







DISCOVER OUR RANGE OF ANALYSIS SOLUTIONS SUPPORTING YOUR DAILY RESEARCH ACTIVITIES.

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

OUR ANALYSIS PRODUCT FAMILY CONSISTS OF DEDICATED SOLUTIONS EXCLUSIVELY DESIGNED AND DEVELOPED TO MEET RESEARCH REQUIREMENTS. IT INCLUDES METABOLIC CAGES AND ACTIVITY WHEELS.

THAT'S THE REASON WHY TECNIPLAST IS NOT ONLY A SUPPLIER, BUT A REAL PARTNER, WITH A FULL TEAM OF EXPERTS READY TO SUPPORT AND HELP YOU.

WE ARE AT YOUR SIDE TO IMPROVE DAILY ACTIVITIES, ENSURING BETTER SCIENTIFIC OUTCOMES!

## INDEX

### 4 METABOLIC SYSTEMS

- 4 • METABOLIC CAGES
- 6 • E-CHILLER



### 7 ACTIVITY WHEEL



## METABOLIC CAGES

TECNIPLAST METABOLIC CAGES PROVIDE A PERFECT SEPARATION OF FECES AND URINE THROUGH THE SPECIAL DESIGN OF THE FUNNEL AND OF THE SEPARATION CONE. THE SYSTEM IS DESIGNED TO MINIMIZE ANIMAL STRESS: THE DRAWER-STYLE DESIGN OF THE FEEDER ALLOWES EASY FILLING AND ALL PARTS BELOW THE CAGE FLOOR ARE REMOVABLE WITHOUT DISTURBING THE ANIMALS, INCLUDING THE FECES AND URINE COLLECTION TUBES. A PROPER ACCLIMATIZATION PERIOD BEFORE RUNNING THE EXPERIMENT WITH METABOLIC CAGES CAN BE PERFORMED WITH THE TECNIPLAST RAISED BOTTOM GRID AVAILABLE FOR BOTH IVCs AND OPEN CAGES.



RACK FOR METABOLIC CAGES



FOR SINGLE MOUSE WITH SINGLE CHAMBER FEEDER



FOR GROUPED MICE WITH DOUBLE CHAMBER FEEDER



SPECIAL DESIGN OF THE FUNNEL AND OF THE SEPARATION CONE



COLLECTION CHILLER



RACK FOR METABOLIC CAGES WITH COLLECTION CHILLERS



REFRIGERATED RACK FOR FRACTIONATED URINE COLLECTION



FOR RATS UNDER 150 g AND FOR RATS FROM 150 g TO 300 g



FOR RATS OVER 300 g

### RELIABLE EXPERIMENTS OUTCOMES

- Unique design of the separation apparatus featuring low-adherence plastic materials: perfect separation and collection of feces and urine
- Easy-remove feeder and collection tubes: feed filling and samples collection without disturbing the test animals
- Optional electronic collection chiller (E-Chiller) and collection chiller to maintain urine at low temperature

### FLEXIBILITY AND DURABILITY

- By changing few components the cage is adaptable to house mice and rats of different sizes/weights
- Systems components are made of special techno polymers: washable, autoclavable and extremely durable
- Several options for refrigerated urine collection are available: E-Chiller, collection chiller, Rack for fractionated urine collection

Cage	Rack configuration
ALL METABOLIC CAGES	12 cages (4w x 3h) Single sided
ALL METABOLIC CAGES (except for single mouse cage)	10 cages (5w x 2h) For metabolic cages with collection chillers Single sided
ALL METABOLIC CAGES (except for single mouse cage)	12 cages (6w x 1h) Refrigerated, for fractionated urine collection Double sided



## E-CHILLER

E-CHILLER IS A TECNIPLAST ELECTRONIC CHILLING DEVICE THAT CAN FIT ANY TECNIPLAST METABOLIC CAGE, FROM SINGLE MOUSE UP TO RATS, CAPABLE OF KEEPING URINE AND FECES AT A CONSTANT LOW TEMPERATURE FOR A SET TIME. THIS FINE CONTROL GIVES THE RESEARCHERS COMPLETE CONTROL OVER THE TEMPERATURE OF THE SAMPLES DURING THEIR METABOLIC RESEARCH PROTOCOLS.

### PERFECT CONSERVATION OF SPECIMENS

The system can keep urine at low temperature in order to slow down biochemical reactions due to enzymes actions. The settable temperature range on the E-Chiller goes from 4°C to 20°C and being electronically controlled it features a tight and fine control of the temperature avoiding any uncontrolled temperature fluctuation during the time of the experiment.

### RELIABLE EXPERIMENTS OUTCOMES

With the E-Chiller researchers are finally able to maintain collected urine and faeces at a constant set temperature through time: no more undesired variables that affect research outcomes and time-constraint experiments.

### USER-FRIENDLY

Plug-and-play device with simple and immediate user interface: soft-buttons display for an intuitive control and setting of the machine parameters: temperature and time.

No more need for a refrigerator to freeze the chillers before the experiment: reduction of operational and logistics complexity, costs, time and space required.

Cage	Rack configuration
ALL METABOLIC CAGES	10 cages (5w x 2h) For metabolic cages with E-Chillers Single sided

*E-Chiller is also available in single-cage stand configuration*



## ACTIVITY WHEEL

Rodent Activity Wheel provides an easy, convenient method for measuring lab rodents' physical activity in response to chemical or environmental stimuli. It is especially useful for researches involving circadian rhythms or pharmaceutical testing. Regular activity increases and maintains physical fitness helping the control of body weight.

- Designed for easy monitoring of rodents physical activity levels
- Flexibility: adaptable for rats and mice



Looking for  
reliable  
housing solutions?

TAKE A LOOK AT TECNIPLAST  
CONVENTIONAL HOUSING  
BROCHURE TO FIND OUT MORE!



 **TECNIPLAST**  
*innovation through passion*

#### HEADQUARTERS

ITALY | Tel. +39 0332 809711 · [www.tecniplast.it](http://www.tecniplast.it) · E-mail: [tecnicom@tecniplast.it](mailto:tecnicom@tecniplast.it); [venditeitalia@tecniplast.it](mailto:venditeitalia@tecniplast.it)

#### SISTER COMPANIES

AUSTRALIA/NEW ZEALAND | Tel. + 61 2 8845 6500 · [www.tecniplast.it](http://www.tecniplast.it) · E-mail: [info@tecniplast.com.au](mailto:info@tecniplast.com.au)

CHINA | Tel. + 86 (0)21 50810920 · [www.tecniplast.cn](http://www.tecniplast.cn) · E-mail: [tecniplastchina@tecniplast.it](mailto:tecniplastchina@tecniplast.it)

FRANCE | Tél. +33 (0)4 72 52 94 41 · [www.tecniplast.fr](http://www.tecniplast.fr) · E-mail: [info@tecniplast.fr](mailto:info@tecniplast.fr)

GERMANY | Tel. +49 (0)8805 921320 · [www.tecniplast.de](http://www.tecniplast.de) · E-mail: [info@tecniplast.de](mailto:info@tecniplast.de)

UNITED KINGDOM | Tel. + 44 (0)845 0504556 · [www.tecniplast.it](http://www.tecniplast.it) · E-mail: [info@tecniplastuk.com](mailto:info@tecniplastuk.com)

JAPAN | Tel. +81 (0)3 5770 5375 · [www.tecniplast.it](http://www.tecniplast.it) · E-mail: [info@tecniplastjapan.co.jp](mailto:info@tecniplastjapan.co.jp)

USA | Toll Free: +1 877.669.2243 · [www.tecniplastusa.com](http://www.tecniplastusa.com) · E-mail: [info@tecniplastusa.com](mailto:info@tecniplastusa.com)

CANADA | Toll Free: +1 855.347.8718 · [www.tecniplastcanada.com](http://www.tecniplastcanada.com) · E-mail: [info@tecniplastcanada.com](mailto:info@tecniplastcanada.com)

TO FIND YOUR LOCAL DISTRIBUTOR, PLEASE VISIT [WWW.TECNIPLAST.IT](http://WWW.TECNIPLAST.IT)