







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 CIRCADIAN RHYTHMS STUDIES

LEDDY
&
RED CAGE



7 ACTIVITY WHEEL

METABOLIC SYSTEMS

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 ALLOW 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



SPECIAL DESIGN
OF THE FUNNEL
AND OF THE
SEPARATION CONE

FOR SINGLE MOUSE
WITH SINGLE CHAMBER FEEDER



FOR GROUPED MICE
WITH DOUBLE CHAMBER FEEDER





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



THE INNOVATIVE WIRELESS, FULLY PROGRAMMABLE
IVC LIGHTING CONTROL SYSTEM

LEDDY & RED CAGE

With LEDDY, it is possible to evaluate the animals' physiological response related to lighting stimuli, without moving the cage from the rack. Leddy, by combining a red tinted cage with a programmable LED source, allows the operator to set dedicated light cycles directly inside the home cage, and run different experiments in the same IVC rack.

FLEXIBILITY AND SAVINGS

- Multi-experiments system: every single cage can be independently programmed with a specific lighting cycle, allowing the possibility of running different experiments in the same room and even in the same IVC rack, without affecting other cages
- Resources saving: no more waste of time and space by dedicating specific rooms to light cycles studies.

ANIMAL WELFARE & BETTER SCIENTIFIC OUTCOMES

- Every cage receives a defined intensity of light for a specific time cycle, without being influenced by the room environment, with better standardization of the biological results
- Decrease in potentially stressful operations, mainly by avoiding the movement of cages off the rack (research in the IVC home cage).

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

ACTIVITY WHEEL



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

HEADQUARTERS

ITALY | Tel. +39 0332 809711 · www.tecniplast.it · E-mail: tecnicom@tecniplast.it; venditeitalia@tecniplast.it

SISTER COMPANIES

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

CANADA | Toll Free: +1 855.347.8718 · www.tecniplastcanada.com · E-mail: info@tecniplastcanada.com

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

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

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

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

SWITZERLAND | Tel +41 (0)81 750 31 40 · www.indulab.ch · Email: infos@indulab.ch

UNITED KINGDOM | Tel. + 44 (0)345 0504556 · www.tecniplastuk.com · E-mail: info@tecniplastuk.com

USA | Toll Free: +1 877.669.2243 · www.tecniplastusa.com · E-mail: info@tecniplastusa.com

TO FIND YOUR LOCAL DISTRIBUTOR, PLEASE VISIT WWW.TECNIPLAST.IT