

**NEW GENERATION OF BIO-SAFETY CABINETS**

## **ARIA TECH48**

**Class 4 Air Quality  
provides the highest protection  
for the operator, the animals,  
and the environment**



**ARIA**



ARIA

## Biosafety Cabinet

### 1. Dual Configuration with the Highest Protection

The Aria TECH48 has the flexibility to operate as a Class II Bio-Hazard safety cabinet or as a changing station Class ISO 4 (according to ISO 14644-1).

A user-friendly control panel allows the operator to select either configuration and easily add a s/s working surface for carry out microbiological procedures.

The TECH48 protects operators from inhalation exposure to dust, allergens, pathogens, and infectious particles during procedures; it shields the animals from human contaminants and protects them from cross contamination and exposure to airborne agents.

### 2. Increased Flexibility and Ergonomics

The ARIA TECH48 features:

- An automatic slanted sash window adjustable to different heights depending upon configuration:
  - Biohazard: 9.84in or 250mm
  - Changing Station: 11.4in or 290mm
- An optional auto-lift system to select standing or seated mode for the operator, and transport the unit through standard height doorways
- Plenums designed to provide acoustic comfort for both the operators and the animals by minimizing noise and vibration levels below the parameters currently specified in the EN:12469 (The European equivalent to the NSF/ANSI Standard 49).

### 3. Safety and Protection

The following working principle allows the Aria TECH 48 to provide the highest level of protection for the operators, the animals and the environment.

- Pressurized air is pushed into the plenum where a motor fan extracts the air up and through a HEPA filter (H14)
- Once filtered, the air is pushed downward via laminar flow into the working area and directly into the perforated front of the working surface. At this point the flow has mixed with particles from the external air that has been pulled from outside the unit providing protection for the animals
- The mixed air is suctioned through the pre-filters (G4 efficiency), into the intake channel located in the rear of the work chamber
- 40% of the air is extracted and exhausted through the HEPA filter (H14) while the remaining 60% is recirculated into the cabinet
- Complies with European (EN 12469) and US (NSF 49 compliant) standards.

### 4. Energy Efficient and Reduced Maintenance Costs

The ARIA TECH 48 features:

- An EC high performance and high efficiency motor for reduced energy consumption, longer filter life span, and reduced noise, vibration, and heat emissions
- An automatic airflow speed regulation system to maintain the air circulation at a constant ratio even when the fans' motors are operating at their highest demand
- A LED lighting system that has proven to deliver higher efficiency and longer lifespan than alternatives in the market. LEDs are more robust, smaller and are faster to illuminate.
- A dimmer to adjust the light intensity as needed
- A Red LED light for procedures performed at night (cage changing configuration only).

### 5. User-friendly and Easy to Read Control Panel

A user-friendly 4.3 in touch screen with a display allows easy operation and access to all relevant data: mode selection, status, alarms, errors, etc.

### 6. High Cleanability and Easy Maintenance

The TECH 48 includes features to maximize cleaning and basic maintenance of the cabinet.

- Rounded corners on the inner and outer surfaces
- An AISI 304 work surface (biohazard) and a Trespa surface (cage changing station). Both are easy to remove or swap, and easy to clean or autoclave
- Access to the pre-filters located inside of the back panel of the working chamber
- A U-shape pre-filter support to prevent the escape of dust
- The capability for the front top to be opened upwards allowing full access on the inside of the panel for effective cleaning and decontamination.

### 7. Options and Accessories

- UV light with magnetic support for easy install in the back panel of the working chamber
- Armrest to maximize comfort when working for extended periods of time
- Extra power socket
- Service valves for gas, air, vacuum, N2, and water
- Thimble connection for thimble-ducted to the outside.

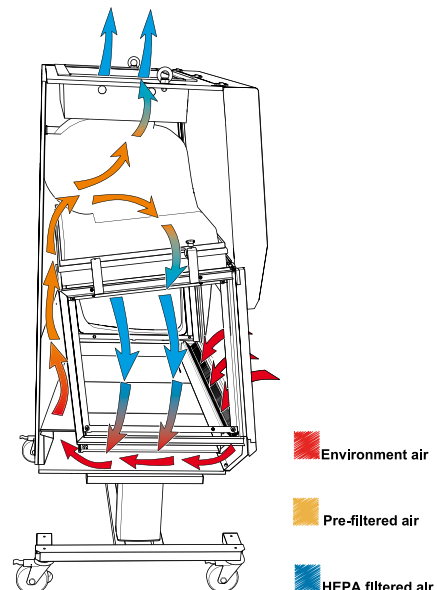
## Dual Configuration with the Highest Protection



## Increased Flexibility and Ergonomics



## Safety and Protection



**Energy Efficient and Reduced Maintenance Costs**

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**User-friendly and Easy to Read Control Panel**

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**TECHNICAL SHEET**

**Overall Dimensions on electrical height adjustable floor stand**

**(W x D x H) - mm/inch:**

1395 x 850 x 1999.5 - 2323.5 mm

54" 7/8 x 33" 4/8 x 78" 6/8 - 91" 4/8 in

**Working Chamber Dimensions Change Station configuration**

**(W x D x H) - mm/inch:**

1190 x 540 x average 692 mm

46" 7/8 x 21" 2/8 x average 27" 2/8 in

**Access Opening Height - mm/inch:**

Changing Station: 290 mm - 11" 3/8 in

BSC: 250 mm - 9" 7/8 in

**Maximum Access opening height - mm/inch:**

485mm

19" 1/8 in

**Weight with electrical height adjustable floor stand - Kg/lbs:**

320 kg

705 lbs

**Power Supply:**

230V-50/60Hz - 100/115V-50/60Hz

**Control:**

Microprocessor driven with 4.3 TFT touch screen control panel

**Classification of Air Cleanliness (according to ISO 14644-1):**

ISO 4

**Options and Accessories**

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**High Cleanability and Easy Maintenance**

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## 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.



# TECNIPLAST

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To find your local distributor, please visit [www.tecniplast.it](http://www.tecniplast.it)

Tecniplast reserves the right to change or modify product and or specifications without notice or obligation.  
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## Related Products

For additional information

please contact your local representative  
or email [info@tecniplastusa.com](mailto:info@tecniplastusa.com)



### Sealsafe Plus

IVC housing system for mice or rats features:

- Exceptional filtration and protection from allergen exposure
- Improved density, increased visibility, and reduced weight.



### ISO Cage

Bio-containment of Bio-exclusion IVC housing system with HEPA filter at cage level.



### Atlantis,

### Cage and Rack Washer

Great modularity for building and installation; high performance and efficiency; with optional on-board H<sub>2</sub>O<sub>2</sub> generator for a turnkey decontamination process.



### GP Decontamination Lock

Turnkey solution for full decontamination cycle. Compatible with multiple brands of VHP and gaseous Chlorine Dioxide generators. It can also be used for chemical fogging.