

ISOSEP MISTRAL D MOBILE

ISOSEP MISTRAL D MOBILE is an **easy to operate** and safe **PORTABLE DISINFESTATION STATION** using nitrogen technology (**ANOXIA**) that allows you to treat objects of any size and shape from a volume of 1 **up to 12 cubic meters**.

Thanks to the portability of the system that measures only 45x88x130 cm and 140 kg, is **movable on wheels** and relies on a **BUBBLE** like chamber, it is easy to prepare the anoxic environment around the object to be treated with the enormous advantage of flexibility in the treatment of, for example:

- **A Chariot** like the one placed as Gate Guardian at National Museum in one single treatment.
- **A full cabinet** of books/artifacts without taking the same out.
- Artifacts displayed in museum galleries **without removing them from the visitor's view**, by just creating a temporary case around them.
- Artifacts displayed in the **open air** by placing the machine indoors, connected to the "Bubble" with the pipes only.
- Collections belonging to other institutions can be treated by temporarily moving the system there, instead of moving their entire collection to your premises.
- Big paintings along with frame and any other **over size artifact** that can not fit in a standard chamber.





DISINFESTATION STATION IN A CONTROLLED ATMOSPHERE

Disinfestation technology in a controlled atmosphere is the natural ecologic alternative to treatments based on toxic harmful substances such as methylbromide, ethylene oxide, and formaldehyde. The principle of *Disinfestation in a controlled atmosphere* is based simply on modifying the proportion of gases which are present in the air we normally breathe every day and, in particular, on reducing the amount of oxygen while increasing the amount of nitrogen, thus determining the death by anoxia of biotic agents at all stages of development (egg, larvae, chrysalis, adult). This mature and proven and does not interact with the materials under treatment.

The process can be repeated from time to time and totally eliminates the risk of interaction or reaction of the materials the protected item is made of and it excludes therefore all risks of exposing these items to an accelerated decomposition process. This system is ideal also for long term preservation of the said objects, protecting them from biotic agents, dust and atmospheric pollution.

Isosep Mistral D Mobile is a portable wheeled integrated system of anoxic disinfestation, by means of nitrogen, that operates independently and automatically and is set and controlled by a dedicated software installed on the laptop. This device can produce high purity nitrogen by making use of advanced technologies based on the molecular separation of common atmospheric gas. The system allows the treatment of the artifacts both in a control- The treatment begins preparing one or more plastic bags inside which the items to be treated are placed. These bags are connected to **Isosep Mistral D Mobile** with a special pipe and - rate automatically for the duration of the treatment, bringing at full capacity the artifact contained in the bubble and ensuring the maintenance of the set values, switching off and on depending on the needs. **ISOSEP Mistral D Mobile** guarantees to work in full safety for the operator and the environment, carrying out constantly also the environmental analysis of oxygen, alternated with the analysis inside the bag, whose values will be handled automatically by the software. In case of anomalous environmental values, the software will stop the operation of the entire system warning the operator through the installed alarm. The System allows you to work on several bags at the same time. The System allows the calibration of the oxygen sensor directly from the integrated control panel.

COMPOSITION

Structure in painted steel

Structure in steel painted with epoxy powders, with handlebar and casters (two of them swivel with lock).

Molecular separation unit

This device can produce high purity nitrogen by making use of a system based on the molecular separation of common atmospheric gas, whose predominant part is composed by nitrogen. As no gas or other combustible material is involved in the process, the system is not subjected to particular safety regulations and can be set up everywhere. Besides, the air molecular separation does not produce undesirable gas nor other impurities.

OILLESS compressor assembly

Oilless compressor, mounted on shielded bearings lubricated inside shaft is borne by both sides so to reduce at full the possible breakings and diminish the efforts that the electric motor has to suffer. The labyrinth suction is innovative and makes the pumping group noiseless.

Electronic analyzer

Electronic analyzer with electrochemical cell for the purity control of the generated nitrogen, complete with a pump for air sample intake and programmable alarms in case the threshold values should be totally or in part exceeded.

Humidification unit

The control and maintenance of a set rate of relative humidity keep the same air, that is to be capable of maintaining a set level of

Temperature/humidity probe

The probe has been created for precise and reliable measurements ensures a reliable measurement and an excellent output.

Manometer for measuring the pressure

The manometer is particularly suitable for portable machines vibration absorption.



Float type flow meter with pin regulation

allows a precise adjustment of the discharge.

Emergency head switch

Electric panel with socket CEE 16A 220V single phase and thermal-magnetic circuit breaker

Connections for sensors and PC

Joints for nitrogen and analysis pipes.

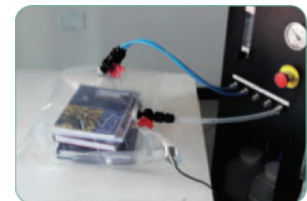


Heat-seal pincers with triple welding

Pincers, simple to use, which allow an easy and fast welding. The ergonomic handle in insulating plastic material protects the operator's hands. Adjustable Temperature up to 250 C. Welding joint: 300 mm long, 12 mm wide. Power supply 230V Single-phase 360W. Weight 1.3 kg.

Multi-layer film coil

PA-EVOH multi-layer barrier sheet to create the gastight environment. The PA-EVOH multi-layer barrier sheet has an almost null permeability to oxygen which makes it the best material for treatments in modified/controlled atmosphere. Roll ca 400 m long – h 1150 mm – weight ca. 30 kg – permeability <math>< 1 \cdot 10^{-5}</math> cc/m² 24 h 1 bar



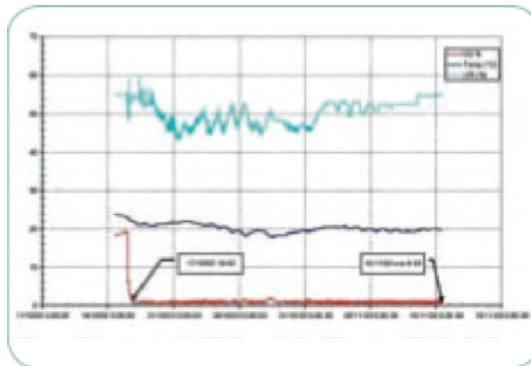
IMPLEMENTATION OF THE SYSTEM

Laptop

Laptop of the latest generation complete with ISOCAT Operational Software and Windows operating system.

Software "ISOCAT"

The program schedules the data display, with fixed time, the printing of the same data, which can be done at every operator's request. The user could ask the program, in any moment, for the trend of the last 24 hours, of the last week, of the last month, and/or the last year (as much as one like) in the shape of diagrams with different scales.



TECHNICAL SPECIFICATIONS

- Nominal nitrogen flow: 1.6 m³/hour (at 99.5%)
10.65 m³/hour (at 99.9%)
- Power Supply: 230V single-phase 50 Hz
- Power Consumption: 1500 W
- Total weight including all accessories: 220 kg approx

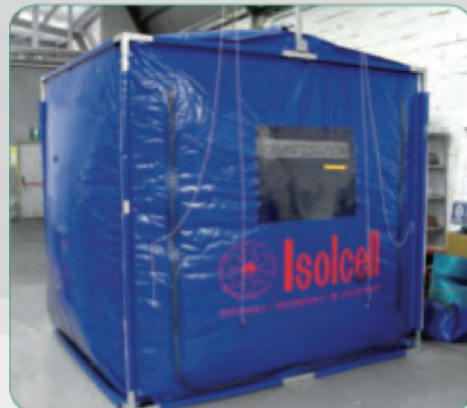
- No. 1 nitrogen pipe coil 100 m long
- No. 1 analysis pipe coil 100 m long
- No. 10 taps with airtight closure ring nut for connections to the bag
- No. 5 push-in fittings for nitrogen pipe
- No. 5 push-in fittings for analysis pipe

MOBILE DISINFESTATION CHAMBER


a-made-to-measure chamber with a volume up to 12 cubic meters that incorporates the advantages of a permanent decontamination room but with more flexibility because it can be easily disassembled, shifted and reassembled in a different place/museum/archive.

Both the **STATION** and the **CHAMBER** can be **easily transported** in a big car

The combination of the **USER FRIENDLY** software and the **security systems** installed in the equipment is such that they allow the operator to handle the disinfection process safely for the objects to be treated as well as for the operator himself after a one-hour training session only.



STP

 **CTS Restoration
Products India Pvt. Ltd.**

6, Dera Mandi Road, Mandi - Mehrauli, New Delhi - 47
Phone. +91 11 65190777 | Email: cts.india@ctseurope.com
www.ctseurope.com

C.T.S. S.r.l., Headquarter

Via Piave 20/22-36077
Altavilla Vicentina (Vi) Italia
Tel. +39 0444 349088
Fax. +39 0444 349039
cts.italia@ctseurope.com

C.T.S. FRANCE S.A.R.L.

26 Passage Thiéré-75011 Paris
Tel. + 33 1 43556044
Fax + 33 1 43556687
cts.france@ctseurope.com

C.T.S. ESPANA S.L.

C/Monturiol, 9-Pol. Ind.
San Marcos-28906 Getafe Madrid
Tel. + 34 91 6011640
Fax + 34 91 6010333
cts.espana@ctseurope.com

C.T.S. ROMANIA S.R.L.

Str. Raului, 23-550137 Sibiu
Tel. +40 269 231476
Fax +40 269 231475
cts.romania@ctseurope.com

C.T.S. SUISSE SA

Via Carvina, 1-6807 Taverne (Ti)
Tel. +41 91 9453830
Fax +41 91 9453831
cts.suisse@ctseurope.com

C.T.S. ISTANBUL Ltd.

Şti. Huzur Mah. Menderes
Cad. No.4 34396 Şişli / İstanbul
Tel. +90 212 2848445
Fax. +90 212 2848446
cts.istanbul@ctseurope.com