

LAMINAR FLOW  
AND VENTILATED SOLUTIONS  
FOR ALL YOUR NEEDS



ARIA







EXPLORE TECNIPLAST COMPLETE RANGE OF ARIA LAMINAR FLOW SOLUTIONS: OUR CUTTING-EDGE TECHNOLOGY IS AT YOUR SERVICE, TO ASSURE TOP ENVIRONMENTAL, OPERATOR AND ANIMAL SAFETY.

TECNIPLAST IS THE IDEAL PARTNER AT YOUR SIDE FOR ANIMAL CARE PRODUCTS AND RELATED EQUIPMENT.

OUR CONSTANT INVESTMENT IN TOOLING, TECHNOLOGIES, AUTOMATION, PRODUCTION CAPABILITY, STOCK AVAILABILITY, STAFF RECRUITMENT AND TRAINING, TOGETHER WITH THE ISO CERTIFIED QUALITY AND ENVIRONMENT MANAGEMENT SYSTEMS, ARE THE KEY-FACTORS OF TECNIPLAST SUCCESS SINCE THE EARLY 1950S.

OUR EVER WIDENING RANGE OF HUSBANDRY AND LAMINAR FLOW EQUIPMENT USED IN BIOMEDICAL RESEARCH ALLOWS US TO MEET ALL CLIENTS' NEEDS, PROVIDING SOLUTIONS FOR EVERY ANIMAL MODEL.

AS WELL AS PRODUCING TOP QUALITY EQUIPMENT, TOGETHER WITH OUR NETWORK OF SPECIALISTS AND CONSULTANTS WE ARE REGULARLY INVOLVED IN THE DESIGN AND CONSTRUCTION OF NEW ANIMAL FACILITIES AND IN THE REFURBISHMENT OF EXISTING ONES, THUS DESIGNING AND DEVELOPING 100% TAILOR-MADE PRODUCTS AND PROJECTS.

THAT'S THE REASON WHY TECNIPLAST IS NOT ONLY A SUPPLIER, BUT A REAL PARTNER AT YOUR SIDE.

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# CHANGING STATIONS



CS48 HP



CS60



CS60 D

ERGONOMIC DESIGN,  
ECO-SUSTAINABLE CONCEPTS AND  
MATERIALS, ACOUSTIC COMFORT,  
LARGE WORKING AREA TO EASE  
OPERATORS' DAILY ACTIVITIES,  
ENERGETIC EFFICIENCY AND  
REDUCED MAINTENANCE COSTS:  
THESE ARE THE PRINCIPLES  
THAT INSPIRE OUR TECHNICIANS  
IN THE DESIGN AND DEVELOPMENT  
OF TECNIPLAST LAST  
GENERATION CHANGING STATIONS.

EXPLORE OUR OFFER:  
YOU'LL CERTAINLY FIND THE  
SOLUTION YOU'RE LOOKING FOR!



Optional night panel  
with UV-C lamp  
for working area  
disinfection cycle



ADJUSTABLE LIFTING SYSTEM

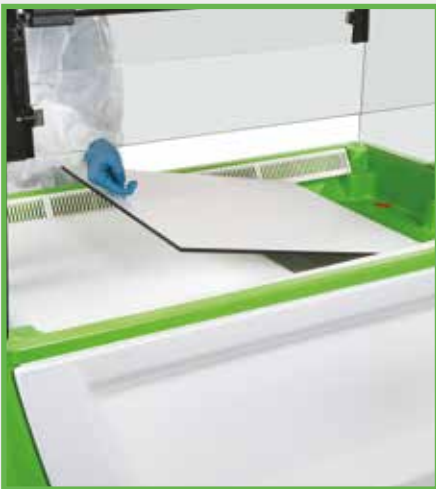
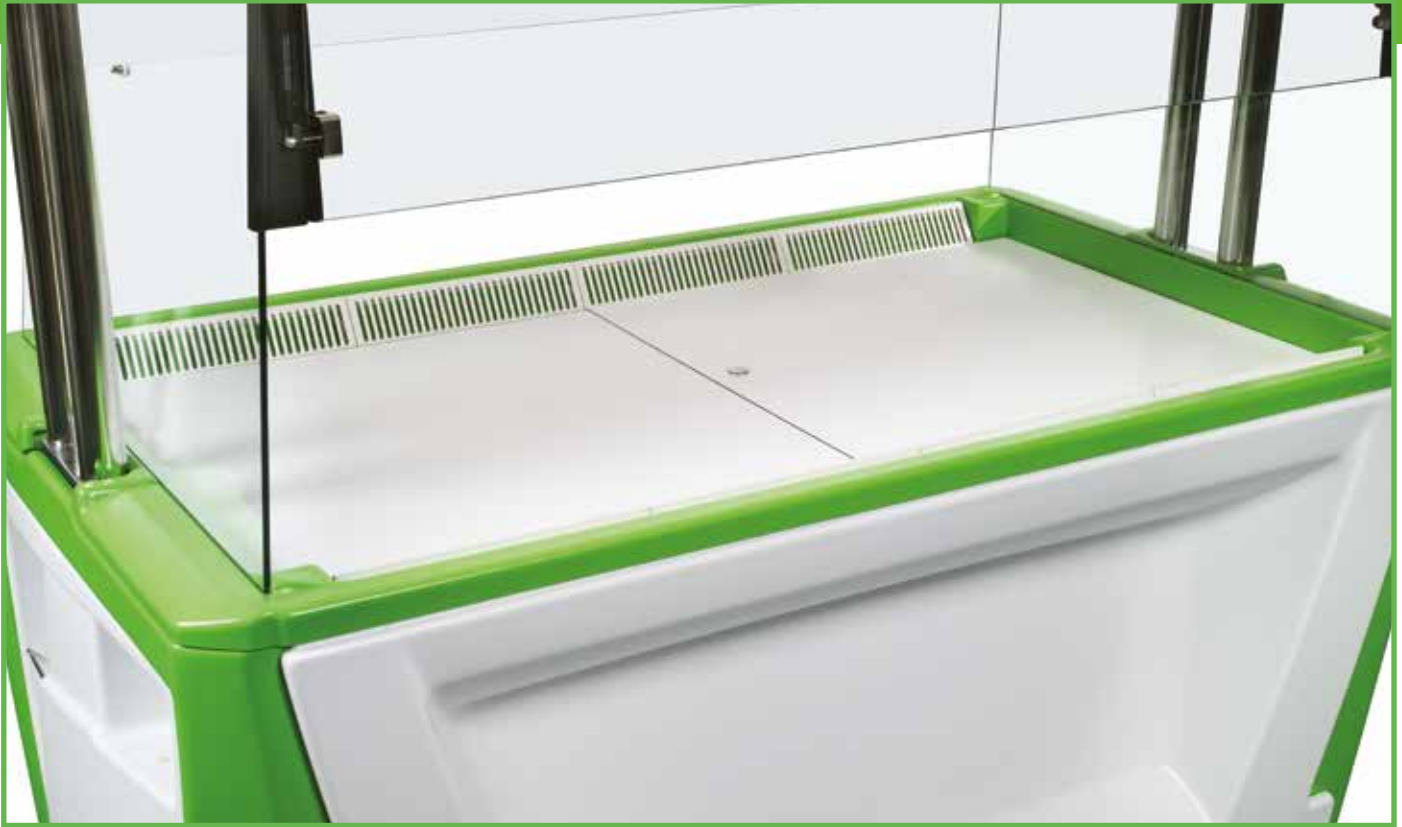


## CS48 HP

SURFACE WIDTH: 120cm - 48"


- ISO Class 4 Air Quality (ISO 14644-1) and comprehensive barrier protection
- "Dual Access" Animal Biosafety Cage Changing Station with superior ventilation system and airflow balancing technology
- Automatic adjustment of the flow rate according to the chosen configuration: single side opening (for one operator) or double-front access (for two operators working simultaneously)
- Low weight: only 190kg (419lbs) - 20% lighter than similar models
- The TRESPA® working surface is composed by two easily removable frames in sound-adsorbent, anti-scratch, autoclavable material
- Operator's protection from infectious particulates, dust, allergens
- Animals' protection from contaminants by minimizing the exposure to aerosols





SLIDING SYSTEM TO SHIFT PANELS: EASY CLEANING OF THE WORKING SURFACE

- Environmental safety during animal handling procedures for cage changing operations
- KI Discus proof: containment levels equal to a Class II Biological Safety Cabinet
- High cleanability: neither sharp corners nor straight edges; the TRESPA® working panels are easily removable for carrying out routine disinfection and/or autoclaving sterilization procedures
- Hinged view screen for easy access to the working area
- Energy-efficient LED light system for bright working environment; the bar is equipped with a dimmer to modify the light intensity as needed. Optional red LED lights for night mode
- 4.3" control panel: user-friendly and easy to read
- Optional H<sub>2</sub>O<sub>2</sub> in-loop decontamination kit



*Hinged view screen  
for easy access  
to the working area*

## CS60

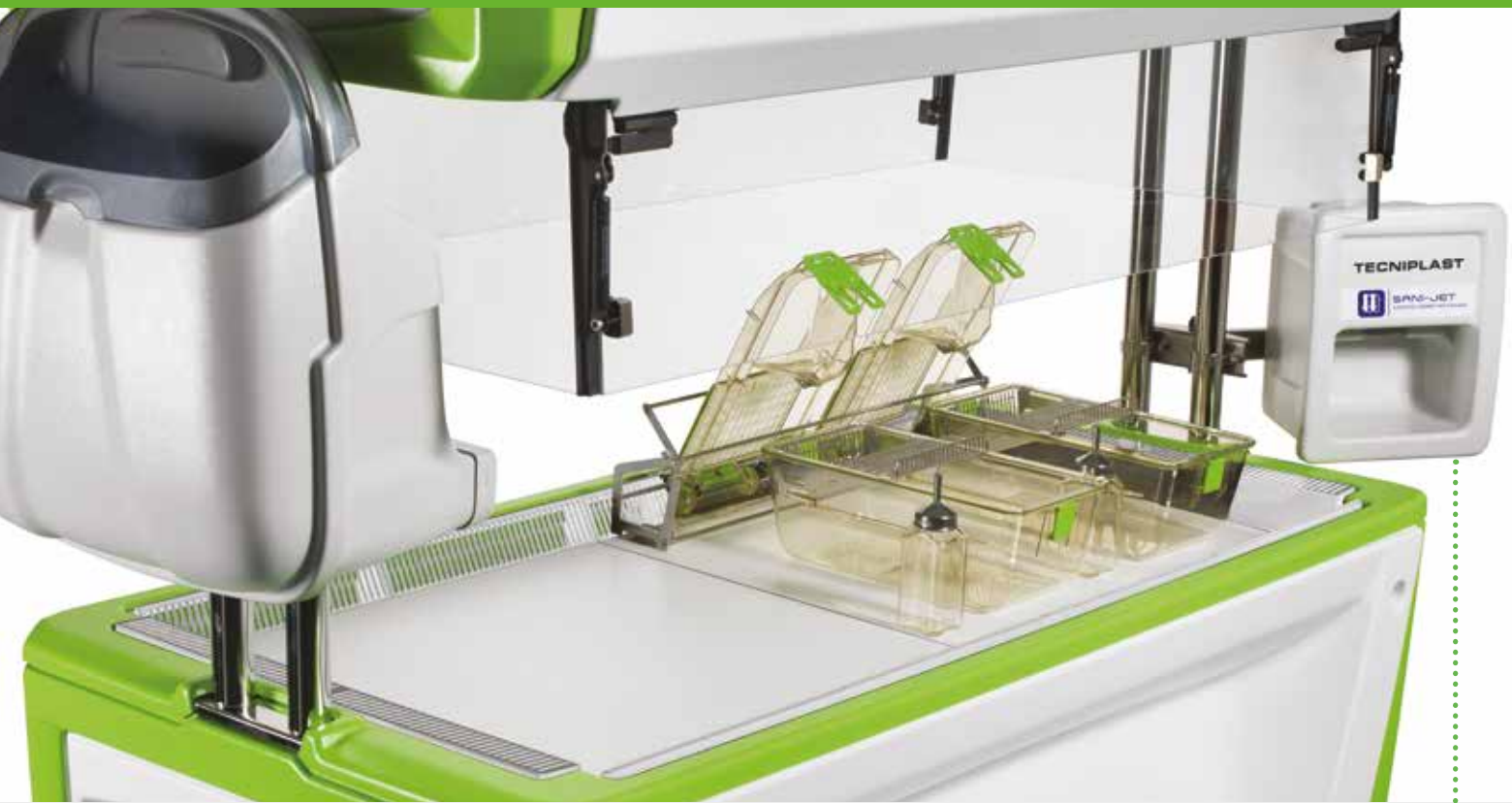
**SURFACE WIDTH: 150cm - 60"**

- Dual-side changing station suitable for specific applications such as weaning and sex separation
- Extra wide working area for increased productivity and exceptional comfort
- Light weight and handy: only 195kg (429lbs)
- Great ergonomics: the wide access to the large working surface makes the introduction and removal of cage easier
- Working area adjustable height to improve operator's ergonomics and comfort, whether seated or standing
- Working surface double configuration: flat (suitable for mice cages) or recessed (ideal for rat cages) to ease cage changing procedures
- ISO Class 4 Air Quality (ISO 14644-1) and comprehensive barrier protection
- Energy-efficient: standard LED bar for higher efficiency and longer life span
- Dimmer to adjust light intensity
- Reduced maintenance costs thanks to EC motors



WORKING SURFACE DOUBLE CONFIGURATION





- Acoustic comfort and vibration minimization for operator's and animals' well-being
- Easy to clean: highly resistant to Chlorine compounds and derivatives; rounded corners and smooth surface. Special protective net to prolong the life span and increase the efficiency of both pre- and HEPA filters
- 4.3" control panel: user-friendly and easy to read
- Wide range of options, e.g.:
  - Red lights for night mode
  - Motion and obstacle detector (to avoid the risk of collision when lowering the lifting system)
  - Cage top holder and folding closure panel
  - Easy-feed ABS dual chute feed hopper and Sani-Jet spray hand sanitizer



Magnifier kit  
and  
retractable cable



Specifically designed for  
large footprint rat cages



## MOTION SENSOR

### CS60 D

SURFACE WIDTH: 150cm - 60"

- Single-side changing station specifically designed for large footprint rat cages (e.g. Double Decker)
- Extra wide working area for increased productivity and exceptional comfort
- Light weight and handy: only 200kg (441 lbs)
- Great ergonomics: the 420mm (16" 4/8) opening height and the large working surface ease the introduction and removal of rat cages
- Working area adjustable height to improve operator's ergonomics and comfort
- Working surface double configuration (flat or recessed)
- ISO Class 4 Air Quality (ISO 14644-1) and comprehensive barrier protection
- Energy-efficient: standard LED bar for higher efficiency and longer life span
- Dimmer to adjust light intensity
- Reduced maintenance costs thanks to EC motors
- Acoustic comfort and vibration minimization for operator's and animals' well-being
- Easy to clean: removable rear closure panel; rounded corners and smooth surface. Special protective net to prolong the life span and increase the efficiency of both pre- and HEPA filters
- 4.3" control panel: user-friendly and easy to read
- Wide range of options, e.g.:
  - Red lights for night mode
  - Motion and obstacle detector (to avoid the risk of collision when lowering the lifting system)
  - Cage top holder and folding closure panel
  - Magnifier kit
  - TRESPA® folding shelf kit









# ARIA

BIOSAFETY CABINET

NEVER OPEN PRODUCT & BASK TO CLEAN  
OR TO REMOVE THE COVER OF THE  
OR TO REMOVE THE COVER OF THE  
OR TO REMOVE THE COVER OF THE  
OR TO REMOVE THE COVER OF THE



# BIOSAFETY CABINETS



TECH48

TECNIPLAST BIOSAFETY CABINETS, SPECIFICALLY DESIGNED FOR ANIMAL RESEARCH LABORATORIES, GUARANTEE THE UTMOST PROTECTION OF THE OPERATORS FROM THE INHALATION OF INFECTIOUS PARTICLES, DUST, ALLERGENS AND PATHOGENS.

AT THE SAME TIME, TECNIPLAST BIOSAFETY CABINETS GUARANTEE AN EXCELLENT PROTECTION OF THE ANIMALS FROM CONTAMINANTS, BY MINIMISING THE EXPOSURE TO AEROSOLS, THUS PRESERVING ENVIRONMENTAL SAFETY.



BIOLOGICAL SAFETY CABINET CONFIGURATION



CHANGING STATION CONFIGURATION

*The unique MSC  
dual configuration in the world!*

## TECH48

**SURFACE WIDTH: 120cm - 48"**

- Double configuration Microbiological Safety Cabinet and Cage Changing. Simply typing a password, the operator can carry out cage changing operations or experimental activities (by adding the related S/S working surface) in Class II Biohazard configuration
- Certified by TÜV-Nord, meets the requirements of EN 12469:2000 regulation in terms of safety and performance and is compliant with NSF49 as Class II type A2
- Complete operator, product and environmental protection: ISO Class 4 Air Quality (ISO 14644-1)
- Increased flexibility and comfort:
  - The automatic slanted sash window can be adjusted at two different heights: 250mm (98") in Biohazard configuration and 290mm (114") in cage changing mode
  - Optional electric auto-lift system: standing or sit mode to improve user's ergonomics
  - Noise and vibration minimization





ENERGY-EFFICIENT LED LIGHTS



RED LED LIGHTS FOR NIGHT MODE



- Increased flexibility and comfort
- Energy-efficient LED light system for bright working environment; the bar is equipped with a dimmer to modify the light intensity as needed
- Standard red LED lights for night mode in changing station configuration
- 4.3" control panel: user-friendly and easy to read
- High cleanability: the AISI 304 working surface (Biohazard configuration) as well as the TRESPA® working surface (Cage Changing configuration) can be easily removed to carry out routine disinfection and/or autoclaving procedures
- Optional H<sub>2</sub>O<sub>2</sub> in-loop decontamination kit and raised armrest for comfortable working posture and no grid blocking

**TECNIPLAST**



**ARIA**  
VENTILATED CABINET

# VENTILATED CABINETS



BIO-C36

- PROTECTION OF IMMUNODEPRESSED, SPF ANIMALS
  - PROTECTION OF STAFF AND LOCAL ENVIRONMENT
- TO HOUSE ANIMALS OF DIFFERENT STRAINS OR TYPES WITHIN THE SAME AREA
  - SUITABLE FOR SPECIFIC STUDIES OR TESTS
    - TO HOUSE ANIMALS IN AREAS NOT SPECIFICALLY DESIGNED FOR THEIR BREEDING

THE VENTILATION SYSTEM CREATES A CLEAN ENVIRONMENT FOR HOUSING RODENTS IN CAGES AND MINIMIZES CONTAMINATION LEVELS IN THE ROOM THANKS TO CABINETS FILTRATION SYSTEM.





## Red doors: why ?

MICE PERCEIVE RED AS BLACK, SO THEY BEHAVE AS IF THEY ARE IN A SECURE, DARK ENVIRONMENT, WHEREAS STAFF CAN SEE THROUGH THE TRANSPARENT PLASTIC, MAKING DAILY CHECK EASIER.

RED LIGHTS AND DOORS FOR NIGHT CYCLE



## BIO-C 36

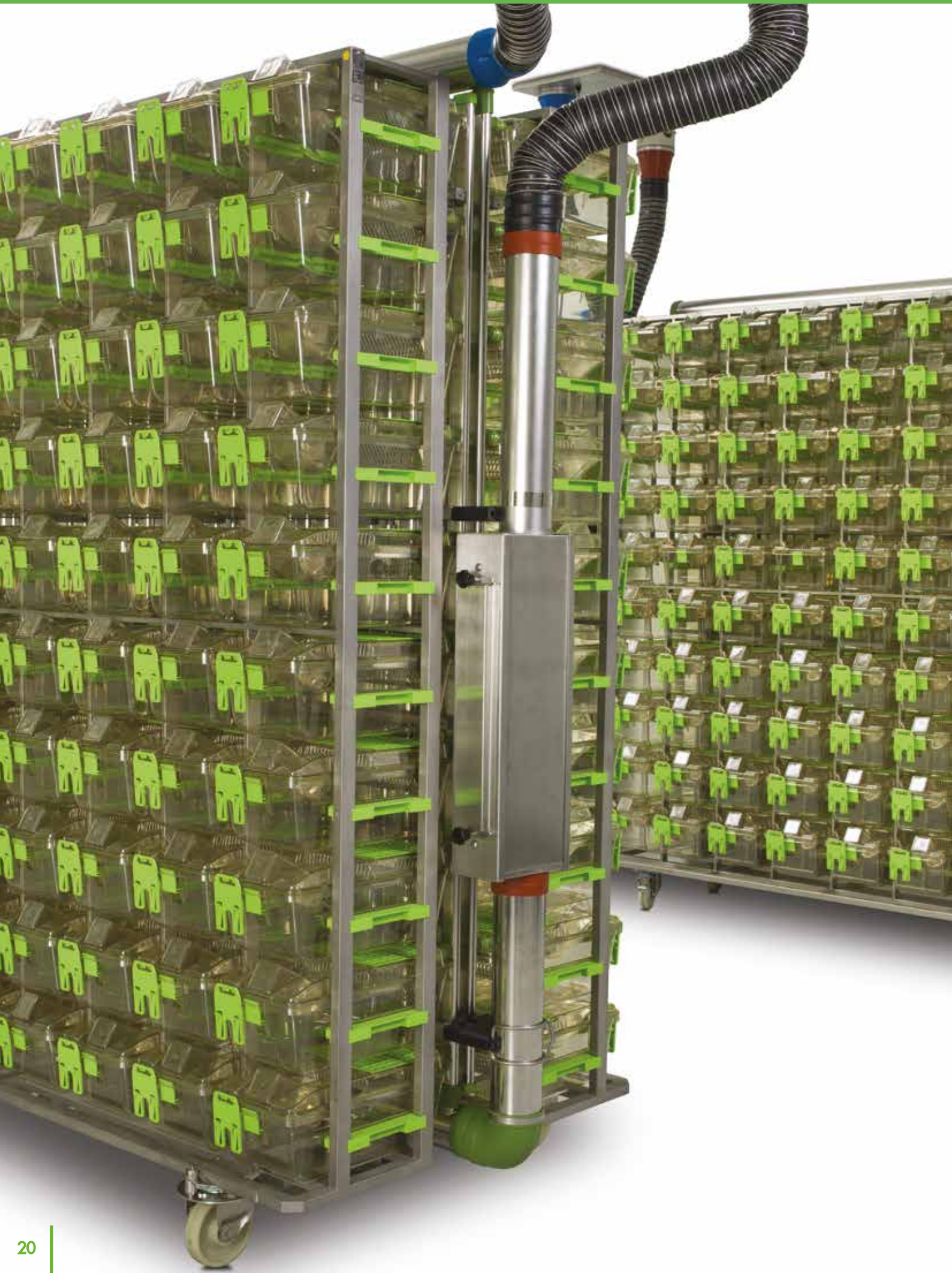
- Innovative dual ventilation system with two energy-saving blowers (ECM Technology): horizontal air flow from the back to the front of every single compartment, to avoid cross-contamination between cages
- Supply and Exhaust air filter HEPA H14 efficiency (EN 1822) with DOP test scanning design
- Optimal protection of the animals, the user and the environment and high flexibility of configuration: Positive (for bioexclusion purposes) and Negative (for biocontainment) pressure modes can be easily selected on the touch screen
- User friendly 7" TFT Colour Touch panel with integrated microprocessor system for easy control and operation
- Large variety of configurations and options:
  - 2, 4 or 8 doors
  - Dual-paned tempered transparent, opaque or red glass doors
  - Adjustable shelving for flexible organization and storage with 3 or 4 shelves (respectively corresponding to 4 or 5 compartments)
- Optional activated charcoal filter



#### LED LIGHTING SYSTEM

- High cleanability:
  - working area entirely built in AISI 304 S/S
  - AISI 304 S/S shelves can be easily removed to facilitate disinfection operations
- Optional innovative LED lighting system (daily/weekly timer) with dimmer uniform light intensity throughout the whole surface of every compartment. We provide top flexibility creating a suitable environment for rodents easing Circadian Rhythm Studies: set the day/night modes (sunrise/sunset or infinite programmable on-off cycles available with high accuracy) according to your research needs
- Optional reliable heating system with uniform and efficient heat transfer. Temperature lock-out for consistency and control, Celsius and Fahrenheit selection for convenience and accuracy. The set value can span from ambient to 40°C







# BUILDING INTEGRATED AIR FLOW SOLUTIONS



MULTI FLOW

- IVCs INTEGRATION SYSTEM:
- CREATE MORE SPACE IN YOUR IVC ROOMS
    - CUT YOUR IVC RUNNING COSTS
      - HUMIDITY AND VENTILATION CONTROL
  - LESSEN THE IMPACT OF MAINTENANCE IN THE HOLDING ROOM
    - WORKING PRESSURE MODE EASY TO SET

WHEN DESIGNING A NEW FACILITY, PROJECT TEAMS ARE LEFT WITH A CHOICE: IS IT BETTER BUILDING AN INNOVATIVE GREEN BUILDING FROM THE GROUND-UP, OR MAINTAINING THE STATUS QUO AND ADOPT A MORE TRADITIONAL SOLUTION?

A NEW WAY OF SAVING MONEY AND ENERGY, REDUCING EQUIPMENT AND MAINTENANCE TASKS IN THE ROOM, IS REPRESENTED BY BUILDING INTEGRATED AIRFLOW SOLUTIONS, WHICH COMBINE IVCs AIR DELIVERY AND EXHAUST WITH THE BUILDING AIR HANDLING SYSTEM.



*Let us help you  
to design your facility!*

THANKS TO OUR DEDICATED AND SKILLED PROJECT MANAGEMENT DEPARTMENT, WE CAN DEVELOP 3D FACILITY LAYOUTING TO BEST MEET OUR CUSTOMERS' REQUIREMENTS

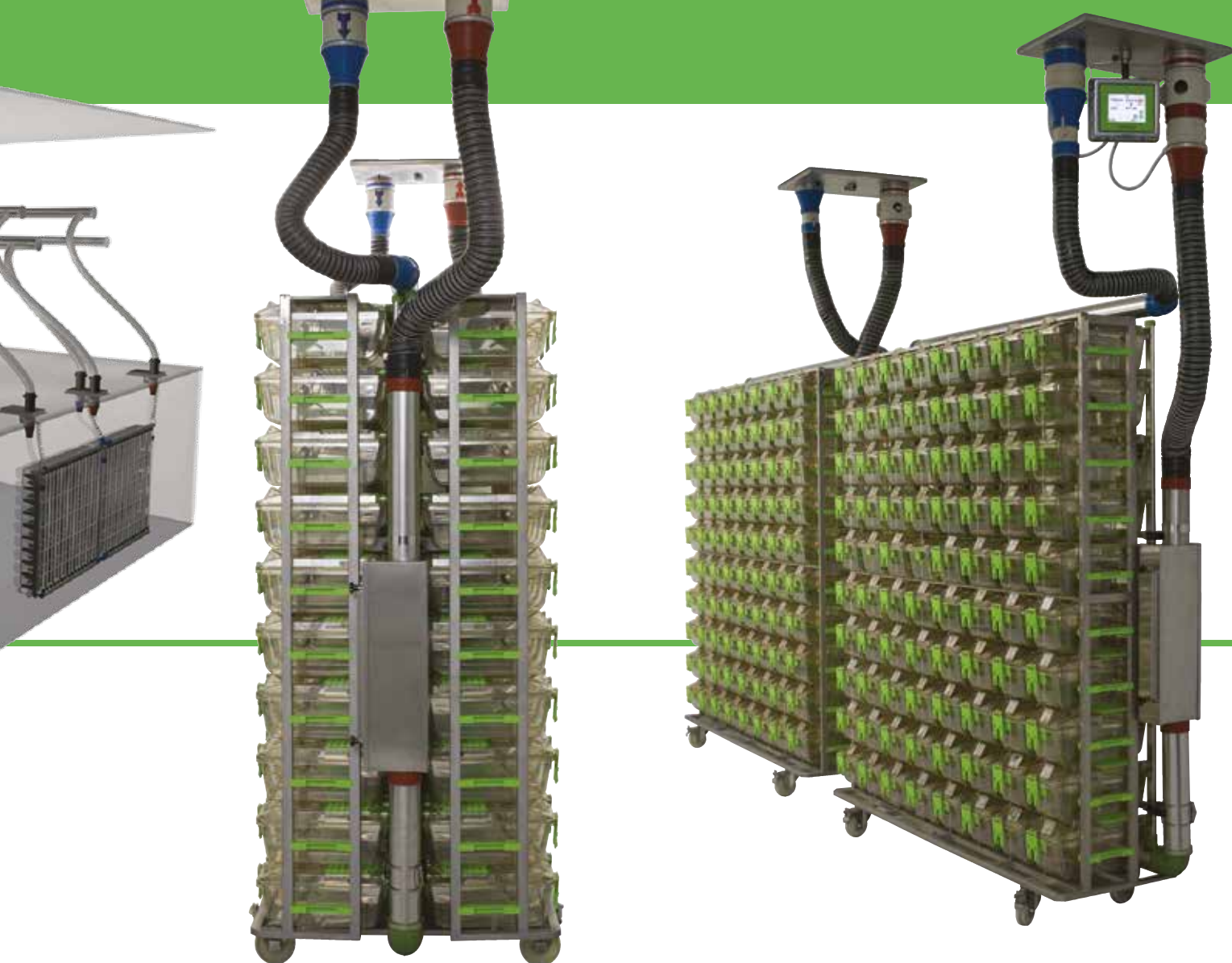


MULTI-FLOW IS THE NEW AIR HANDLING UNIT DUCTABLE FOR IVC'S INTEGRATION SYSTEM, SPECIFICALLY DESIGNED FOR RELIABILITY, HIGH PERFORMANCE, ENERGY EFFICIENCY, FOR INSTALLATION IN MEZZANINE WITH DUCTING SYSTEM.

## MULTI FLOW

- Fan unit providing airflow to up to 14 single-sided racks
- The rack can be conditioned to RH 55%
- Condition the rack temperature
- Eliminate fans from the holding room
- Reduce energy consumption
- Maintenance outside the holding rooms
- Cost allocation moved from the equipment list to the building and maintenance budget





### CONDITION YOUR RACK AIR

Constant humidity and temperature at cage level, ensuring that each cage keeps standardized settings for top animal health.

### THE FAN BOX

Designed to provide best thermal and acoustic isolation, it is supplied in a modular form to improve maintenance process.

### THE RACK CONNECTIONS

Quick fit hose points are provided at ceiling height to directly connect the racks to the supply and exhaust systems. The room can be provided with a pressure inverter to easily switch the pressure supplied to the racks from positive to negative, or vice versa.



### KEEPING THE BEST STANDARDS

Multi-Flow meets and exceeds current regulations: the “Eurovent Certified Performance Certificate” assures that the equipment, its mechanical features and performance are compliant with energy specifications.

### CONSTANT AIR FLOW REGULATORS

The CAR valve balances airflows in IVCs Rack Ventilation supply and exhaust air ductworks:

- Smart design Elastomer double lip-seal for better positioning and airtightness
- Multi- airflow: rotative ring for on-site airflow setting
- Recyclable, chlorine-free plastic with fire-resistance rating B-S3-d0 (Euroclass) S/S regulation spring





COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =

COMPANY WITH  
ENVIRONMENTAL SYSTEM  
CERTIFIED BY DNV GL  
= ISO 14001 =

 **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*

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