they protrude.
- Insert the thread protector cover inside the block nuts.
- Open the door and rest it on the block nuts.
- Remove the cylinders from their supports.
- Separate the chamber chassis from the installation chassis (module).

To reassemble, follow the points described above in reverse.

1.7 - Final qualifying tests for installation, operation and performance

Check the device is operating correctly before using it for the first time.
To do this, you need to conduct final qualifying tests, which are normally divided into three successive steps: the installation qualifying test to check the device has been installed in compliance with the specifications (e.g. pressure and water flow rate, drain size, ambient temperature, etc.). This is followed by the operation qualifying test to check the device is operating correctly in the manner for which it was designed (e.g. cycle time, sensor calibration, etc.) and finally the qualifying test for performance. This involves a check on the treatment cycles with an effective load (e.g. cycle with waste at full load, etc.). Together, these qualifying tests guarantee the device will work correctly.

WARNING!
Do not use the device before carrying out the final qualifying installation, operation and performance tests.

FIG. A

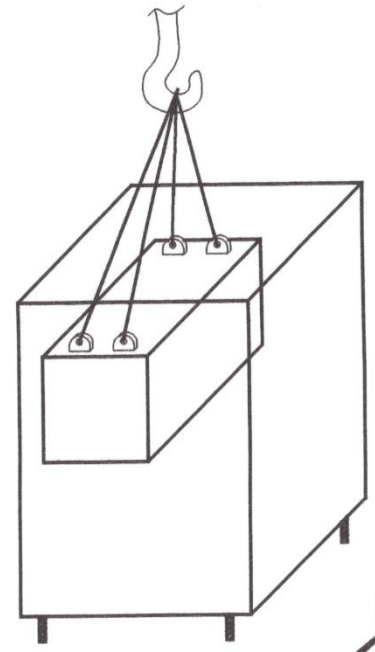

FIG. B