



**Sealsafe** *plus*®

RAT IVC GREEN LINE

- **Patented radial cage sealing means no need for latches:  
the best ergonomics with maximum protection**
- **Limited air speed for stress  
and anxiety-free animals:  
maximized animal welfare**
- **Great visibility and easy access to the cage:  
quick daily check and cage change procedures**
- **Designed to cut down running costs**



**HOUSING**



**TECNIPLAST**  
*i n n o v a t i o n   t h r o u g h   p a s s i o n <sup>SM</sup>*

## Introduction

The Sealsafe® PLUS range of IVC products features a PATENTED cage design, consisting of a soft silicone gasket that protrudes radially all around the cage base rim: a perfect sealing is simply achieved by placing the top on the cage body, through the radial interference between gasket and cage top.

Consequently, the vertical compression (commonly provided by the use of latches) of the silicone gasket between cage base and top is not required:

- no latches for the best ergonomics
- no need for latches to achieve excellent containment and high protection

### 1/Protection for Operators and Animals

- PATENTED cage sealing design: optimal seal and protection without need for latches.
- Multiple sealed cage: silicon gasketed valves (not invasive to the cage), bottle caps, cage base and filter retainer ensure **maximum sealing**.
- Large Microbiological filter (VFE\*  $\geq$  99.999987%, BFE\*  $\geq$  99.999937%) at cage level, ensures optimal gas exchange as well as an **ideal protection also during procedures or in case of power failure**.
- DOP tested Air Handling Unit's HEPA Filters provide **high protection against bacteria, viruses and allergens**.

\*VFE: Virus Filtration Efficiency. BFE: Bacteria Filtration Efficiency.

### 2/Animal Welfare

- Air inlet and outlet valves in the top: **no air drafts at animal level, avoiding risk of stress and heat loss**, as reported in the scientific literature.
- Stand-alone Air Handling Unit: Easy, Smart and Sky Flow provide safe ventilation **without transmitting vibrations** to the rack, ensuring **standardization of the experiment**. The system is independently certified by TÜV.

### 3/Ergonomics

- No latches for a **faster cage change**, while **protection is always ensured** by the patented cage sealing. Ideal for Automation.
- Half length wire bar lid: easy access for a **quicker cage change**, minimizing the risk of musculoskeletal disorders as well as reducing the cage weight.
- Great visibility-focused design and Automatic Visual Docking Indicator with Cage Self-Locking System to help operators perform a **quicker daily check**.
- External self-centering water bottles: **quicker bottles change** without removing the cage from the rack.

### 4/Low Running Costs

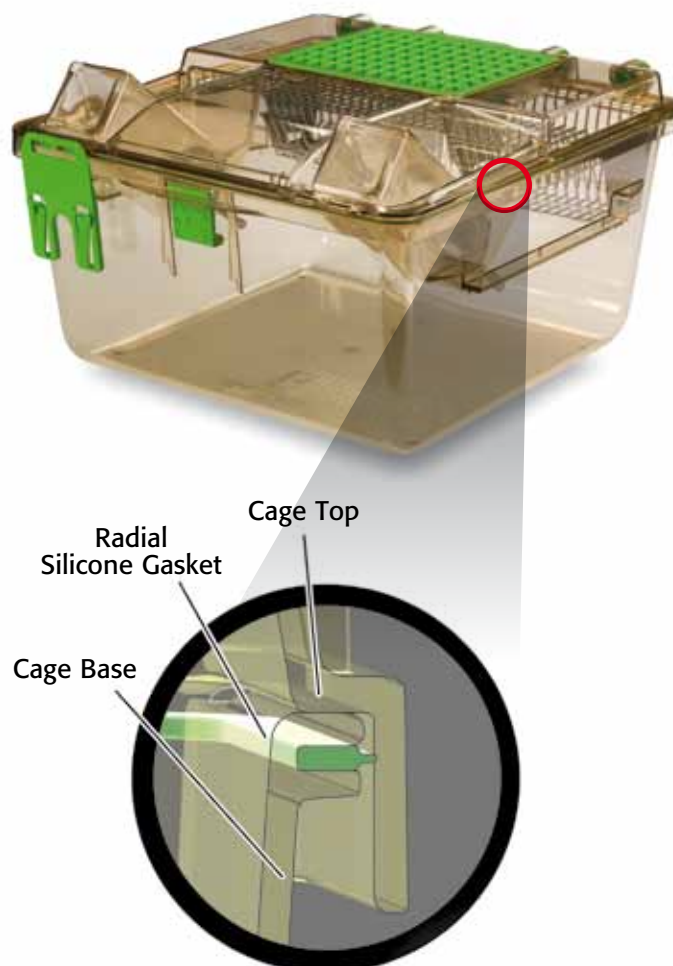
- Seven-row racks under 2 meters high in a small footprint for **maximized density**: optimized floor area usage with consequent **reduction of the facility running costs**.
- Stand-alone air handling unit can manage up to 4 single sided racks (or 2 double-sided): **energy saving with lower maintenance costs**.
- ECM DC-Blowers means **low power consumption and less maintenance**.
- Quick daily check, easy access to the cage and quicker bottle change mean **low labour costs**.



# HOUSING

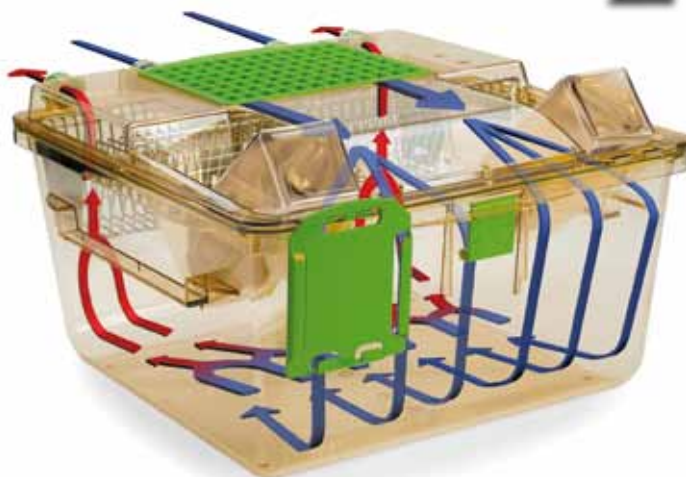
**Sealsafe® PLUS**  
**Rat IVC Green Line**

## Protection for Operators and Animals



Patented cage design / Gasket-top perfect adherence:  
sealing with no need for vertical compression

## Animal Welfare



Max air speed at animal level:  
0.05 m/sec

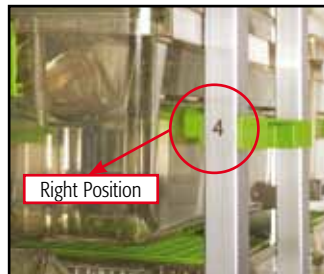
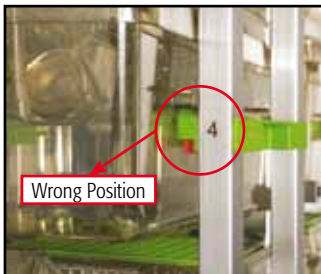
Air inlet/outlet on the top



Latches-free cage



Half length lid



Automatic Visual Docking Indicator



- Multilinking: one AHU serves up to four racks.
- Safe for animals/operators/ environment.
- Energy-saving and Eco-compatible.
- Light and ergonomic.
- User friendly.
- High monitoring and security: Remote Alarm System (RAS) and Wireless Data Management (WDM).



## TECHNICAL SHEET

## GR900 cage

## Floor Area:

904 cm<sup>2</sup> • 140.12 sq inch

## Overall Dimensions (W x D x H):

395 x 346 x 213 (227\*) mm • 15.55 x 13.63 x 8.39 (8.93\*) inch

\*With water bottle

## Plastic Type:

H-TEMP (Polysulfone): 3 years warranty

X-TEMP (Polyphenilsulfone): 8 years warranty

## Cage Body:

Radial silicon gasket (occlusive seal); High stackability; Simmetric (no back no front)

## Lid:

Half wire bar lid style

## Feeder Capacity:

1.30 l • 43.96 fl oz (US) • 45.75 fl oz (UK)

## Top:

Filter retainer with silicon gasket; Selfcentering indentations for external water bottles

## Water Bottles:

312 ml • 10.55 oz (US) • 10.98 oz (UK) capacity each

External with Oring for perfect sealing

## Cage Filter Efficiency:

Microbiological filter

Bacterial Filtration Efficiency (BFE) ≥ 99.9999937%

Virus Filtration Efficiency (VFE) ≥ 99.999987%

## GR900 rack

Cat. N.	Configuration	Specie	Overall Dimensions (L x W x H) - mm / inch
2GR28	28 cages (4 w x 7 h) Single sided	Rat/Mouse*	1462 x 500 x 1881 (1976*) / 57.56 x 19.68 x 74.05 (77.80*)
2GR35	35 cages (5 w x 7 h) Single sided	Rat/Mouse*	1820 x 500 x 1881 (1976*) / 71.65 x 19.68 x 74.05 (77.80*)
2GR56	56 cages (4 w x 7 h) Double sided	Rat/Mouse*	1462 x 888 x 1881 (1987*) / 57.56 x 34.96 x 74.05 (78.23*)
2GR70	70 cages (5 w x 7 h) Double sided	Rat/Mouse*	1820 x 888 x 1881 (1987*) / 71.65 x 34.96 x 74.05 (78.23*)

• Mouse cage accessories required

\* With removable supply plenum





# Options

## For Cage:

- Cage body with grommet, for auto watering
- Flat top, without bottle indentation, for auto watering
- Top with single bottle indentation
- Top with depression for disposable water pouches
- Wire bar lid for mice
- Vertical or Horizontal flip up plastic card holder
- Raised floor grid

## For Rack:

- Rack with automatic watering system
- Quick disconnecting magnetic joints (connecting AHU to rack or rack to rack)
- Flexible hoses (available in several lengths)

# Related Products

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



**Double Decker.**  
The ultimate 3D rat group housing system.



**CS5 Evo changing station.**  
Compact, ergonomic and light double-side mobile Changing Station that allows the user to easily move the cabinet inside the animal room.



**BS60, Biosafety Changing Station.**  
Double side Biosafety Changing Station ideal for rat cages.

## 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° 0296A/0



# TECNIPLAST

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