

When the infected animal is in the **Isocage™** and the hazardous pathogen is contained at cage level, the handling of the animals and the cages has to be carried out without contaminating the room environment and the user thanks to the secondary enclosure of the **Isocage™** working system, which is represented by a Class II laminar flow cabinet that guarantees protection to operator, environment and content. Within this equipment the opening of the **Isocage™** can safely occur.



To properly disinfect externally and thus to move back the **Isocage™** (opposite the transfer chamber), a "Dunk Tank" is connected on the other side of the IBS. The **Isocage™** is water-proof and can easily be fully immersed into an appropriate disinfectant solution for the required time of action of the chemical. It is moved automatically from one side to the other of the dunk tank and is thus completely washed and microbiologically cleaned, dry in a few moments and ready to be fitted onto the rack.



To properly disinfect externally and thus to return the **Isocage™** to the rack (opposite the transfer chamber), a "Dunk Tank" is connected on the other side of the **IBS**.



The **IBS** has a port (double door) that connects to an autoclavable transfer chamber that can be moved straight to the autoclave.

DIMENSIONS AND CONFIGURATIONS

ISOCAGE™ Overall Dimensions: mm 390 x 215 x 190 (L x W x H) Floor Area 504 cm²

Cat. N.	2ISO30CP*	2ISO36CP*	2ISO60CP*	2ISO72CP*
N. of Isocages™	30*	36**	60***	72****
Side(s)	Single	Single	Double	Double
Isocage™ Unit Overall Dimensions (L x W x H) mm	1710 x 550 x 1958	1710 x 550 x 1958	1710 x 880 x 1958	1710 x 880 x 1958
Rack Dimensions (L x W x H) mm	1428 x 550 x 1688	1428 x 550 x 1936	1428 x 880 x 1688	1428 x 880 x 1936
Weight (kg) n*****	216	236	323	363

- * Rack + Air Handling Unit
- * 29 complete Isocages + 1 Control Cage
- ** 35 complete Isocages + 1 Control Cage
- *** 59 complete Isocages + 1 Control Cage
- **** 71 complete Isocages + 1 Control Cage
- ***** n Weight of the Isocage™ Unit (AHU): 86 Kg

ISOCAGE™ Biosafety Station (IBS)

- **Electrical supply:**
230 V/50 Hz - 115 V/60 Hz
- **Overall dimensions:**
2730 x 880 x 2180 mm (w x d x h)
- **Chamber dimensions:**
1465 x 550 x 690 mm (w x d x h)
- **Power:**
7,5 A
- **Power consumption:**
1,7 KVA
- **Weight:**
550 Kg

All specifications and descriptions are subject to change without notice.

The
Isocage™
System

Isolator at Cage Level



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ISO 9001 - Cert. n° 0075

CAT06BING005 - 09/06 - REV.03

TECNIPLAST®

THE ISOLINE™ SYSTEM: ISOLATOR AT CAGE LEVEL!

The Isoline™ system is Tecniplast's answer to the requirements of ABSL3 workers in terms of safety and flexibility. The total biocontainment concept typical of Isolators technology is moved at IVC cage level fusing the advantages of the two technologies. Ergonomic and space requirements, among other disadvantages intrinsic to Isolators, are removed, maintaining at the same time the very high level of protection for people and the environment with no compromises.

- The Isoline™ System consists of a dedicated cage, a dedicated rack and Air Handling Unit and a dedicated Class II Biosafety Station.
- The Isoline™ is the first hermetic ventilated cage, working at a highly consistent negative pressure and it is able to maintain the pressure mode when disconnected from the ventilating rack. The Air Handling Unit is an integral part of the Isoline™ Unit and it is locked to the rack.
- A Biohazard Class II cabinet, the Isoline™ Biosafety Station (IBS), purposely designed, ensures the safe handling of the animals.



Isocage™ Unit

The Isocage™ Unit is composed of a dedicated rack, a dedicated Air Handling Unit and the Control Cage.



Isocage™ BIOSAFETY STATION

The Air Handling Unit is an integral part of the Isocage™ Unit and it is locked to the rack. It is removable for washing/autoclaving of the Isocage™ Rack (ICR). We recommend to install the system in facilities with a central UPS. The AHU is provided with a Soft Touch screen and with an UPS guaranteeing at least three hours autonomy and featuring a pre-filter and a Hepa filter both on the Supply and Exhaust. The AHU works by extracting air from the cages. The air arrives in the cage as an effect of the aspiration carried on by the twin fan module.



The Control Cage monitors the pressure of the cages and sends the data in real time to the air handling unit which adjusts the speed of the twin fans to achieve the desired negative pressure.

The Control System (composed of the Control Cage and the AHU) also monitors the airflow inside the cages triggering an alarm when the flow drops below the set point.

The CONTROL Cage



The AHU features connection ports that transmit the alarms and parameters to the building management system.



The Isocage™ MINI has been designed to complete the Isocage™ family and to meet the need of having a small Isocage™ unit when the autoclave is small, for small laboratories working with infectious diseases, for quarantine purposes and as a transport trolley, too.

It has supply pre-filters and HEPA filter on the lower right-hand side; exhaust pre-filter and HEPA filter on the left, and in the middle the soft touch for setting. On top of this trolley there will be the possibility of installing mini Isocage™ racks of 8 or 12 cages. Those racks have 4 columns and respectively 2 or 3 rows of Isocage™ and they are screwed on to the trolley structure. When you need to remove them for autoclaving cycles you unscrew them, and simply slide them out.

Code 2ISO08CP: the unit consists of a trolley equipped with twin fan motor blowers to create the depression inside the cages, pre-filters and HEPA filters for both supply and exhaust, removable mini rack for seven complete Isocage™ + the Control Cage.

Code 2ISO12CP: the unit consists of a trolley equipped with twin fan motor blowers to create the depression inside the cages, pre-filters and HEPA filters for both supply and exhaust, removable mini rack for eleven complete Isocage™ + the Control Cage.

Isocage™ Mini



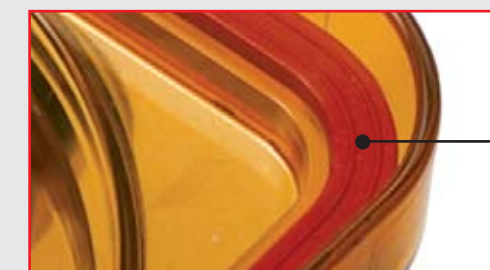
The Isocage™



The ISOCAGE™ features a HEPA filter on the Exhaust valve protected by a pre-filter, GUARANTEEING TRUE BIO-CONTAINMENT AT CAGE LEVEL!

The HEPA filter and the pre-filter can be removed and quickly changed when the cage is open and in a protected environment.

The ISOCAGE™ is a hermetic IVC that creates a total containment comparable to that obtained through isolators while at the same time not losing the advantages of simplicity of use typical of IVCs.



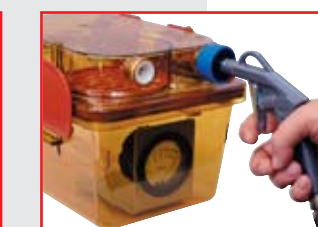
The pressure inside the cage is obtained immediately when the cage is fitted into a rack via its runner. Negative pressure is maintained by a soft silicon seal, positioned between the top and the cage base, shaped to give the best containment and long life.



Supply and exhaust valves at the top are airtight both during closing and opening thanks to a silicon o-ring.

The Isocage™ guarantees a stable, lasting hermetic seal under both normal working conditions and when the cage is removed from the rack.

The ISOCAGE™ features twin clamps on the long sides, provided with many points of closure, to evenly and securely distribute the closing pressure on the airtight seal. The clamps also feature safety buttons preventing incorrect closure and accidental opening.



Hermeticity tests are carried out on every single Isocage before it is packed and sent to the customer.

