



CONSERVER

Catalog



The Company

RGI bioSteryl Tech Srl, a company specialized in Engineering for Cultural Heritage, began operating in the late 90s and increasingly established itself as a unique company, known and appreciated globally.

As a further demonstration of the uniqueness and quality of our services it should be emphasized that RGI bioSteryl Tech is the only company that carries out pest control services by its own production equipments.

CONSERVER® System

The CONSERVER® is an apparatus that was created for the vacuum preservation of paper materials but, its versatility allows using it with different kind of objects. In fact it is used also for the preservation of wooden materials or metal objects in order to prevent oxidative processes.

For over 10 years the CONSERVER® has been the most popular equipment in Archives and Libraries.

The CONSERVER® removes the air contained in a special plastic envelope which can be used for preserving a book, a file or a particular object and consequently, it creates an adjustable vacuum level and then seals hermetically the envelope itself. Consequently, the object is isolated from the outside, remaining in contact with very little air and hence protected.

The CONSERVER® is composed of two parts: the main unit and an auxiliary part that can be used to extend the dimensions of the working plane. Through the main unit, it is possible to check all the operating parameters and make some adjustments.



Birth of CONSERVER® - The Challenge of RGI

The idea of creating the CONSERVER® was born in the late nineties when important Managers of Libraries and Archives expressed the need for a low-cost and high quality machine that would allow to preserve paper materials in a secure way and, at the same time, make it easily storable.

After some improvements, the CONSERVER® has become the most popular machine in Archives and Libraries for about 10 years: this is due to the specific designing developed for meeting the real needs of these Organizations: it contributes to the success of this machine.

Features of the CONSERVER®

Compared to others machineries on the market, the CONSERVER® has been designed with high engineering standards and, at the same time, maintaining an extreme simplicity of use.

The first distinction that must be noted between the CONSERVER® and other vacuum machinery is the vacuum rate that can be applied to objects. Other apparatus, called “bell-shaped”, which come from the world of food preservation, tend to reach the maximum vacuum in a fraction of a second, and it may imply the risk of damaging treated objects. The CONSERVER® reaches the required vacuum level slowly, or it is also possible to set a manual adjustment in order to reach the desired vacuum level gradually.

Another great advantage of the CONSERVER®, which distinguishes it from other similar products, is the possibility of using envelopes of different sizes. In other words, the CONSERVER® allows choosing the optimal size of the envelope; in fact it is possible to choose between different formats that depend just on the size or volume of the object.

A very popular feature of the CONSERVER is the size of the welding bars that are very wide, it means that it is possible to create envelopes with sealable side up to 53 cm and this is very important for the packaging of large objects.

The convenience of the CONSERVER® does not only consist in the purchase price, but also in the great economy of its using and its low maintenance. It is easy to verify this, for example, by just considering the type of used pumps, that are dry, with long maintenance time and that do not require either the replacement or checking the level of the lubricating oil.

Evolution of CONSERVER®

The CONSERVER® system has undergone considerable functional and engineering improvements. RGI is always available to study and design special machineries and CUSTOMIZED CONSERVERS® with different features from the standard version, in order to suit specific customers' needs.

1. Applications of CONSERVER®

The uses and purposes of the CONSERVER® are numerous: **Protected Conservation** of objects; the stiffening of breakable paper materials; the better **Reserved and Secure Vacuum Storage** of objects; the **Rigidity of archived materials**; the **Reduction of conservation/storage spaces**; the **Protection of wet paper materials**.

Normally the application of vacuum preservation is carried out to paper materials and to the field of Cultural Heritage, in reality the scope of application is much wider, in fact it can be extended to the industrial sector such as chemical and food industries.



Protected Storage

Enemies of materials are many, such as: dust, humidity, air pollution, insects, microorganisms, water, the oxygen in the air, the light itself, without forgetting all risks that may be caused by disasters, such as flooding.

The CONSERVER® is also very suitable for preserving antique paper materials due to the possibility of regulating the vacuum. Because of this feature any material and, therefore any kind of object, can be protected from oxidizing and corrosive chemicals (acids) that are present in the air.

Safe Storage

A direct consequence of the vacuum conservation is to **protect treated objects from unauthorized accesses**. The opening of the enclosures implies the cutting of the envelope which would leave an obvious sign of forced entry. The restoration of the vacuum enclosures and the sealing involve necessarily the use of the CONSERVER®.

Reserved Storage

Through the CONSERVER® it is possible to combine both the protection provided by enclosures and the possibility of concealing contained objects from prying eyes. In fact RGI is able to provide customers with special envelopes equipped with an additional aluminium thin layer that protects preserved objects from all light frequencies, but also from prying eyes.

Hardening of Stored Materials

The CONSERVER® has become very popular among the newspaper libraries as the preservation of newspapers and magazines has always created a lot of problems, both in terms of quality of preservation and ease of storage and consultation.

The CONSERVER® permits to create enclosures with different vacuum levels and to obtain high rigidity to paper materials which usually are yielding and/or flexible.

CONSERVER® allows storing newspapers and magazines in vacuum enclosures which guarantee rigidity to them and consequently, they can be stored in an upright position, as they would be conventional hardcover books: in this way they can be catalogued and consulted easily.

Reduction of Space

The CONSERVER® allows reducing the storage space that is occupied by the preserved material; in the case of paper material – such as administrative practices, magazines or newspapers – it is possible to obtain a reduction of volume up to 40%.

Protection of Wet Materials

In the event of flooding and/or inundation, the key of successful protection consists in undertaking **immediately** actions in order to prevent the formation of mold and funghi. Having adequate pieces of equipment, that allows taking immediate actions, could prevent a serious accident becoming a disaster.

In fact, it is known that the worst consequences on paper material, which is damaged by water, are not only that you can see immediately, but primarily those related to delays in restoration and drying. Immediately after of being affected by water, paper materials are subjected to strong attacks especially by mold which, in presence of air, could cause serious damages even during the first week after the soaking. Unfortunately it was observed that sometimes remediation actions were taken on several months after the soaking, with disastrous consequences for books, folders, paper materials and so on.

The CONSERVER® permits to isolate and seal the wet material in a very short time, slowing drastically the formation of mold and fungi and avoiding serious damages caused by fungal infections without involving cryogenic processes that are very difficult and expensive.

Moreover, paper materials that had most of the water removed by using the CONSERVER® had also another very important advantage: in fact **defects of planarity and/or undulation were drastically reduced or eliminated**. These defects are not removed by using cryogenic processes.

2. Optional Devices

The CONSERVER®, in all versions "Standard", "Power", "Special", on request can be equipped with "**DRY**" optional device. This optional allows the use of CONSERVER with wet material, being able to extract the water.



Technical Data of CONSERVER®

	STANDARD	POWER	SPECIAL
Maximum width of the envelope on the open side	52.5 cm	52.5 cm	Customizable
Maximum length of the envelope		No limit	
Support surface for the artwork (without auxiliary plane)	60 x 22 cm	60 x 22 cm	Customizable
Removable auxiliary support surface (extension)	60 x 66 cm	60 x 66 cm	Customizable
Sealing	Thermal, thermo-controlled, 6 mm width		
Sealing bar	Teflon-coated, manual handling and automatic operation		
Vacuum Chamber	Useful surface 52.5 x 7.5 cm, with manual closure	Useful surface 52.5 x 7.5 cm, with manual closure	Customizable
Minimum pressure	110 mbar	10 mbar	110 mbar/10 mbar
Maximum suction flow	32 litres of air per minute @ 50Hz	60 litres of air per minute @ 50Hz	32/60 litres of air per minute
Supply voltage		220/230 V. 50 Hz	
Voltage of the internal electrical system		12V	
Power consumption	Suction 200W max Welding 160 W max	Suction 270W max Welding 160 W max	Depending on the chosen option
User Interface	<ul style="list-style-type: none"> - Led buttons - Handle for the vacuum regulation - Control lights 		
Display	Alphanumeric 20x4 characters Blue backlit led.	Alphanumeric 20x4 characters Blue backlit led.	Alphanumeric 20x4 characters Customisable RGB colour backlit led.
Vacuum suction	Controlled and monitored electronically		
Instrumentation	<ul style="list-style-type: none"> - Precision vacuum gauge - Welding time on the graphic bar - On display user guide with user interaction 		
Activations	<ul style="list-style-type: none"> - Complete cycle - Welding cycle only - Reset - Manual vacuum chamber - Manual vacuum regulation - Manual handling sealing and automatic activation 		
Management and control devices	Microprocessor technology for management of work phases, control actuators, Error Check, Safety		
Frame and Chassis CE Mark	Neutral anodized aluminum According to Eu Directive 765/2008		
Weight	23 Kg, including auxiliary bolster	24.6 Kg, including auxiliary bolster	Depending on the choice
Dimensions (H x W x D) (excluding auxiliary bolster)	60 x 50 x 33 cm	60 x 50 x 33 cm	Depending on the request

Business information

Please, do not hesitate to contact us if you require any information, our references or further details about our machineries: it will be a real pleasure for us.