

DISINFESTATION STATION IN A CONTROLLED ATMOSPHERE ANOXI24



TECHNICAL DATA SHEET

-
IMPORTANT!

**Before operating the machine, read this manual carefully.
This manual should be kept carefully and should accompany the machine in all
changes of ownership that it may have in its life.**



CTS SRL

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FIRST

The operation and maintenance manual is an integral part of the machine and has been produced in order to purpose of providing advice and information necessary for:

- Proper awareness of security issues among operators
- The safe handling of the machine, packed and unpacked
- The correct installation of the machine
- Thorough knowledge of its operation and limitations
- its proper use in safe conditions; perform maintenance work, correctly and safely
- Dismantle the machine under safe conditions and in compliance with current regulations to protect the health of workers and the environment

This manual is intended for:

- to the owner of the car
- to the installer
- To the personnel using the machine
- To personnel performing machine maintenance

Before performing any operation, carefully read this manual and all notices displayed, especially those involving safety.

The instructions in this manual supplement the obligations dictated by the laws in force in the country where the machine is used regarding accident prevention and environmental protection.

In case of sale, attach this operation and maintenance manual to the machine.

This document assumes that in the facilities, where the machine is intended, the applicable occupational safety and hygiene regulations are observed.

The instructions, drawings and documentation contained in this manual are of a technical confidential, the strict property of CTS S.r.l. and may not be reproduced in any way, either in whole or in part.



CTS S.r.l. holds itself harmless from any liability for any damage caused to the machine, people, animals and property, as well as for lost production due to:

- *Use of the machine not in accordance with its intended purpose*
- *Failure to follow the instructions in the manual*
- *Use of the machine by unauthorized personnel*
- *Failure or inadequate maintenance of the machine*
- *interventions or modifications performed on the machine and not authorized by CTS S.r.l.*
- *Changes to preset parameters in the operator panel*
- *Use of non-original spare parts CTS S.r.l.*
- *Abnormalities in the power supply*

The use of the machine must comply with the provisions of the following operation and maintenance manual and is subject to compliance with the laws, administrative and regulatory provisions of the state in which the machine is installed and used.

Photographs and drawings in this manual are for illustrative purposes only and do not necessarily reflect updates or variations applied to the product itself.

Taking into account constantly evolving technological innovations, CTS S.r.l. reserves the right to make changes aimed at improving the product, without giving any prior notice.



MACHINE'S TECHNICAL DETAILS:

4.1 GENERAL DESCRIPTION

The machine is designed for disinfecting delicate items, such as sculptures, artwork, documents and archives. The process is done through a compressor that feeds a cartridge in which air is filtered to remove oxygen, leaving only nitrogen. This is then injected through a tube into a sealed bag containing the object to be disinfected.

The disinfection cycle lasts about 20 days, varying according to the user's needs. The compressor sucks up the oxygen in the bag and replaces it with nitrogen until the preset oxygen level is reached. If this level increases due to any micro-leaks, the machine automatically reactivates to restore it within the set limits.

The entire process is monitored by sensors inside the bag, which constantly communicate with the machine to ensure that disinfection is taking place correctly.



Photo 4.1 – General view of the machine



4.2 LIMITS OF USE OF THE MACHINE

The machine is designed exclusively for the disinfection of artworks, sculptures, documents and archives. The disinfection process is carried out solely through the use of nitrogen. The objects to be disinfected must be placed exclusively inside bags or booths with a volume between 1 m³ and 12 m³.



Photo 4.2 – sack for disinfestation



It is mandatory to use the machine in unenclosed, non-dusty environment and keep it away from atmospheric precipitation.



If the machine were to be used by the Customer or by a third party not respecting the limits of use set forth above, the warranty would lapse and CTS S.r.l. would be relieved of all liability for any damage caused to the machine, to persons, animals and property, as well as for failure to produce.



4.3 MAIN PARTS OF THE MACHINE

The main parts of which the machine is composed are described below:

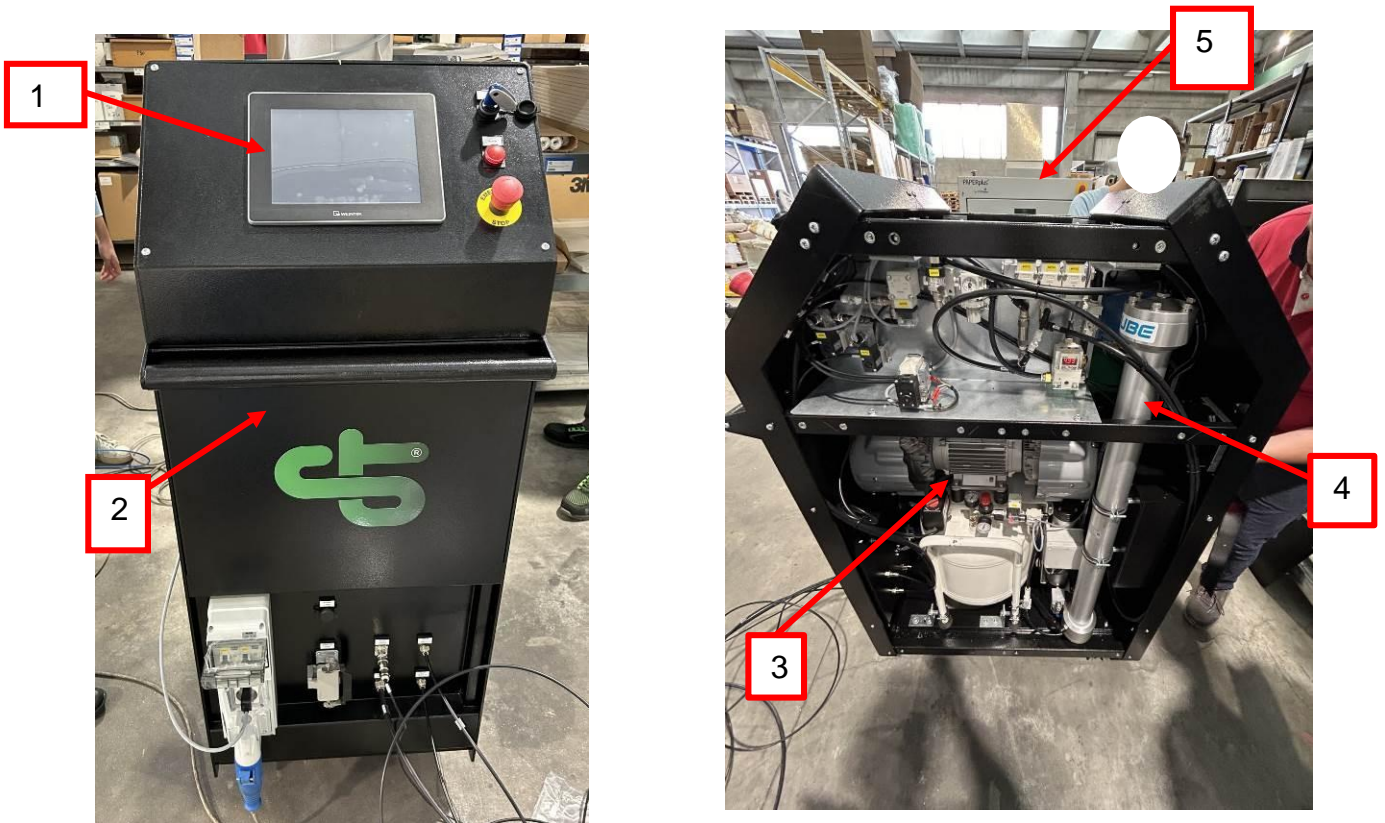


Photo 4.3 – Disinfestation machine

Legenda:

1. Panel HMI
2. Structure
3. Compressor with tank
4. Column filter separator (cartridge)
5. Ventilation System



4.3.1 Panel HMI

It is a 9.7" color LCD touch screen display built into the structure in the machine. All controls are realized through HMI.

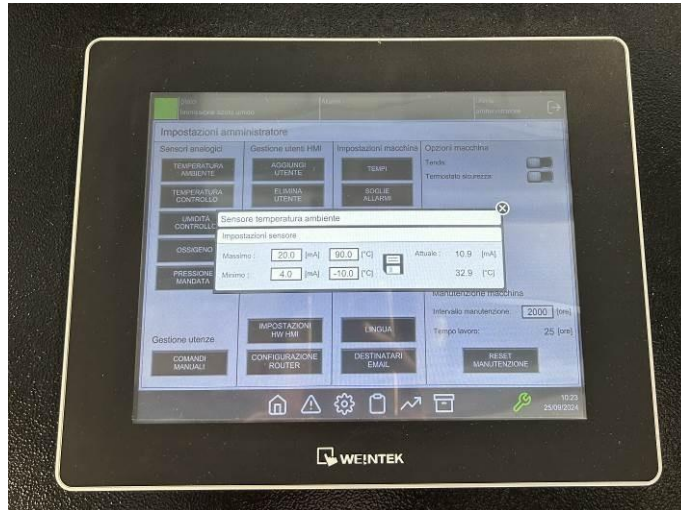


Photo 4.4 – Panel HMI

4.3.2 Structure of the machine

The structure of the machine was made entirely of painted sheet metal. The structure has a weight of about 104 kg and was made of 2 mm thick sheet metal.

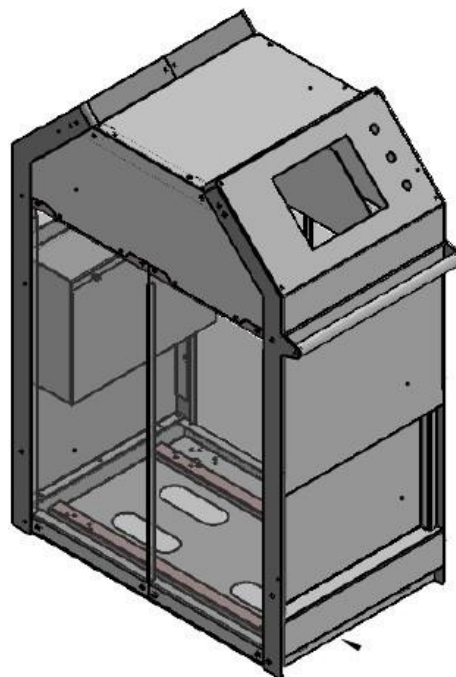


Photo 4.5 – Structure of the machine



4.3.3 Compressor with tank

The compressor has a single-phase motor having voltage 230VAC 50Hz, power 2.5CV (1.85kW), absorption 13.5A, 1400rpm, with two lightweight and compact die-cast aluminum heads, balanced to minimize vibration, having a maximum capacity 480lt/min and maximum pressure 10BAR. The compressor's 50L vertical tank is a compact model that has undergone special painting to prevent its internal corrosion over time, which is space-saving yet provides high performance. The compressor is equipped with automatic absorption air dryer and cooler, which ensure high air quality for the required application.



Photo 4.6 – Compressor with tank

4.3.4 Column filter separator (cartridge)

It has the function of filtering the incoming air, extracting oxygen and leaving only nitrogen at the outlet of the separator filter column (cartridge).



Photo 4.7 – Column filter separator

4.3.5 Ventilation System

Fans and vents have been installed in the machinery, which, due to the overheating produced by the compressor motor, go to expel the heated air inside the machinery.

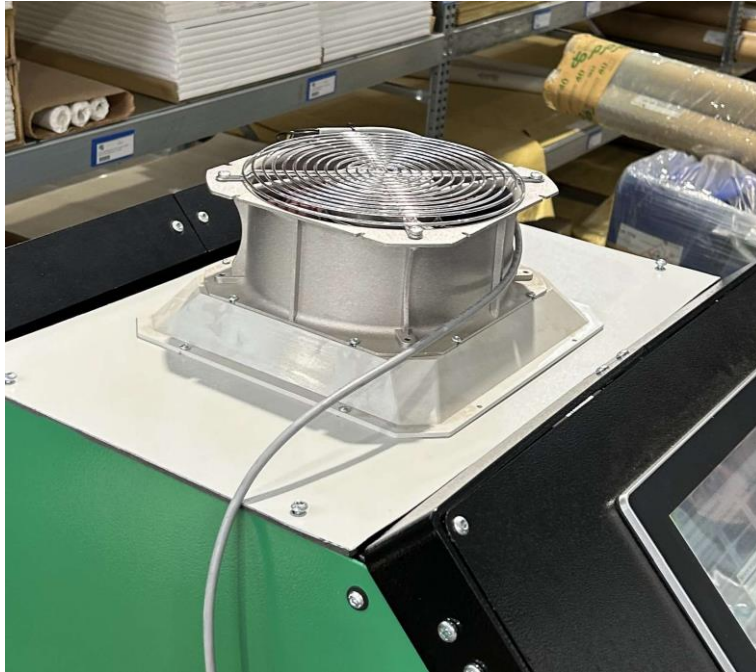


Photo 4.8 – Ventilation System

4.4 MACHINE IDENTIFICATION PLATE

On the front side of the machine near the electrical panel is affixed the CE plate.



CTS S.r.l.

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www.ctsconservation.com

Macchina: **Macchina per disinfezione**

Modello: **ANOXI24**

Matricola: **001**

Anno: **2024**



Photo 4.9 – Plate



4.5 TECHNICAL DETAILS

Width	mm	957
Depth	mm	550
Height of the machine	mm	1335
Weight	kg	160
Minimum / maximum ambient operating temperature (1)	°C	10 ÷ 40
Operating temperature	°C	15 ÷ 30

(1) The machine in the workplace will be installed over a structure of appropriate proportions according to the size and weight of the machine.

4.6 TECHNICAL ELECTRICAL DETAILS

Installed power	kW	3,5
Supply voltage/frequency	V - Hz	230 - 50
Rated absorption	A	16
Power supply	Mono	1PH+N+PE

4.7 PNEUMATIC POWER SUPPLY TECHNICAL DATA

Pressure max	Bar	10
Air type	Filtrated	
Feeding cylinders/actuators	Dry not lubricated	

4.8 MACHINE ACCESSORIES DESCRIPTION

CTS S.r.l. has provided as an accessory for the machine a 12-m³ tent that is used to perform the disinfection cycle on large objects. Inside the tent will be a small heater, connected to the machine, which will allow the temperature to be regulated.

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The implementation of the machine with elements and/or modifications carried out directly by the Customer or by third parties, would void the warranty, furthermore, CTS S.r.l. would be relieved from any liability for any damage caused to the machine and its components, as well as to people, animals and things, as well as for failure to produce.

