

- **Isolator at cage level:**  
it combines the protection of an Isolator with the ergonomics and density of an IVC
- **HEPA filter at cage level**  
to maximize personnel protection
- **Air tight cages with high negative intra-cage pressure**  
for ideal biocontainment
- **Flexibility: multiple studies on the same rack**



## Introduction

ISOcage N system has been designed in order to achieve the safety and protection of an isolator coupled with the advantages of an IVC, in terms of ergonomics, flexibility and density.

ISOcage N is an isolator at cage level that allows the carrying out of multiple studies on the same rack, providing **strong Biocontainment** for maximum personnel protection.

### 1/Ideal Biocontainment

- Exhaust air is HEPA filtered at cage level: **complete confinement of biohazards at cage level**, keeping the air circuits sterile.
- Twin clamps and double gasketed self-closing nozzles: ISOcage N is a **real airtight, hermetic cage**. Once removed from the rack, it remains **pressurized** for a long time: **safety** and **protection** for operators.
- Pressure driven microprocessor based ventilation control: **constant high negative pressure** to provide **safe environment**.

### 2/Operators Safety

- High resistant Polyphenylsulfone cage to ensure the integrity of the cage even if dropped, hit or mechanically stressed.
- Two blowers working simultaneously: **redundancy** in the unfortunate case of a blower failure.
- Battery back-up system can provide adequate **ventilation** for more than **24 hours in case of power failure**.
- Possibility to export data via USB, error recording, on-line help menu, UPS-saver mode, connection to BMS: **safety** and easy **data monitoring**.

### 3/Density and Ergonomics

- Being an isolator at cage level, ISOcage N allows the carrying out of **different studies on the same rack**, achieving an **IVC-like density**.
- Large touch screen with **user-friendly interface**: **easy** to use and **check parameters** or eventual **alarms**.
- Automatic Visual Docking Indicator and great visibility: operator can immediately see if the cage is properly in place for a **safer and easier daily check**.

### 4/Animal Welfare

- The air handling unit provides ventilation **without transmitting vibrations** to the rack, ensuring **standardization** of the experiment.
- Air valves placed in the top in order to **avoid undesired variables that may affect research outcomes**, such as air drafts at animal level.

### 5/Low Running Costs

- New low consumption ECM DC-Blowers together with protection-related lower personnel costs reduce the overall system's running costs.



## HOUSING

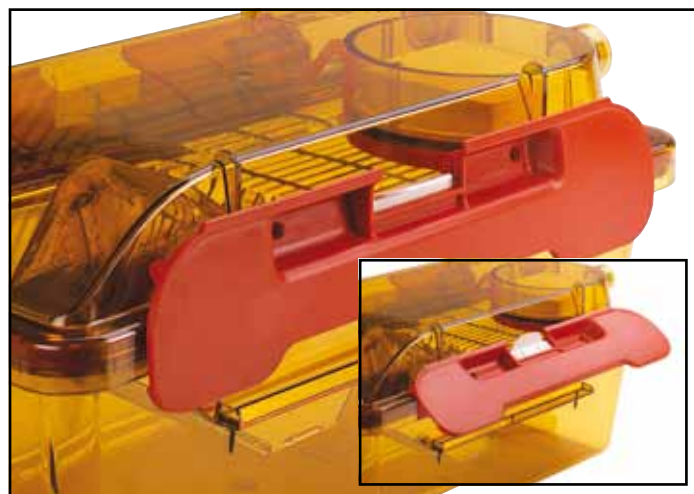
### ISOcage N: isolator at cage level

Ideal Biocontainment / Operators Safety

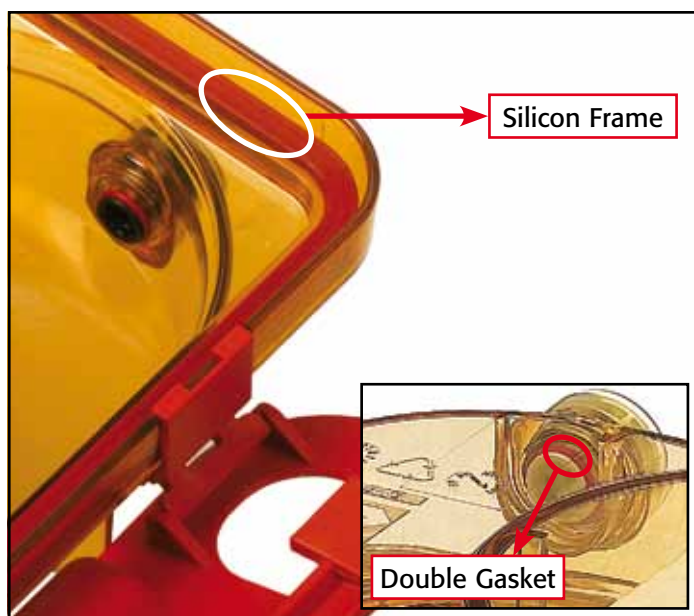
# 1&2



Cage Level HEPA filter for exhaust air



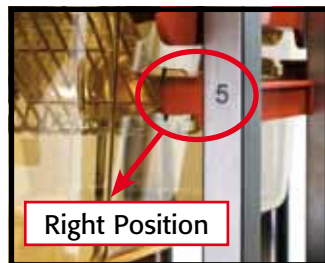
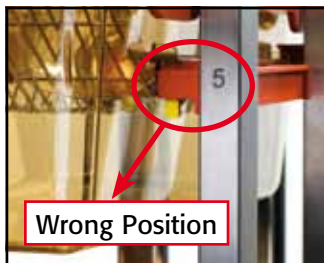
Special closure clamps



Hermetic cage



Multiple isolators in an IVC rack footprint



Automatic visual docking indicator



Large touch screen



Possibility to export data

TECHNICAL SHEET

Overall dimensions (L x W x H):

ISOcage: 384 x 216 x 190 mm / 15.12 x 8.52 x 7.47 in  
 ISOrat: 384 x 216 x 242 mm / 15.12 x 8.52 x 9.53 in

Floor area:

ISOcage: 504 cm<sup>2</sup> / 78.12 sq in  
 ISOrat: 468 cm<sup>2</sup> / 72.54 sq in

Feeder capacity:

600 ml

Bottle capacity:

400 ml

Rack dimensions:

Rack	Configuration	Overall Dimension (rack + AHU) (L x W x H)
ISO30N	30 cages (6w x 5h) Single sided	1838 x 590 x 1958 mm 72.35 x 23.23 x 77.07 in
ISO36N	36 cages (6w x 6h) Single sided	1838 x 590 x 1958 mm 72.35 x 23.23 x 77.07 in
ISO60N	60 cages (6w x 5h) Double sided	1838 x 901 x 1958 mm 72.35 x 35.45 x 77.07 in
ISO72N	72 cages (6w x 6h) Double sided	1838 x 901 x 1958 mm 72.35 x 35.45 x 77.07 in

Air Handling Unit

Construction:

Stainless steels

Control:

Microprocessor controlled - pressure driven, negative pressure mode, with touch screen panel

Power Consumption:

≤ 200W

Heat Loss:

≤ 40W

Noise:

≤ 50dB

Communications:

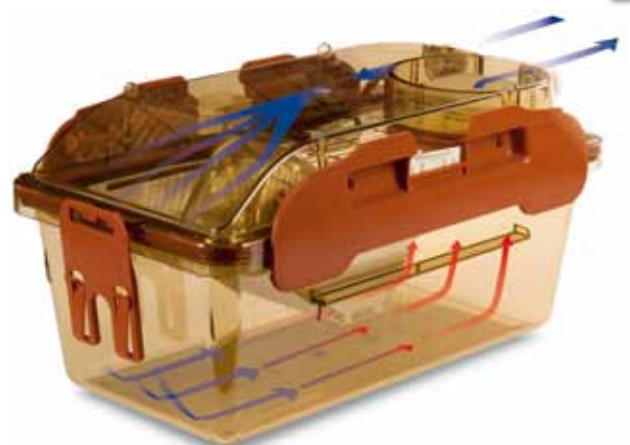
Serial Data transfer (protected by password) - Dry contact for integration to the BMS

HEPA Filters:

99.995% at the most penetrating particle size - H14 HEPA filters. Each AHU is leak & HEPA filter installation tested (D.O.P.)

G4 Prefilters Arrestance:

≥ 90% (average synthetic dust weight arrestance)



Exhausted air is HEPA filtered at cage level

## Options

- Wire bar lid for water pouches.
- Autoclavable IsoCage HEPA filter.
- IsoRat cage base.

## Accessories

- ISO decontamination trolley.

## Related Products

To maximize operational efficiency and learn more about these products contact your local representative.



### ISOmini

Small ISOcage unit when the autoclave is small, for laboratories with infectious diseases, for quarantine purposes and as a transport trolley.



**ISOcage Biosafety Station** Class II Laminar Flow that guarantees protection to operator, environment and content during ISOcage changing procedures.



### BS48

TÜV certified Class II Laminar Flow Cabinet.

### ENVIRONMENTAL SUSTAINABILITY: MINIMIZE IMPACT MAXIMIZING VALUE

What Tecniplast did to become leader in sustainability:

#### Company:

- Quality Management System Certification according to ISO 9001 and Environmental Management System Certification according to ISO 14001.
- Certified Environmental Report according to Eni Foundation Enrico Mattei Guidelines.

#### Products:

- Life Cycle Assessment (LCA) according to ISO 14040 and ISO 14044.
- Carbon Footprint according to PAS 2050.
- Environmental Data Sheet according to ISO 14025.
- Contribution to credits under the LEED rating system.



ISO-9001  
Cert. n° 0875



ISO-14001  
Cert. n° 0256A/0



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