

Tecniplast is pleased to announce that we are now a member of the “Green Building Council Italia” organization

The “Green Building Council Italia” is part of a broader movement which started in the USA with the foundation of USGBC in 1993 and then spread to more than 110 countries worldwide.

All GBC organizations are nonprofit, working to make green buildings available to everyone within a generation.

GBC ITALIA has been a member of World Green Building Council since September 2008.



Why TECNIPLAST and LEED?

LEED Certification has become an essential component of sustainable design in the building and construction industry.

It ensures that a building project is environmentally responsible, profitable and a healthy place to live and work. The need for “sustainability” is fast becoming a mandatory requirement as more and more environmental initiatives are being enacted at all levels of government and also involving consumers themselves. Architects’, contractors’ and building owners’ preferences are quickly changing to support green, energy efficient products because they see the advantages of lower environmental externalities, healthier lifestyles and the reduced impact of environmental friendly items.

LEED is an important tool to measure the environmental aspects of a building’s performance. Tecniplast products can contribute consistently and constantly to credits under the LEED rating system.

Moreover, the LEED concept helps to avoid “Green Washing”, in which incorrect claims are made that processes or products are environmentally friendly. “Green Washing” is becoming more widespread. The advantage of the popularity and transparency of LEED is that it enjoys a high level of consumer confidence in maintaining leadership in environmental development and promoting legitimately high thresholds of sustainable design.

What is LEED? ...and related questions.

The “Leadership in Energy and Environmental Design” Green Building Rating System™ is a national voluntary standard developed by the U.S. Green Building Council (USGBC), a coalition of not-for-profit organizations. LEED is a nationally accepted benchmark for the design, construction and operation of high performance green buildings.

The LEED Rating System gives architects, building contractors and owners tools to determine how to have a measurable impact on a building’s performance. It provides the building industry with consistent, credible standards to design and maintain green buildings that are healthy places for their occupants, energy efficient and cost efficient, and built with sustainable materials in a sustainable way.

FlashNews

ANZLAA at The Australian National University in Canberra

On the 27th of May 2011, ANZLAA with the support of Tecniplast Australia, conducted a one-day symposium at The Australian National University in Canberra. This was symposium number 4 and, unlike the previous three events, combined presentations on technician as well as animal welfare. Seven speakers covered a variety of topics amongst which were:

- How can managers minimise the impact on staff that care for animals?
- Essential contributions made by animal technicians - an integral part of the animal ethics process.
- When performing animal procedures we need to know how to prepare and handle anything that may potentially touch an animal.

Everyone mingled, people catching up with people they hadn’t seen since the ANZLAA conference. There were a small number of Managers present as most facilities had given their junior technicians the opportunity to attend. Many comments were heard during the day - here is a selection:

- “Fantastic symposium good presentations”
- “It is really great for the junior technicians to be able to attend a symposium”
- “Technicians can network with other technicians”
- “The guest speaker’s (Debbie Chesterfield) presentations were really interesting and thought provoking”
- “Some Managers thought the symposium was very useful for their staff”

The symposium was closed by Dr Simon Bain, Executive Officer of the ANU Animal Experimentation Ethics, who thanked Tecniplast and ANZLAA for their support.

While yet to be confirmed Tecniplast will continue this educational collaboration with ANZLAA in 2012, the most likely venue being once again in Melbourne where the series first began.

Brian Fowler - Tecniplast Australia Managing Director

What is LEED certification? What are its benefits?

LEED credits are awarded based on criteria in six categories of performance. Architects, building planners, owners or other project team members apply for this certification. A building project must meet a set of pre-requisites to be registered, and it must achieve the minimum number of points to earn a basic “Certified” level of LEED certification. The number of points the project earns determines the level of LEED certification (from a Certified level through Silver and Gold to the Platinum level).

LEED certification is a third party validation of a building’s green performance, and it demonstrates that building green need not increase costs in order to reap benefits. According to the USGBC, LEED certified buildings cost less to operate and maintain, are healthier places to live and work in, and conserve our natural resources (see www.usgbc.org for more information).

Can Tecniplast products be certified under LEED?

Not exactly. LEED applies to green building projects, and the USGBC does not endorse or certify the products and services of any company. However, individual manufacturers’ products can contribute to credits under the LEED rating system. Many TP products can contribute from two to six categories of performance - Energy & Atmosphere, Materials & Resources, Regional Priorities and Environmental Quality. For instance, many of our products help earn points under EA, MR, ID and EQ as Waste Management, Recycled contents, Regional Materials, Optimization of Energy Performance credits.

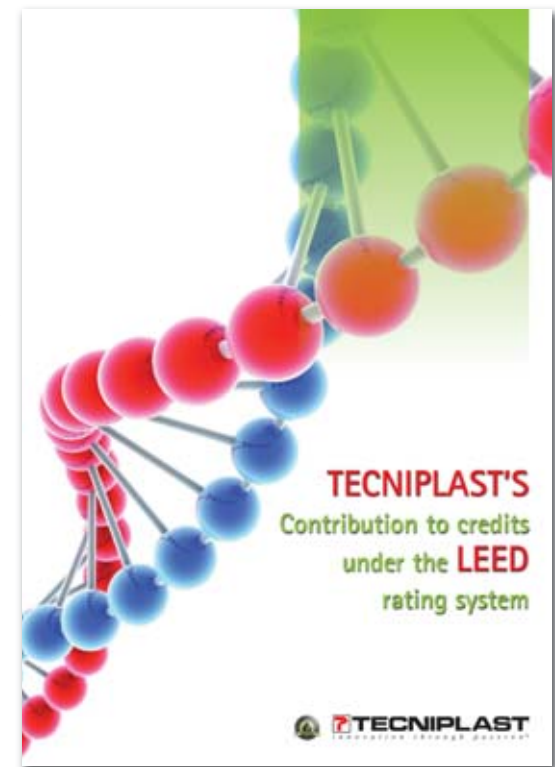
Tecniplast has taken into account three criteria that match external certifications (ISO 14001, Environmental Report) and objectively measurable data (emissions of CO₂, LCA and quantity of recycled plastics via specific initiatives). TP production is carried out in an ISO 14001 certified factory. This certification was obtained in 2006 and is still the only one of its kind in the lab animal industry. This certification, granted by an independent body (The International Organization for Standardization), attests to the efforts deployed to reduce the impact of production on the environment.

CO₂ Emissions. Tecniplast products are the only ones which can offer customers a statement of CO₂ emissions through a peer reviewed LCA analysis. The analysis was performed to identify areas where improvements can be made in environmental terms, providing customers and partners with added confidence.

Recycling: Tecniplast products are designed to allow the exploitation of 100% of their mass at the end of life (recycling and energy recovery) and built with the concept of Eco Innovation to stimulate the development of new solutions and processes. Moreover, Tecniplast offers an exclusive project in recycling old plastic cages for a second life to plastic and thus do something together for the environment.

What benefits come from being more green-minded?

How can you profit? Encourage architects, contractors and other building designers to specify the energy efficient TP products. How does the building industry profit? Specifying TP products helps contribute towards credits for LEED certification. It also demonstrates commitment to green building practices and helps realize profitability. This is good business sense and it is good for everyone.



Leopoldo Zauner - Marketing Director

EDITOR
George Crowhurst

ART WORK
Cromoflash Italy

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TECNIPLAST
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www.tecniplast.it



Environmental Procurement enters the Animal Facility

Environmental procurement can reduce operating costs, reduce the impact vivaria can have on the environment, and promote sustainability and waste reduction. Laboratory sciences are in a transition phase towards more sustainable operations. The justification for sustainable operation, or “greening,” of laboratories addresses concerns that laboratories utilize considerable non-renewable resources and generate significant amounts of emissions and waste. Part of the process of sustainable development has been formalized as “Environmental Procurement”, which compares environmental impacts when selecting products and services, and influences the way facilities are designed and operated. Including the selection of equipment and products, environmental procurement is increasingly factored into regulations, organizational initiatives, and procurement documents. Of all of the laboratory environments, vivaria are often vilified as some of the worst offenders in terms of sustainability and energy consumption. While this is largely true in the current environment, this need not be the case for future animal facilities. For countless years, the design of animal facilities has isolated itself within time-tested methodologies that have become a “black-box” approach to how vivaria are designed and constructed.

The typical lifespan of the major systems serving a vivarium is twenty years and total life expectancy is generally 40-50 years. In other words, **emphasis on first-cost alone is a short-sighted approach to vivarium design**. A large part of the operational cost is based on the energy consumption of the facility to sustain operations and therefore these areas are natural targets for reduced consumption.

So how does one select the most-efficient equipment from the myriad manufacturer’s options, claims, and listings? One method is to insist on third party evaluation of life cycle environmental impact of the equipment. One tool to achieve this is the ISO 14040 and 14044: 2006 standards for Life Cycle Analysis. These certifiable processes allow the owner and specifier to evaluate the total life cycle cost and environmental impact, from the processes and materials used in the manufacture and assembly of a product, to shipping to the project site, and then on to projected operating costs for a specified period of time based on local energy costs. **This holistic approach to evaluation has been extremely useful in understanding the total environmental impact of choosing one product over another.** However, given the effort the ISO 14000 series life cycle analysis requires, it has not been widely embraced by the industry. As a community of laboratory animal facility owners, planners and designers, we should demand this type of third party independent analysis from the equipment manufacturers as a uniform means of evaluation. Application of these processes could be applied to animal housing selection, primary containment equipment, cage wash equipment, and high-performance coatings - almost any product used in the vivarium.

Editor’s note:

First among animal facility equipment manufacturers, Tecniplast obtained ISO 14001 certification in 2006. Besides this, Tecniplast also commissioned a peer reviewed LCA Assessment for its IVC systems. IWT, Tecniplast’s washing, automation, decontamination and bedding handling arm, has also worked tirelessly over recent years to successfully cut the energy consumption of its equipment, as further evidence of the Group’s overall, genuine commitment to a cleaner, safer environment. And, as stated by Jeffrey R. Zynda, “emphasis on first-cost alone is a short-sighted approach to vivarium design”. What is needed is an evaluation of “the total environmental impact of choosing one product over another”.

Jeffrey R. Zynda - Associate Principal, Payette

BoxNews

Dr. Doug Morck from the University of Calgary receives the Tecniplast Veterinarian of the Year 2011 award

Dr. Doug Morck has committed his entire veterinary career to improving the welfare of animals used in research. His dedication to mentorship and training staff has earned him the Tecniplast Veterinarian of the Year award.

“This is an extreme honour. It’s both humbling and gratifying to learn that those who have nominated me feel I have made a difference. They are the people at the frontlines of animal welfare, they are the animal care technicians and laboratory animal scientists,” says Morck, who holds a professorship in the faculties of science and veterinary medicine. The Tecniplast Veterinarian of the Year Award was established by the Canadian Association for Laboratory Animal Science to recognize the outstanding contributions that veterinarians make in the field of lab animal medicine both locally and nationally. “I can’t imagine a more deserving vet,” says Michelle Gillespie, manager, operations and infrastructure-Health Sciences Animal Resources Centre. Morck is known for his quiet and calm approach to solving problems, says Dr. Jay Cross, associate dean - research and graduate education in the Faculty of Veterinary Medicine. “But his intent is firm, clear and committed. This approach has allowed Dr. Morck to solve several problems and make major contributions to veterinary medicine, including improving animal welfare and streamlining processes to help researchers.”

His work touches many faculties at the University of Calgary. “It is about respecting animal life,” he says.

“The best thing about the University of Calgary and the Faculty of Science is the encouragement to work with others in medicine, veterinary medicine, engineering, kinesiology, arts, environmental design-all the faculties - to improve animal welfare and to do so in a practical and meaningful way,” says Morck.

Dr. Doug Morck - University of Calgary, Veterinary Medicine

The **voice** of the Customer



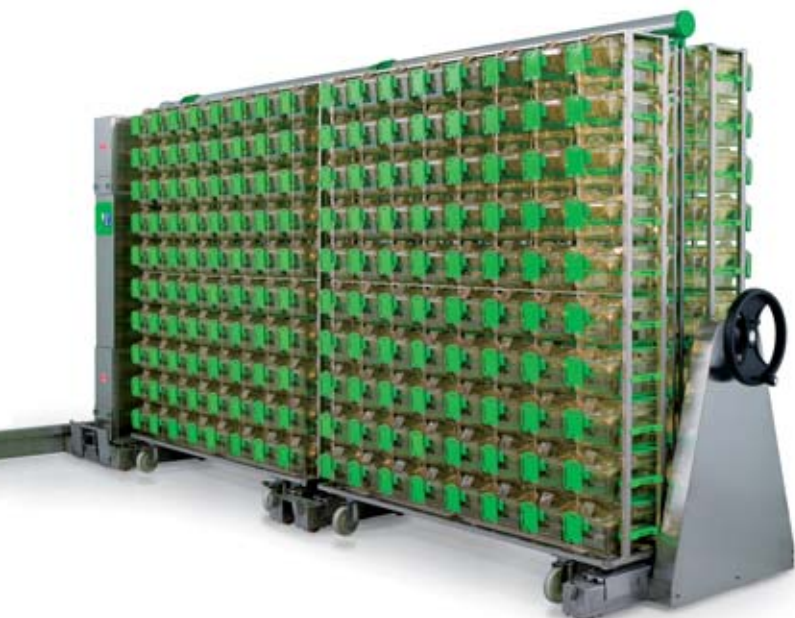
Equipping a new facility at the University of Central Florida

Teri Krisch is currently the Associate Director of two transgenic animal facilities at the University of Central Florida (UCF) in Orlando where she has been employed for the past 5 years. Her career has included positions as veterinary technician, hospital manager, animal keeper, lab animal technologist, and animal facility manager. She has worked in several small animal and emergency hospitals, a pharmaceutical research company, Disney's Animal Kingdom, Kennedy Space Center, and UCF. She has cared for a variety of species ranging from mice to hippos.

In the spring 2010, UCF began the construction of a state of the art 25,000 square foot (2,300 metres) animal facility which is capable of housing over 25,000 rodents. UCF purchased the Tecniplast IWT 900 Series Rack Washer with hydrogen peroxide vapor option. This equipment allows Teri to decontaminate heat sensitive equipment such as computers, incubators, microscopes, laboratory instruments, lab supplies, etc. "We now feel that we could not function without it! The large chamber allows us to pass the items listed above into the barrier, confident that they are clean and safe". Teri and her team chose the Tecniplast library-style caging racks in order to maximize animal room space. She says this type of racking system is easily maneuvered and allows increased animal inventory in the same footprint.



The decision to purchase the library-style racks was made after construction began. Teri worked with Tecniplast's design engineers in Italy to reconfigure the animal room layout. The new layout required modifications to the HVAC system and door placement. Tecniplast worked with the architect to incorporate the new specifications into the construction project.



Teri is impressed with Tecniplast's friendly and efficient customer service. "It has been excellent. It is very important for me to be able to ask questions and resolve issues as quickly as possible. The people at Tecniplast respond quickly to queries." During startup of the new facility, Tecniplast representatives flew to UCF prior to equipment delivery to initiate cagewasher operation. They also assisted in offloading, uncrating, cleaning, and set up of all equipment. "They went above and beyond to ensure my satisfaction and success."

When asked about future improvements she would like to put in place, Teri said her wish list would include a data management system with WDM (wireless data management) for increased monitoring of the animals at the rack level.

George Crowhurst - Panorama Editor

Innovation Focus

BDS+...what else?



This is a really nice story to tell, a story that started over one year ago, a story recounting the dream of a group of people sitting around a table brainstorming and aiming to create something new, something different... something "Plus"! Allow me to share with you the same passion and commitment that drove me and an outstanding team of colleagues to create the very latest product in the Tecniplast/IWT range. Over one year ago we were sitting around a table listing, as always in Tecniplast, the needs and the demands of our customers, trying to understand how to improve the "old" Stand Alone Dispenser. The message was clear: we needed something that could enhance ergonomics and allergen/dust containment, something that would guarantee total flexibility in selecting the right bedding for your experiments, leveraging Tecniplast's cutting-edge technologies and incorporating eco-friendly features.



Creating a new machine is like preparing your favourite dish - you need to put on the table all the ingredients, mix them together, blend them appropriately and finally cook them with that "secret touch" that only you know. Customer aspirations and our experience in over 130 Vacuum bedding handling systems installed worldwide spawned the idea - literally squeeze, shrink, concentrate a centralized vacuum system into an extremely compact unit! After months of passion, design reviews and meetings we finally came to the conclusion that we could do it! But pure technology was not enough. While the designers were putting on paper every single screw of the BDS+, the excitement kept on growing. We were intent on creating something even more innovative, a real turnaround in the market. We wanted it to be attractive! As already achieved by Tecniplast in the holding rooms with the CSS Evo and the Aero Rack, here was the first, unique piece of equipment in the washing area made of recyclable plastic!

The first prototype unit saw the light of day in early March this year and it was truly love at first sight! But like every relationship it had to go through grueling tests and challenges, robustness trials, performance evaluations, not to mention the tough process of industrialization which allows us today to provide you with a 360° reliable unit to join you in your daily work.

So let me introduce you, with a certain pleasure, to the **Bedding Dispensing System Plus**.

An on-board single-phase vacuum pump draws the clean bedding material from the loading funnel up to the dispensing silo, meaning:

- Quicker refilling compared to the traditional mechanical solution - over 100% faster than the previous auger system.
- Total safety for the operator and for the machine itself:
 - No more fear of card holders falling into the funnel.
 - Possibility for the operator to open the working grid to discharge the small bedding bags directly into the funnel with the best ergonomics ever.
- The negative pressure provided by the vacuum contains any dust generated during the bag discharge procedure.



A back draft hood which grants:

- 1400m³/h of air-flow - more than twice as much as in the previous solution.
- Double level G4-F7 filter - easily accessible from the front panel.
- Total protection for the operator during bag discharge and dispensing operations. An upgrade kit for light bedding processing - a unique feature composed of a special mixer/stirrer in the dispensing silo. For the first time the range of beddings selectable for your research is not limited to "free-flowing" materials. A broad working surface which allows the processing of all rodent cages available in the market, with ultra-sonic sensors to trigger the dispensing. A smooth area to simplify your cleaning procedures. An intuitive touch-pad to interact with the system - up to 5 dosage values selectable and easily settable, and alarm diagnostics for quick trouble-shooting. An attractive high-resistance thermoformed ABS plastic outer casing. Its rounded surfaces will not only enhance your cleaning operations but it will look like a work of art in your washing area! A light unit on castors, allowing you to move it easily around and locate it wherever needed, combined with the optional on-board air compressor, makes it the most compact and versatile machine in the market.

And let's not neglect its Green soul:

- 100% recyclable plastic housing.
- 24V low consumption fan for the back draft hood.
- Green Power mode to automatically switch off the unit if not used for a selected time window.

You will actually enjoy having this breathtaking product in your facility!

Different beddings? No problem!



Marco Pagani - IWT Product Manager

The iSPAWN:

A Novel Group Spawning Chamber for Zebrafish

High fecundity is one of the major advantages of zebrafish, but the reproductive potential of zebrafish has not been fully realized because methods traditionally used for embryo collection are inefficient.

In an effort to enhance zebrafish embryo production Tecniplast Aquatic Solutions, in collaboration with Children's Hospital Boston, has developed the iSPAWN, a breeding chamber designed to stimulate natural reproductive behavior.

The iSPAWN allows the collection of large numbers of developmentally synchronized embryos in brief and defined windows of time, and with minimal investments in labor and space.



Designed by Zebrafish researchers and scientifically proven

Thousands of synchronized embryos on demand

Traditional methods for zebrafish embryo collection do not allow the tremendous reproductive potential of the fish to be fully realized. The iSPAWN meets this challenge, streamlining the process of collecting large numbers of developmentally synchronized embryos in precise windows of time. The result? Thousands of embryos - when you want them, and in a simple and user friendly design.

Natural spawning behavior

The iSPAWN capitalizes on the natural tendency of zebrafish to spawn in shallow water. The innovative design of the platform promotes group mating behavior that results in intense bursts of embryo production.

Easy to use

The iSPAWN is easy to use: during the evening, males and females are sequentially added to the system, and are divided by a separator. The next day, when embryos are required, the separator is removed and the spawning platform is lifted to initiate the spawning event.

Scientifically proven

The system has been successfully field-tested in one of the largest and most active zebrafish laboratories in the world. The iSPAWN is driving science - now.

Animals under constant control

The iSPAWN is completely transparent for maximum visibility and animal inspection.

Flexible solution

The iSPAWN can work either in static conditions or with recirculating water.

Easy to maintain

The system is easily disassembled, washable and limits the build-up of debris.

For every kind of floor

The iSPAWN has four adjustable feet in order to properly level it and adapt it to every kind of floor.

Embryo collector

The system features an ergonomic embryo collector.



Marco Brocca - Aquatic Solutions Product Manager