

LAMINAR FLOW AND VENTILATED SOLUTIONS FOR ALL YOUR NEEDS



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EXPLORE TECNIPLAST COMPLETE RANGE OF ARIA LAMINAR FLOW SOLUTIONS: OUR CUTTING-EDGE TECNOLOGY 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.







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!

CHANGING STATIONS

CHANGING STATIONS

CS48

SURFACE WIDTH: 120cm - 48"

- ISO Class 4 Air Quality (ISO 14644-1) for maximum protection
- Dual confguration of the working surface: flat or recessed
- Weights only 185kg (407lbs): 20% lighter than others on the market; easy to trasport around the facility
- Ergonomic design and sturdy construction
- Energy saving blowers (ECM Technology)
- Low energy LED strip provides uniform light on the work surface
- A dimmer controls light intensity to accepted levels for albino strands
- Injection molded polysulfone airfow grille around the work surface reduces noise and turbulence generated by inside air flow
- Acoustic comfort. Low levels of noise and vibration
- Overall energy savings and reduced heat load emissions
- High cleanability
- Reduced turbulence and noise inside working surface

ARIA CS48 IS INDEPENDENTLY CERTIFED (UL/CSA) AND COMPLIANT WITH CE REQUIREMENTS.

QUALITY MATERIALS ARE IN CONFORMITY TO GUARANTEE THE STRICTEST SAFETY STANDARDS.







Dual Access. ISO Class 4 Air Quality. Innovative Flat or Recessed Working Surface

EFFECTIVE BARRIER: PREVENTS CROSS-CONTAMINATION AND ALLERGEN EXPOSURE
 FLEXIBILITY: DUAL CONFIGURATION WOKING SURFACE FITS FROM THE SMALLEST TO THE LARGEST CAGES
 LIGHTER. 20% LESS WEIGHT THAN OTHER MODELS ON THE MARKET

OVERALL DIMENSIONS (WxDxH)	WORKING AREA DIMENSIONS (WxDxH)	WEIGHT
1414 x 790 x 1954 - 2278 mm	1120 x 610 x 640 mm (flat mode) - 690 mm (recessed mode)	185 kg
55" 5/8 x 31" 3/8 x 76" 7/8 - 89" 5/8	44" 1/8 x 24" x 25" 2/8 (flat mode) - 27" 1/8 (recessed mode)	408 lbs



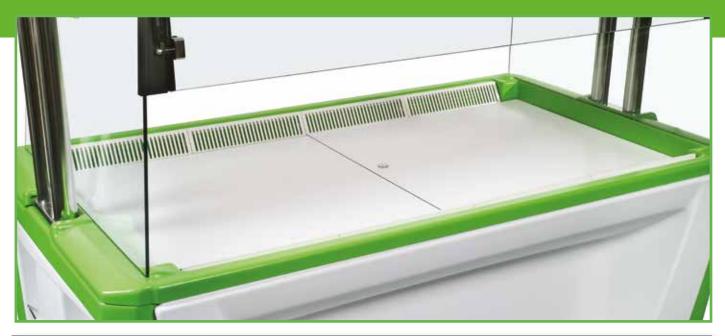
CHANGING STATIONS



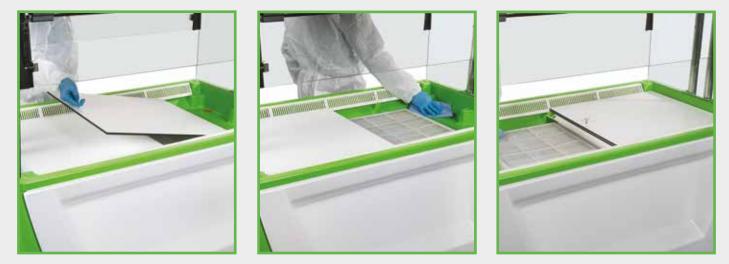
CS48 HP

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
- Working surface double configuration: flat for experimental procedures or recessed for cage changing operations
- Operator's protection from infectious particulates, dust, allergens
- Animals' protection from contaminants by minimizing the exposure to aerosols



OVERALL DIMENSIONS (WxDxH)	WORKING AREA DIMENSIONS (WxDxH)	WEIGHT
1414 x 790 x 1954 - 2228 mm	1214 x 610 x 590 mm (flat mode) - 640 mm (recessed mode)	190 kg
55" 5/8 x 31" 3/8 x 75" - 87" 6/8	47" 6/8 x 24" x 23" 2/8 in (flat mode) - 25" 2/8 (recessed mode)	419 lbs



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 H₂O₂ in-loop decontamination kit

CHANGING STATIONS



CSEO

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 derivates; 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



Specifically designed for large footprint rat cages



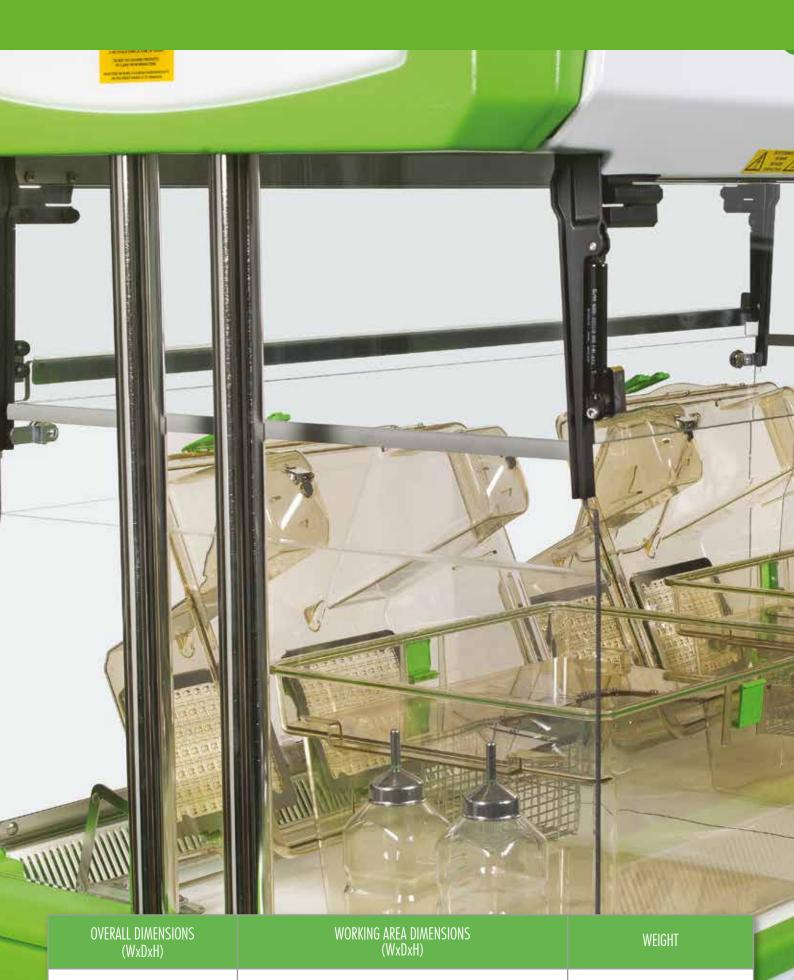
MOTION SENSOR

CSEO D

SURFACE WIDTH: 150cm - 60"

- Single-side changing station specifically designed for large footprint rat cages (e.g. Doubble Decker)
- Extra wide working area for increased productivity and exceptional comfort
- Light weight and handy: only 200kg (441lbs)
- 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



1590 x 790 x 1994 - 2318 mm 62" 5/8 x 31" 3/8 x 78" 4/8 - 91" 2/8 1394 x 610 x 680 mm (flat mode) - 730 mm (recessed mode) 51" 1/8 x 24" x 26" 6/8 (flat mode) - 28" 6/8 (recessed mode) 206 kg 454 lbs









TECHBO

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.

BIOSAFETY CABINETS



The unique MSC dual configuration in the world!

теснчв

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
 - Noise and vibration minimization
- 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





ENERGY-EFFICIENT LED LIGHTS



RED LED LIGHTS FOR NIGHT MODE



OVERALL DIMENSIONS (WxDxH)	WORKING AREA DIMENSIONS (WxDxH)	WEIGHT
1395 x 850 x 1590 (cabinet only) mm 1395 x 850 x 1998.5 - 2323.05 (with mobile base) mm 1395 x 850 x 2255 - 2305 (with fix base) mm 54" 7/8 x 33" 4/8 x 78" 5/8 - 62" 5/8 (with mobile base) 54" 7/8 x 33" 4/8 x 78" 5/8 - 91" 4/8 (with mobile base) 54" 7/8 x 33" 4/8 x 88" 6/8 - 90" 6/8 (with fix base)	CHANGING STATION: 1190 x 540 x average 692 mm 46" 7/8 x 21" 2/8 x average 27" 2/8 BSC2: 1190 x 540 x average 612 mm 46" 7/8 x 21" 2/8 x average 24" 1/8	CABINET ONLY: ~ 260 kg - 573 lbs WITH MOBILE BASE: ~ 320 kg - 705 lbs WITH FIX BASE: ~ 280 kg - 617 lbs

- 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

BIOSAFETY CABINETS



DUAL CONFIGURATION MSC: CLASS II MICROBIOLOGICAL SAFETY CABINET AND CAGE CHANGING STATION

теснво

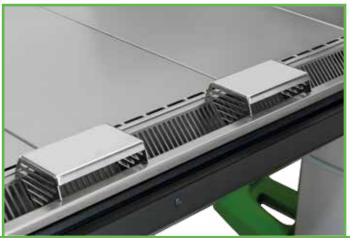
SURFACE WIDTH: 150cm - 60"

Specifically designed for Animal Research Laboratories, Tecniplast ARIA Tech60 assures an effective barrier, prevents cross-contamination and allergen exposure. Simply typing a password, the operator can perform cage changing operations or microbiological activities (by adding the dedicated S/S working surface) in Class II Biohazard configuration.

OVERALL DIMENSIONS (WxDxH)	WORKING AREA DIMENSIONS (WxDxH)	WEIGHT
1700 x 850 x 1590 (cabinet only) mm 1700 x 850 x 1998.5 - 2323.5 (with mobile base) mm 1700 x 850 x 2255 - 2305 (with fix base) mm 66" 7/8 x 33" 4/8 x 62" 5/8 (cabinet only) 66" 7/8 x 33" 4/8 x 78" 5/8 - 91" 4/8 (with mobile base) 66" 7/8 x 33" 4/8 x 88" 6/8 - 90" 6/8 (with fix base)	CHANGING STATION: 1495 x 540 x average 692 mm 58" 7/8 x 21" 2/8 x average 27" 2/8 BSC2: 1495 x 540 x average 612 mm 58" 7/8 x 21" 2/8 x average 24" 1/8	CABINET ONLY: ~ 305 kg - 672 lbs WITH MOBILE BASE: ~ 370 kg - 816 lbs WITH FIX BASE: ~ 330 kg - 728 lbs



ERGONOMIC ACCESS TO PREFILTERS FOR EASY MAINTENANCE



MOVABLE ARMRESTS TO IMPROVE OPERATOR'S COMFORT



ON-BOARD HOLDER FOR STAINLESS STELL WORKING SURFACES (WHEN SET IN CS MODE)

- Automated slanted sash window adjustable at two different heights (250mm in biohazard configuration; 290 mm in cage changing procedure)
- Electric auto lift system (optional) for ergonomic positioning and easy transport
- 4.3" touch screen panel
- LED light bars with dimmer (particularly beneficial for procedures with light-sensitive mice) and red LED lights to work at night (in CS mode)
- Wide range of available options
- Lower energy costs, longer filter life, reduced noise, vibration and heat emissions thanks to the EC highperformance and superior efficiency motor
- Sound-pressure levels (including alarms) way below the parameters of the current EN:12469
- TECH60 performances compliant with both the European and American standards of Class II Biosafety Cabinets
- Outstanding flexibility and comfort thanks to the extra wide working area
- Bright and open working environment: transparent glass side windows and LED ligth bars with dimmer
- No rounded corners: easy to clean. The AISI 304 (biohazard cofiguration) and the TRESPA (cage changing configuration) working surfaces are easily removable to perform routine cleaning and/or autoclaving sterilization procedures
- Easy access to pre-filters located in the rear of the panel, which preserves HEPA filters lifespan and efficiency
- Noise and vibration minimization thanks to the unique plenum design: acoustic comfort for both operators and animals



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.

VENTILATED CABINETS

Red doors: why?

0 000

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.

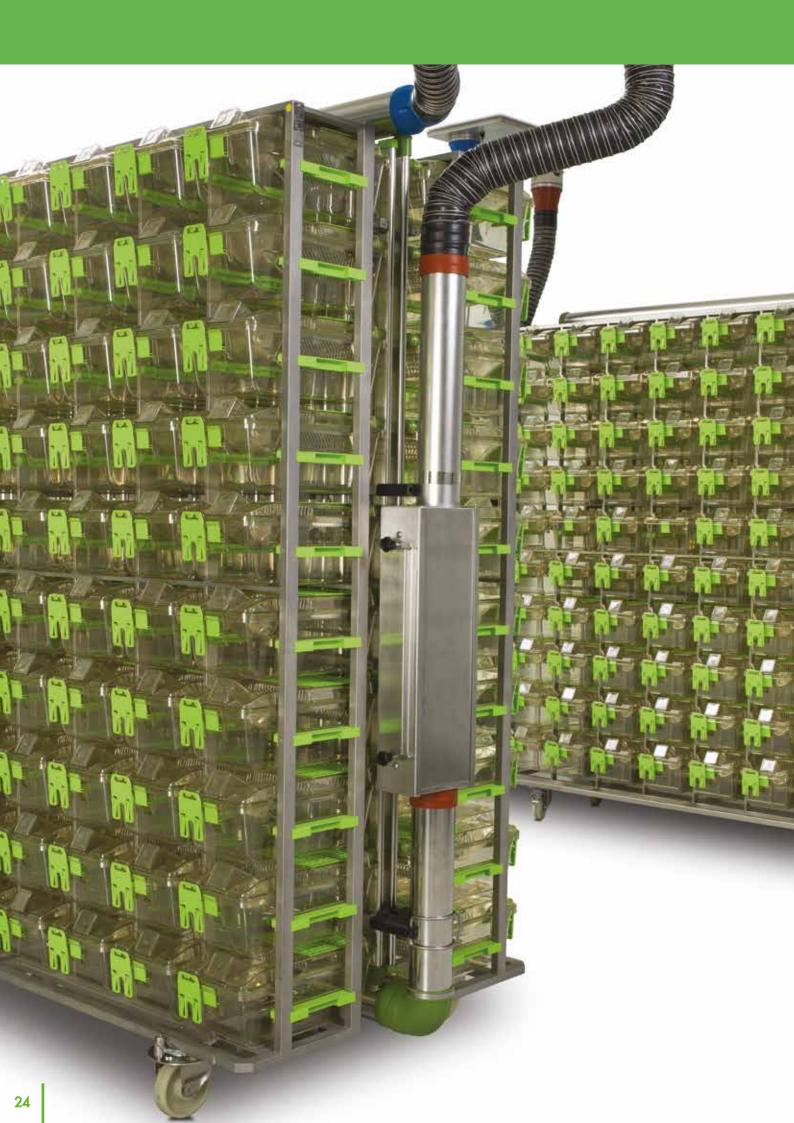
RED LIGHTS AND DOORS FOR NIGHT CYCLE

BIO-C 36

- Innovative dual ventilation system with two energysaving 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

EXTERNAL DIMENSIONS (WADWH) NTERNAL DIMENSIONS (WADWH) NUMBER OF COMPARTMENTS PLOTE ADD ADD ADD ADD ADD ADD ADD ADD ADD AD			NIPLAST	
1020 x 840 x 1956 mm 920 x 680 mm 4 compartments; 315 mm - 12" 3/8		15 (* 18 (* 19 9) (* 19 10) (* 19) (
	EXTERNAL DIMENSIONS (WxDxH)	INTERNAL DIMENSIONS (WxD)	NUMBER OF COMPARTMENTS AND COMPARTMENTS HEIGHT	
40" 1/8 x 33" 1/8 x 77" 36" 2/8 x 26" 6/8 5 compartments; 246 mm - 9" 5/8	1020 x 840 x 1956 mm 40" 1/8 x 33" 1/8 x 77"	920 x 680 mm 36" 2/8 x 26" 6/8	4 compartments; 315 mm - 12" 3/8 5 compartments; 246 mm - 9" 5/8	

- 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.



BUILDING INTEGRATED AIR FLOW SOLUTIONS



MULTIFLOW

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

BUILDING INTEGRATED AIR FLOW SOLUTIONS



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 CONSTANT AIR FLOW REGULATORS process.

THE RACK CONNECTIONS

Quick fit hose points are provided at cealing 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.

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 fireresistance rating B-S3-d0 (Euroclass) S/S regulation spring



HEADQUARTERS

COMPANY WITH

QUALITY SYSTEM

CERTIFIED BY DNV GL

= **ISO** 9001 =

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COMPANY WITH

= ISO 14001 =

SISTER COMPANIES

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