



# PET FOOD MAGAZINE

■ Issue N° 17

INTERNATIONAL MAGAZINE ABOUT PET FOOD INDUSTRY

Volume V - October 2023 ■



**REGENERATIVE AGRICULTURE  
IN PET FOOD, A DOOR  
TOWARDS A CIRCULAR  
ECONOMY IN OUR INDUSTRY**

**CIRCULAR ECONOMY:  
THE PACKAGING CHALLENGES  
IN THE PET FOOD INDUSTRY**



**HOW DO WE CREATE  
A CIRCULAR FOOD  
INDUSTRY?**

**PROCENS, THE COMPANY  
THAT PRODUCES 100%  
NATURAL PROTEIN FLOUR AND  
OIL FROM INSECTS THROUGH  
A CIRCULAR ECONOMY MODEL**



# CIPAL

# 2024

## Returns!

## Latin American Pet Food Industry Congress

All Pet Food organizes its **third edition** of the Latin American Pet Food Industry Congress after the success of its previous editions in 2019 & 2022, with the attendance of more **than 600 professionals** from several countries of **LATAM, America and Europe**.

UCA | Puerto Madero  
Buenos Aires | Argentina

September  
25<sup>th</sup> - 26<sup>th</sup>

[www.cipal.com.ar](http://www.cipal.com.ar)

Organized by



**All Pet Food**

Alvear 44, Chacabuco  
 Provincia Buenos Aires–Argentina  
 Info@allpetfood.net

**Managing Director**

Pablo Porcel de Peralta  
 pablo.porcel@allpetfood.net  
 M. +54 9 2364-537698

**Sales Manager**

Iván Marquetti  
 ivan.marquetti@allpetfood.net  
 M. +54 9 2352 501730

**Director’s Assistant**

Victorina Manes  
 victorina.manes@allpetfood.net

**Editorial Team**

Maria Candelaria Carbajo  
 Victorina Manes  
 Ludmila Barbi Trindade  
 Erika Stasienuik  
 M. Candela Bonaura  
 Armando Enriquez de la Fuente Blanquet  
 Fernando Raizer  
 Juan Manuel Peralta

**Design & Layout Manager**

Laureano Cane  
 Juliana Di Palma

**Software Development**

Matías Basile  
 Matías Schettino

**Our Community**

Web: [www.allextruded.com](http://www.allextruded.com)  
 LinkedIn: <https://bit.ly/36SK5MT>  
 Facebook <https://bit.ly/3kGFJk5>  
 Twitter: <https://bit.ly/3ByDbdY>  
 Youtube: <https://bit.ly/3izLoHn>  
 Instagram: <https://bit.ly/3lUV6Z7>

IN THIS ISSUE

<b>4</b>	<b>EDITORIAL</b>
<b>6</b>	Alternative pet food, gaining ground in pursuit of a circular economy
<b>10</b>	Circular economy: the packaging challenges in the pet food industry
<b>12</b>	Regenerative agriculture in pet food, a door towards a circular economy in our industry
<b>16</b>	How do we create a circular food industry?
<b>18</b>	Talking about “numbers”: how much does it “cost” to own a pet?
<b>22</b>	Statec Binder: a pioneer in the packaging industry
<b>24</b>	Mobile “Smart Cart” Automates Food Conveyor CIP for Pet Food Manufacturers
<b>28</b>	Small actions also contribute to a circular economy
<b>30</b>	CIPEU 2023
<b>32</b>	Symrise Pet Food Eco-friendly plant in Colombia celebrates its 3 years
<b>37</b>	Mycotoxins in dog and cat food: how to deal with them?
<b>40</b>	<b>TECHNOLOGY SHOWCASE</b>
<b>42</b>	<b>THE INTERVIEW: LUCAS CYPRIANO</b>
<b>46</b>	Fiber Innovations – Time to Shine
<b>48</b>	Raising the Bar in Pet Nutrition: ANDRITZ’s Twin-Screw Extruders for High-Meat Formulations
<b>52</b>	Procens, the company that produces 100% natural protein flour and oil from insects through a circular economy model
<b>56</b>	<b>COMPANIES WITH HISTORY: PORFENC</b>
<b>58</b>	<b>ALL PET FOOD NEWS</b>
<b>60</b>	<b>MARKETPLACE INDUSTRY SUPPLIERS</b>



## EDITORIAL

Once again, here we are, in a new All Pet Food Magazine edition! On this occasion, the last one that will gather us in the remainder of 2023, **we manage with the greatest delicacy, certainty, and information articles regarding circular economy**, content of great value and importance for all of us involved in the active search for new proposals and solutions that improve our industry while taking care of future possibilities.

With the help of professionals such as Candela Bonaura and Armando Enríquez, and pieces of news by experts from companies such as Cablevey, Andritz, and JRS, **we will talk about different aspects and subtopics that make up the circular economy, such as regenerative agriculture, the circular economy in packaging, actions to contribute to a sustainable economy and much more.** Additionally, in this edition, we have an exclusive interview with the Procens team, who provide us with detailed information about their innovative proposals in terms of new sources of nutrients that contribute to the circular economy of our industry.

Before finishing, we would like to publicly extend our gratitude to the more than 500 attendees, experts, and professionals who have accompanied us in this first edition of the **Pet Food Industry Congress in Europe, CIPEU, led together by Feria Zaragoza.** The success was such that **more than 50% of the exhibitors have already reserved their place for the next edition in 2025!** Thank you for the trust and collaboration to make an increasingly better pet food industry!

On November 14, in Bogotá, we will carry out **All Pet Food Day Colombia 2023.** This event proposes a new meeting point dedicated to industry participants from the Andean region. It will be an intensive day of conferences, ideal for knowledge and professional links exchange and creation.

In the meantime, **we will continue working to offer the most updated and cutting-edge content to grow together and expand our industry, moving towards greater sustainability with each of our actions.**

Editorial team





# The Results Speak for Themselves

With Wenger, you make products that pets love to eat.

Through careful testing and extensive research, our world-class team helps you develop premium foods and treats, and the processes to produce them at scale. Pet food producers globally trust Wenger for systems and solutions to satisfy healthy pets everywhere.

See what Wenger can do for your business.

[Wenger.com](https://www.wenger.com)



# ALTERNATIVE PET FOOD, GAINING GROUND IN PURSUIT OF A CIRCULAR ECONOMY

Our planet faces an unprecedented climate crisis, and the solution will happen, only if we act together. For that, we must work to adapt all aspects of human society in order to reduce environmental impact. Of all these aspects, the one that currently has a great impact on the damage we cause to the environment is food production, both for pets and humans, based on meat proteins. However, in the pet food industry, a new and sustainable alternative has been gaining ground for some time: insect-based pet foods.

By All Pet Food

## Why consider insects as a possible protein source for pets?

Insect-based pet food uses, as the name suggests, insects as the primary source of protein, rather than beef, poultry, or fish.

Global human population growth is projected to reach 10 billion people by 2050. In turn, pet ownership is also increasing, with a current estimation of more than 1 billion

pets worldwide. Consequently, there is a rapidly increasing global demand for protein as a nutrient source. In addition, due to pet humanization, there is some concern about the direct competition between food production for both living beings.

**Today, food consumption by the world population of dogs and cats represents about a quarter of the environmental impact of production.** In fact, in 2020, a study found that global greenhouse gas emissions from pet food were equal to those of the 60th highest-emitting country in the world. Knowing



# System Solutions in Bulk Material Handling

## » Pneumatic Conveying

- Extruder to dryer
- Dryer to coating
- Coating to storage/mixing silos
- Silos to packaging

## » Feeding

- Gravimetric feeding of palatants

## » Sifting

- Pre-extrusion – particle classification



**More  
Information**

[www.schenckprocess.com](http://www.schenckprocess.com)  
[americas@schcnckprocess.com](mailto:americas@schcnckprocess.com)  
816-891-9300

**we make processes work**

these numbers, it is imperative to prioritize both global food security and environmental impacts related to food production and consumption.

Insect-based protein is presented as a great sustainable alternative with high nutritional quality to develop in the pet food sector. **Some of the most used insects currently in this type of proposal are black soldier fly larvae, crickets, and mealworms. These insects are rich in protein, healthy fats, and essential minerals, making them an excellent source of pet nutrition.**

Most pet food brands are developing this type of pet food focused on dry dog food, followed by the wet food sector, also for dogs. The insect-based alternatives present for cats are considerably fewer.

### **Advantages of insect-based pet food production**

Some of the reasons insects are increasingly being incorporated into new pet food recipes and formulations have to do with the nature of their primary production:

- Insects have a very high feed conversion efficiency and can be raised in organic side-streams, as plant by-products of human food production systems, thus recycling low-value food waste into high-value protein and fat.
- They require significantly less water and produce fewer carbon dioxide and ammonia emissions, compared to traditional protein sources.
- They need much less physical space. For example, commercial insect-rearing facilities using vertically integrated farming techniques can produce 1 ton of insect larvae every two weeks on 20 square meters of land.

In addition, insects, depending on their species, can be a great source of essential nutrients, including amino acids, fatty acids, minerals, and vitamins-

### **Current consumers perception**

One key factor to inserting this type of protein into the market, in addition to scientific research and development, is nothing more and nothing less than communication and marketing. Good advertising campaigns and awareness about the benefits of insects as a protein source can be great drivers of market growth in the short and medium term.

As these shares increase, the perception by pet owners is expected to improve, and this, in turn, will fuel the sector's growth. In fact, in a recent study, more than 50% of pet owners who participated stated that they were willing to feed their dogs this type of food, while, in another, more than 90% of the participants expressed a positive opinion about it.

### **A possible future, based on insects?**

Today, we know that insect-based pet foods offer numerous environmental benefits compared to traditional meat-based options. Like any relatively new proposal,

it needs more scientific evidence to back it up, and this depends not only on governments but also on the institutions themselves. **To achieve this, it is essential to foster partnerships and active communication with veterinarians and professionals, both for new studies and to find new ways to improve consumer perception to promote insect-based pet foods.**

Some insect species can provide rich sources of highly digestible amino acids, fats, and minerals for pet nutrition. Its sustainability benefits, at levels of commercial insect crops compared to traditional livestock farming, are already demonstrated and constitute an interesting development area worldwide, which could even be transferred to human food.

**Adopting systematic marketing, producing more scientific evidence, and informing the consumer are 3 essential keys that, if used consciously, will increase the time it takes to market for successful adoption of these foods.**

Some of the most used insects currently in this type of proposal are black soldier fly larvae, crickets, and mealworms. These insects are rich in protein, healthy fats, and essential minerals, making them an excellent source of pet nutrition.



# Yeruvá

SOCIEDAD ANONIMA

PROTEÍNAS FUNCIONALES E INGREDIENTES

| FEED | FOOD

Más de 25 años produciendo proteínas funcionales e ingredientes de máxima calidad para las compañías más exigentes del mercado global.



### Administración Esperanza:

Zeballos 714 (3080)  
ESPERANZA, Santa Fe - Argentina  
Tel/Fax: 54 (0) 3496 425474 / 475 / 476



### Planta Industrial Esperanza:

1º de Mayo 3300 (3080)  
ESPERANZA, Santa Fe - Argentina  
Tel/Fax: 54 (0) 3496 424450 / 426606



### Planta Industrial Capitán Bermúdez:

3 de Febrero 2606 (2154)  
Cap. Bermúdez, Santa Fe - Argentina  
Tel/Fax: 54 (0) 341 4781474

Yeruvá S.A. @yeruvasa Yeruvá S.A. [www.yeruva.com.ar](http://www.yeruva.com.ar)

## EXTEND YOUR PRODUCT'S SHELF LIFE

### NATURALLY.

Leading pet food manufacturers, renderers and ingredient suppliers recognize that Kemin is Assurance, delivering specialized expertise, innovative products and unrivaled support every step of the way — from oxidation control and food safety to palatability and nutrition.

We **assure** the shelf life of your pet food and rendered products with our extensive range of natural and synthetic antioxidant solutions.

Learn more at [kemin.com/nutrisurance](http://kemin.com/nutrisurance).



**KEMIN**  
IS ASSURANCE

[kemin.com/nutrisurance](http://kemin.com/nutrisurance)



# CIRCULAR ECONOMY: THE PACKAGING CHALLENGES IN THE PET FOOD INDUSTRY

The circular economy has become a crucial approach to addressing the environmental and sustainability challenges we face at an international level. In particular, the pet food industry has come under scrutiny due to its use of plastics in packaging and associated environmental impacts. Today, most pet food packaging ends up in the trash, even those that could be recycled, reused, or returned to the stores.

By All Pet Food

The truth is that the packaging that we had on the market 10, 20, or 30 years ago, when in many places the recycling system was just beginning to have relevance, has changed significantly, and there are strong indications that it will continue to do so. A few years ago, the same pet food companies began to analyze their packaging **to find a way to achieve new, more efficient proposals in terms of sustainability and circular economy.**

**But what are we talking about when we talk about the circular economy?**

**A circular economy is an integrative approach that seeks to minimize waste generation and maximize resources reuse, recycling, and regeneration.** In contrast to the linear “use and dispose of” model, a circular economy

encourages the creation of closed systems where products, materials, and resources are kept in circulation for as long as possible. **It promotes a systemic change from the traditional model towards a more sustainable and regenerative one.**

The challenge, then, is not only focused in terms of sustainability but also on **finding the most practical, functional, and attractive packaging for each product that hits the market.**

**The current situation in the pet food industry**

Our industry has witnessed significant growth in recent decades, which has consequently led to an increase in the production of plastic packaging. These offer durability,

lightness, and practicality but also contribute substantially to environmental pollution and waste accumulation. This market, like any other, generates waste and pollution on a daily basis, so trying to reduce it by working on one of the aspects with the greatest negative impact, the use of plastics in packaging, seems to be the most efficient option in the short and long term.

Often, there is a disconnection between what happens to a package at the beginning of its useful life when it is designed, and what happens at the end of its life. Currently, gaps of 5 and up to 10 years can be found between the environmental recovery situation for which a container is designed and what really happens with it when it goes on the market.

Considering the present context, not only of our industry but of the planet in general, **it is undeniable to recognize that packaging plays an essential role in the food supply, protecting and maintaining the products from processing and manufacturing to distribution, handling, and storage to reach the final consumer.** Without efficient packaging, food distribution would be completely incompetent and, therefore, much more expensive. The functions of a food package, both human and pet eats, can be described as protection and containment, preservation, information, convenience, and service. These are, directly or indirectly, essential for physical, chemical, and microbiological food safety. In pet food, the requirements for a packaging system intended for a fresh, frozen, dehydrated, thermal, or aseptic processed product, in terms of barriers to oxygen, humidity, light, and so on, are all different.

Reviewing the international situation, it is possible and clear to identify the efforts different companies and organizations are already making to find alternatives to a problem that will only increase, such as:

- Scientists at the Chinese University of Hong Kong (CUHK) **have developed an edible, transparent, and biodegradable material with considerable potential for application in food packaging.** The team is studying bacterial cellulose, an organic compound derived from certain types of bacteria that appears to be a sustainable, readily available, and non-toxic alternative to plastics.
- Analyzing the waste generated by plastic pet food containers, Dow, a leader in materials science, Nestlé Purina, a leader in the safe food market for animals, and the Avina Foundation, a civil society organization focused on addressing the social challenges in Latin America, created the Pegada Limpa project. **The proposal is to encourage the creation of a recycling chain for pet food containers,** promoting the conversion of 300 tons of circular plastic and positively impacting the income of approximately 5,000 collectors in Brazil and Argentina.
- Other alternatives under development focus on biogas energy. According to the U.S. Energy Information Administration, modern biodegradable waste can skip eons and go directly to energy production via landfill gas recovery systems. Gas from decaying organic matter can be captured and burned. **Like natural gas, biogas contains**

**mainly methane and carbon dioxide, both greenhouse gases if they escape into the atmosphere. However, when they are held trapped in a properly constructed landfill, that biogas can be used to generate electricity.** In this case, the bioplastic waste of one person in the industry could serve as electricity for others.

A circular economy is an integrative approach that seeks to minimize waste generation and maximize resources reuse, recycling, and regeneration.

## What to focus on?

- **Active development of sustainable alternatives to traditional pet food packaging materials,** such as biodegradable and compostable materials, edibles, and smart packaging technologies. By adopting these revolutionary options, the pet food industry can significantly reduce its environmental footprint.
- **Improving waste collection, classification, and recycling** to minimize environmental impact.
- **Seeking collaboration between involved parties.** Governments, pet food manufacturers, packaging suppliers, and consumers must work together to create a sustainable ecosystem.
- **Promoting sustainable change along with consumer education.** We must encourage pet owners to make informed decisions and opt for sustainable packaging solutions to raise awareness of the benefits and environmental impact.
- **Asking governments for measures that facilitate the transition** towards a circular economy in the pet food packaging industry, with, for example, mandatory recycling programs or ecodesign requirements.

## Pet food packaging: pursuing a more circular economy for our industry

It is well known that industries need to be increasingly aware of the impact on the environment and the well-use of resources. And, even though it is true that society has evolved towards a way of consumption that can be considered unbalanced and disproportionate with very harmful materials to the environment, **awareness is also needed about the importance of generating and promoting change.** Material suppliers and packaging producers, the recycling industry, food companies, the waste management sector, the public sector, and consumers are all collectively and individually responsible for environmental impact success.

Today, **the circular economy presents a revolutionary opportunity for the pet food packaging industry to address the waste problem.** By embracing sustainable packaging innovations, improving waste management practices, fostering collaboration, and educating consumers, we can create a more sustainable future for our industry.



# REGENERATIVE AGRICULTURE IN PET FOOD, A DOOR TOWARDS A CIRCULAR ECONOMY IN OUR INDUSTRY

Ending factory farming and transitioning to regenerative farming practices can reduce greenhouse gas emissions and improve animal welfare and the quality of the products we bring to the market. But why is it said that regenerative agriculture produces better food? And, fundamentally, what are the benefits of driving such a change at an industrial and international level?

By All Pet Food

More and more professionals and environmentalists are saying that continuing with the current production models is a path of no return toward the destruction of our planet. As an example, we can name Philip Lymbery in his book *Farmageddon*, **where he argues that farm animals currently eat more than a third of the world's agricultural crops and waste most of them as feces and heat.**

## What is regenerative agriculture?

La producción agrícola ha aumentado en las últimas décadas. However, the nutritional value of crops has been declining. According to a study from the University of Texas, the content of phosphorus, iron, calcium, protein, ascorbic acid, and riboflavin in crops has decreased between 9% and

38% compared to data taken between 1950 and 1999. The most likely reason for this is that over-tillage (the process of preparing the soil for crops) has killed off the microbes and fungi that make it biologically active, which increases crops' nutritional value.

Regenerative agriculture is, first, a response to this type of problem. **It is an agricultural production approach focused on managing land use to build healthy soils, promote biodiversity, and improve ecosystem services with the aim of producing more sustainable and resilient systems.** Their practices seek to increase soil organic matter, reduce erosion, and promote soil health and fertility through cover crops, crop rotation, composting, reduced tillage, and agroforestry, among other techniques.

This way, creating a more holistic and interconnected system that supports healthy and resilient ecosystems can improve productivity and profitability. However, **its great potential lies in the fact that it has the great capacity to mitigate climate change by sequestering carbon in the soil and reducing greenhouse gas emissions from agricultural practices.**

### Key benefits of regenerative agriculture

If we talk about the benefits of regenerative agriculture, we must discuss its main goal, sustainability, but also its nutritional quality.

- **Emissions from agriculture still are one of the most difficult ones to reduce**, and climate change is an international problem that, within our industry, we can begin to mitigate with this practice.
- **This agricultural production model can help improve crops' nutrient density, promoting healthy soil usage and reducing chemical fertilizers and pesticides. This would result in materials with a higher content of essential vitamins and minerals, which ultimately provides better quality raw ingredients for consumers.** Very often, these are the cattle later used for food production, both for humans and pets, so the derived products will be healthier and more nutritious. The University of Washington carried out a study that

demonstrated that crops from this production model have higher levels of nutrient density than those from standard models. Research shows that farms that use regenerative farming practices, such as no-till farming (planting crops without disturbing the soil beforehand), cover crops (working with vegetal species to improve soil health rather than for harvest), and rotations of various crops (changing the raw material grown on the same plot of land) produced crops with higher levels of vitamins and minerals than conventional farms.

**Its great potential lies in the fact that it has the great capacity to mitigate climate change by sequestering carbon in the soil and reducing greenhouse gas emissions from agricultural practices.**

### Mindset change: Short-termism is not the only way of analyzing a situation

One of the main challenges we find when changing the current forms of production is the problems that can develop in the supply chain. When seeking to implement a change in the way of doing things, clashes will inevitably occur. **In this case, wanting to have eco-conscious or sustainable business practices meets the costs of some of those practices right now, and how not only businesses but also consumers care about them.** We also must consider that inflation and

**Bringing pet's tastes closer to their parents'**

Biorigin has improved the flavor of human foods for more than 15 years, and now, it will turn pet foods tastier! PalaUp line products enhance Umami flavor and specific beef and roasted chicken notes. **If you want to make pets wipe out their bowls, add PalaUp!**

**PalaUp**

NATURAL  
GMO FREE  
VEGAN  
SUSTAINABLE & RESPONSIBLE

Choose Biorigin. #GoBiorigin. **Quality Animal Nutrition.**

For technical information:  
[www.biorigin.net](http://www.biorigin.net)  
[biorigin@biorigin.net](mailto: biorigin@biorigin.net)

**Biorigin**  
Art in Natural Ingredients

Biorigin Animal Health and Nutrition

\*PalaUp is not and does not contain animal ingredients. Regulations may vary among countries. Please always check the local regulations and requirements on the use of the product and its claims. Check the product availability in your region.

economic movements impact our industry, which makes many decision-makers prefer to wait or not risk too much.

**The key, in this sense, is to be able to generate collective conversations with the message that these changes may not necessarily be positive in terms of profit for companies or costs for consumers but that they are a bet to take care of the future, where we will see, at its best, the results of today's decisions.**

Another aspect to consider in the discussion is the number of points in the supply chain that go into creating a single final product. Furthermore, these differ depending on how the products and the value chain are built. **The perspective with which we currently look at this issue is based on efficiency and profitability, but perhaps we should give up a bit of our attention on that focus to start thinking in terms of resilience.** The biggest number of issues when implementing change arise around disruptions in those supply chains that ultimately create disruptions for the consumer, distributors, and vendors.

**What will happen 30 or 60 years from now if we can no longer produce today's raw materials because we make more decisions around profitability than environmental impact? To be able to bring the lens to the here and now is crucial. This way, by analyzing the present to achieve**

**a better future**, we will be able to set short-term profitability aside and choose measures and actions aligned with our companies' values. Thus, the short-term "benefits" have much more to do with building a brand and its ideals, and the positive, regenerative results are positioned a little more toward the future.

Of course, every day more companies and organizations understand this perspective, but we need empirical science to confirm with data what really happens to the land and crops once regenerative agriculture is applied.

### **Regenerative agricultura: it's time to take action**

Sustainability came to life when we realized that much of what we do in agricultural production, our value chains, and our products have a negative impact, depending on how we work and make decisions. The first proposal, that of sustainability, is focused on not creating a negative impact on our activities. On the other hand, **regenerative agriculture proposes to go further and not only not produce it but also improve what we leave behind.**

As an industry, the possibility of addressing these problems as soon as possible is in our hands, if we want to protect all the agents involved in them, including our only planet Earth.



# GOODWAY®

## INNOVATIVE SOLUTIONS TO REVOLUTIONISE YOUR CLEANING AND SANITATION DUTIES

Contact us today to discuss your specific needs and schedule a FREE on-site visit. Experience why for over 55 years so many trust Goodway with their cleaning and sanitation needs.

Speak with one of our experts: 1-203-359-4708 or schedule a visit online



# WE MAKE PET FOOD TASTE GREAT.™

AFB partners with pet food companies to provide palatant solutions that meet performance, attribute, and economic objectives.



Contact your AFB account manager to discuss your unique palatant needs.





## People

Currently, **less than 2% of valuable nutrients are recycled in food by-products and waste.** By reusing them as fertilizer, animal feed, or raw materials for textiles and plastics, we can spur innovation, open new ways for business, and reduce environmental damage. This shift towards resource utilization presents immense opportunities for sustainability, employment, and economic prosperity.

## Nature

**We need to redirect the industry toward regenerative food production.** For that, we should re-evaluate what and how we grow. Currently, more than 75% of food derives from only 12 plant and five animal species due to agricultural industrialization. Failure to address this problem will have profound consequences both for human and planet health. **By diversifying farming systems and ensuring a symbiotic relationship with nature, we can mitigate these risks and foster a more sustainable and resilient future**

## Weather

**Minimizing food loss and waste is crucial.** At all stages, from field to table, much food is discarded nowadays. If food waste were a country, it would rank as the third largest emitter of greenhouse gases worldwide! By addressing this issue, we can make significant progress in mitigating climate change and creating a more sustainable future.

**It is about placing more and more emphasis on circularity in food systems to minimize waste and create a closed-loop model where all resources are used efficiently and sustainably. In this paradigm, waste from one stage of the food supply chain would be reused as a resource for another, creating a continuous cycle of use and reuse.**

*“Unleashing the potential of commonly wasted resources is essential and urgent.”*

## Will we be able to create a circular economy for our industry?

The waste generated by society will decrease in response to climate change and food insecurity. For that, we need to start considering new alternatives.

Today, the pet food industry already belongs to a circular economy in which some leftovers from the human food industry are used. That is an efficient way of using the planet's resources. But more education is needed to highlight these efforts and improve circularity connections. **If we work for it, future generations will count on an efficient and responsible animal agriculture industry concerning the environment and its resources.**



Hidrolyzed Aromas · Texture & Appearance · Colorants · Additives

# WE ARE SENSORIAL ALCHEMISTS

We develop innovative solutions of integral palatability for pet-food manufacturers, aiming to provide companies with winner options for both pets and their owners.



COSTA RICA | COLOMBIA | PARAGUAY | PERÚ | VENEZUELA | MÉXICO

info@callizoaromas.com | www.callizoaromas.com

# TALKING ABOUT “NUMBERS”: HOW MUCH DOES IT “COST” TO OWN A PET?

Our patients impact the family economy, and we should include this topic in conversations with guardians to positively influence their life quality.

When deciding to adopt or include a new member in the family, considering the pet in the family economy is important. But why? Because pets are living, sentient beings with needs to satisfy. We must understand that pets depend 100% on their guardians.

By Dra. Bonaura M. Candela

It is not common to talk about this topic with guardians during one or more vet appointments, but we could turn it into a healthy habit, which will allow them to have orders and a monetary fund for the care of their pets, and to foresee situations that may require a greater demand, such as an emergency, hospitalization, complementary studies, or treatment.

## **Bills to consider:**

**1.** Food can be homemade, commercial, maintenance, functional, or therapeutic. Treats such as snacks or candies should also be under this category.

**2.** Health, which may contain insurance, includes “planned” expenses such as check-ups, maintenance of the complete health plan, unforeseen events, basic or complex complementary studies, hospitalizations, and surgeries.

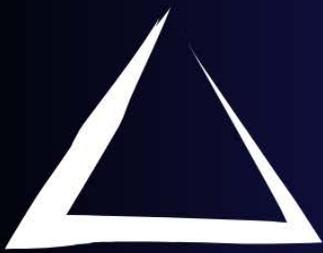
**3.** Cleaning or leisure can include ethologists, trainers, walkers, baths, spas, toys, scratching posts, and gyms. These items, although they might seem like it, are no less important. Being able to provide pets with all their needs is fundamental for their health, especially if we think about the impact of stress, and the large number of diseases that originate in its presence, especially as cats are very predisposed to suffer from it.

These expenses make up the list of must-haves to guarantee pet well-being. Prices will depend on the quality of the items or the particular needs of the dog or cat.

Beyond the expenses, the unconditional love that our pets and patients provide is invaluable, so giving them the love, time, and care they need to prevent diseases, preserve their health, and improve their life quality is priceless and fundamental.

In recent years, there has been enormous interest and awareness generation about our impact on the planet, which is





TRIPLETHREE  
INTERNATIONAL



# Get Involved in the First Pet Food Market Study in Argentina.

Do not miss the opportunity!

Book your place as a sponsor by sending an email to:  
[ifranco@triplethreeinternational.com](mailto:ifranco@triplethreeinternational.com)

why sustainability and circular economy are also considered in the veterinary field.

Sustainability represents a way of living in balance with our environment and preventing a shortage of resources that could put life at risk.

The circular economy is a production and consumption model that involves sharing, renting, reusing, repairing, renewing, and recycling existing materials and products as much as possible, thereby generating added value. It proposes a new look at our way of producing, consuming, and disposing of to optimize the planet's resources and produce less and less waste. It is an alternative model to the linear economy. It proposes a concept of the seven R's of redesigning, reducing, reusing, repairing, renewing, recovering, and recycling.

To collaborate, some alternatives and actions can be carried out regarding our pets. For example: pet food containers, insect protein-based foods, etc., are some of the main sources. In the last aspect, there is still a lot of research on its amino-acid composition and the medium-term impact on pets' health.

More than eight million tons of plastic end up in the oceans every year, according to the environmental organization WWF. That's the reason why the Clean Footprint project was born: to close the recycling cycle of these packages. This circularity initiative develops and implements solutions that act on the main challenges of each stage of the chain: from 100% recyclable or reusable packaging development to promoting the correct disposal of packaging by consumers and the incorporation of post-consumer plastic in new products.

Homemade games with reused materials, cardboard, and bottle caps

The important thing is that a social conscience has been generated that leads us to take greater environmental care and the impact of living in it, and pets do not escape this!

**Did you know about these topics? Do you have any ideas about it?**



# PAYPER

## Next-generation bagging lines for Pet Food.

DOSING & WEIGHING



BAGGING



PALLETIZING  
& OVERWRAPPING



**50** years  
of experience

**4,000+** projects  
worldwide

[payper.com](http://payper.com)

Spain · Brazil · Central America · North America · France  
Central Europe · India · Middle East · Asia Pacific

# SINGLE SCREW MULTIPLE MARKETS

## SINGLE SCREW EXTRUSION SYSTEM OPTIMIZES FLEXIBILITY AND MARKET OPPORTUNITIES



Optimize the return on your capital investment with a single screw extrusion system. Buy one system and cost-effectively deliver product to multiple market opportunities.

- One system capable of economy up to super premium fresh meat petfood
- Aquatic feeds that range from floating to sinking shrimp feed
- Capitalize on high margin petfood treat opportunities
- Significantly lower operating cost per ton versus competitive systems

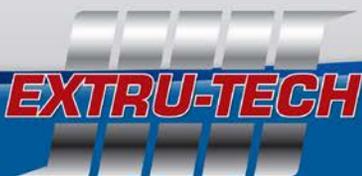
As the chart below demonstrates, an Extru-Tech Single Screw Extrusion System provides all the flexibility and production efficiencies at around half the cost of competitive extrusion systems with high operating costs.

	Extru-Tech Solution	The Competition
Capital Investment	1.0	2.5
Operating Costs	1.0	1.60
Ingredient Flexibility	Excellent	Excellent
Complexity	Low	High
Operating Cost (\$/M Ton)	1.08	2.80

VS

## KEEP IT SINGLE.

Contact Extru-Tech today at 785-284-2153 or visit us online at [extru-techinc.com](http://extru-techinc.com)



[extru-techinc@extru-techinc.com](mailto:extru-techinc@extru-techinc.com)  
[www.extru-techinc.com](http://www.extru-techinc.com)

P.O. Box 8  
 100 Airport Road  
 Sabetha, KS 66534, USA  
 Phone: +1-785-285-8866



# STATEC BINDER: A PIONEER IN THE PACKAGING INDUSTRY

STATEC BINDER GmbH is a leading company in the packaging industry with an impressive track record, having developed innovative solutions for packaging and palletizing bulk materials for many years. Headquartered in Gleisdorf, Austria, STATEC BINDER has built a first-class reputation as a reliable partner for packaging technology and solutions.

By STATEC BINDER

## Foundation and Company History

The company was founded in 2008 as a joint venture between two renowned companies, BT Wolfgang Binder, and BINDER+CO AG. Both companies had already been active in the packaging and processing industry since the 1970s and brought many years of experience and expertise to the partnership. The merger created a new player in the packaging industry, STATEC BINDER. .

Over the years, STATEC BINDER has impressed with over 1800 successfully installed plants on all continents and in over 85 countries, underlining its global presence and expertise. **The company continuously expanded its product range,**

**from stand-alone machines to complete solutions for customers.** Thanks to innovation, teamwork, and the pursuit of perfection, STATEC BINDER has always been able to meet the requirements of global markets and provide customized solutions for its customers.

## Innovation and Product Portfolio

**A key factor in STATEC BINDER's success is continuous innovation and the development of customized solutions for its customers.** The product range of STATEC BINDER includes fully automatic as well as semi-automatic

packaging systems for bags from 5kg to 50kg, BIG BAG filling stations, palletizing systems, and bag closing systems, which are developed specifically for customers' needs. Whether it is bulk materials such as grain, animal feed, fertilizer, plastic granules, or other materials, STATEC BINDER offers solutions for a wide range of industries.

### Quality and Customer Service

STATEC BINDER places great emphasis on the quality of its products and services. The packaging solutions are manufactured in a production facility and are subject to strict quality controls to ensure they meet the highest standards. **The company is ISO 9001 certified, which underlines its commitment to maintaining high-quality standards.**

In addition to product quality, customer service is another key factor that distinguishes the company. STATEC BINDER's customers appreciate the personalized advice, individualized customer services, and comprehensive support the company offers. Working closely with customers enables the company to better understand their specific requirements and challenges, and to offer customers an all-around carefree package once they have purchased the equipment.

### International Success

La reputación de STATEC BINDER se extiende más allá de STATEC BINDER's reputation extends beyond Austria, reaching a global scale. The company exports its packaging solutions to over 85 countries worldwide and maintains an extensive network of

distribution and service partners across various regions, ensuring exceptional onsite support and guidance for its customers. This international presence reflects the trust customers worldwide place in STATEC BINDER's products and services.

### Conclusion

STATEC BINDER is a company that stands out in the packaging industry for its innovation, quality products, and dedicated customer service. With a strong focus on the needs of its customers, STATEC BINDER remains a major player in packaging technology and will continue to play a significant role in the industry in the future.



**STATEC BINDER**

highly efficient bagging and palletizing solutions

Principal-R

up to

**1400**

units per hour

more than

**1800**

installed machines worldwide

installed machines in over

**85 countries**

more than

**45 years**

of experience

YOUR SPECIALIST FOR  
**BAGGING & PALLETIZING**



[www.statec-binder.com](http://www.statec-binder.com)

**STATEC BINDER GmbH**

Industriestrasse 32, 8200 Gleisdorf, Austria

Tel.: +43 3112 38580-0

E-Mail: [office@statec-binder.com](mailto:office@statec-binder.com)



# MOBILE “SMART CART” AUTOMATES FOOD CONVEYOR CIP FOR PET FOOD MANUFACTURERS

For an automated, wet clean-in-place process, pet food manufacturers can push a cart with pre-programmed recipes and integrated water line hookups to tubular drag conveyors, facilitating quick, sanitary compliance and production changeover.

By Del Williams - Cablevey Conveyors

To promote food safety and sanitary compliance, pet food manufacturers are increasingly seeking the ability to clean-in-place (CIP), an automated method of cleaning the interior surfaces of tubular drag conveyors without disassembly. Now, with the advent of mobile tools like an innovative “smart cart” that quick-connects to any tubular conveyor and enables simple, customizable “single button cleaning recipes,” CIP is becoming easier, faster, less labor-intensive, more repeatable, and almost fully automated.

Tubular drag conveyor systems gently move product through a sealed, enclosed tube using a drag cable and circular discs

pulled through on a loop, so they are ideal for delicate items. Designed to handle a variety of different forms and sizes, from kibble to seeds or pellets and nutrients, tubular conveyors maintain both quality and proper proportions.

**In a wet CIP process, the system is flooded with water, flushed, rinsed, cleansed, and thoroughly sanitized. Although the process is very effective, streamlining its automation and simplifying the process for all a facility’s tubular drag conveyors has been a priority for leading innovators in the industry.**

*“The standard system required port hookups to water lines and installing piping. The processor also had to make decisions, such as which water temperatures to utilize, or whether to use a cleaning solvent - and the correct amount to add manually,”* says John Adair, Engineering and Quality Director for Cablevey Conveyors, an Oskaloosa, Iowa-based conveyor manufacturer that has designed, engineered, and serviced enclosed cable and disc conveyors for 50 years, and is in more than 65 countries.

To simplify the wet cleaning process, Adair and his engineering team at Cablevey have developed a small, mobile “smart cart” with integrated water line hookups that a single technician can easily take to any tubular drag conveyor in a facility. The cart is specifically designed to be a fraction of the size of similar carts on the market to facilitate mobility. When the cart is in position and connected to water lines, the CIP process is automated and controlled by a programmable logic controller (PLC) that reduces the need for manual labor and virtually eliminates the risk of improper cleaning.

*“Once it is set up, all you do is press a button, and it will bring in the required amount of water at the correct temperature with the necessary amount of solvent for cleaning,”* says Adair.

The smart cart is designed to store and utilize pre-programmed CIP recipes to flush various residual materials from the tubular drag cable conveyors in a facility before new production runs. The cleaning recipes enable even those with

very little training to use the cart, which is helpful in today’s tight labor market and allows the technician to move on to other tasks once the cleaning process begins.

**The use of easily executable recipes ensures a superior, repeatable clean that essentially “error-proofs” the process. This is particularly important when the technician may be new or less familiar with the production equipment.**

*“Depending on the product conveyed, sometimes all you need is a wet rinse or a specific cleaning solvent. All that information is saved, so after the first cleaning, it can be automatically repeated. Just push a button to start the appropriate recipe, whether you have one conveyor running multiple products or dozens of conveyors running various products,”* says Adair.

To meet strict compliance standards, the smart cart also documents all critical CIP information, such as water volume and temperature, chemicals used, and cleaning time by date, in an easily retrievable data log.

Since decreasing production downtime between conveyor cleanings is a priority for pet food manufacturers, Cablevey provides new capabilities with the cart that expedites the CIP process.

*Currently, the CIP process floods the tubular conveyor system but is not designed to clean the discs specifically.*

## Gentle Clean Reliable Conveying Experts in Cable & Disc Conveying Solutions



- Leader in Tubular Drag Conveying
- Gentle on your materials!
- Starts & Stops Under Load
- Dust-Free Enclosed System
- Clean-in-Place Options
- Low Maintenance
- Energy-efficient



8" Systems

### System Capacity:

- 8" (203.2mm) tube diameter
- Moves up to 2,000 Ft<sup>3</sup> (56.6 M<sup>3</sup>)/hr
- Moves up to 80,000 lbs/hr (36,287 Kgs/hour)  
*(depending on bulk density of materials)*



The Gentle Way to Convey®

www.cablevey.com



Dry Cleaning  
Brush Box

The Heart of the System  
CABLE & DISCS

+1(641) 673-8451  
info@cablevey.com

Cablevey® Conveyors is a registered trademark of Intraco, Inc. 10/2022



Cablevey Smart Cart connections: Once it is set up, all you do is press a button and it will bring in the required amount of water at the correct temperature with the necessary amount of solvent for cleaning

*“Operators would manually clean each disc and advance the system disc by disc when the discs had to be cleaned of particularly viscous substances,”* says Adair.

**Now, as an option on the cart, a disc washer can be integrated with the conveyor turnaround to spray a pressurized cleansing solution on the discs. This helps to remove stickier substances that could remain after routine CIP cleaning.**

*“The disc washer sprays high-pressure water directly on the discs, so it acts like an automatic car wash. At the push of a button, the discs and cable are run through, and spray cleaned, which reduces CIP time and eliminates the need to manually clean the discs,”* says Adair.

To further reduce downtime, **Cablevey** also offers a new sanitary blower option.

*“After the wet CIP process, a sanitary blower attachment on the smart cart can dry the discs and other parts of the system 75% faster than typical air drying,”* says Adair. He points out that the faster the conveyor is cleaned and dried after a product change, the sooner it can be put back into service, which improves profitability.

According to Adair, Cablevey’s mobile smart cart is already available since it was officially unveiled at Pack Expo, a premier packaging and processing show held at the Las Vegas Convention Center in September. The event featured full-scale setups of machinery in action.

The company also offered traveling demo smart cars to customers in September for free so clients could test drive the units. Pet food manufacturers can now purchase the

demonstration unit used in their facilities, with hands-on training available immediately.

While the pet food manufacturing industry is aware that automated CIP can improve conveyor system production uptime, barriers to implementation have slowed adoption. Utilizing a mobile smart cart with integrated water hookups will help manufacturers easily implement CIP in tubular drag conveyors throughout their facilities: expediting conveyor cleaning, production changeover, and sanitary compliance.



Cablevey Smart Cart mid-room: The cart is specifically designed to be a fraction of the size of similar carts on the market to facilitate mobility.

# Providing the best Solutions for the Extruded Pet Food and Aqua Feed Industry



**Projects:** Focused mainly on companies manufacturing Extruded Pet Food and Aqua Feed, we develop Projects for complete or partial plants.

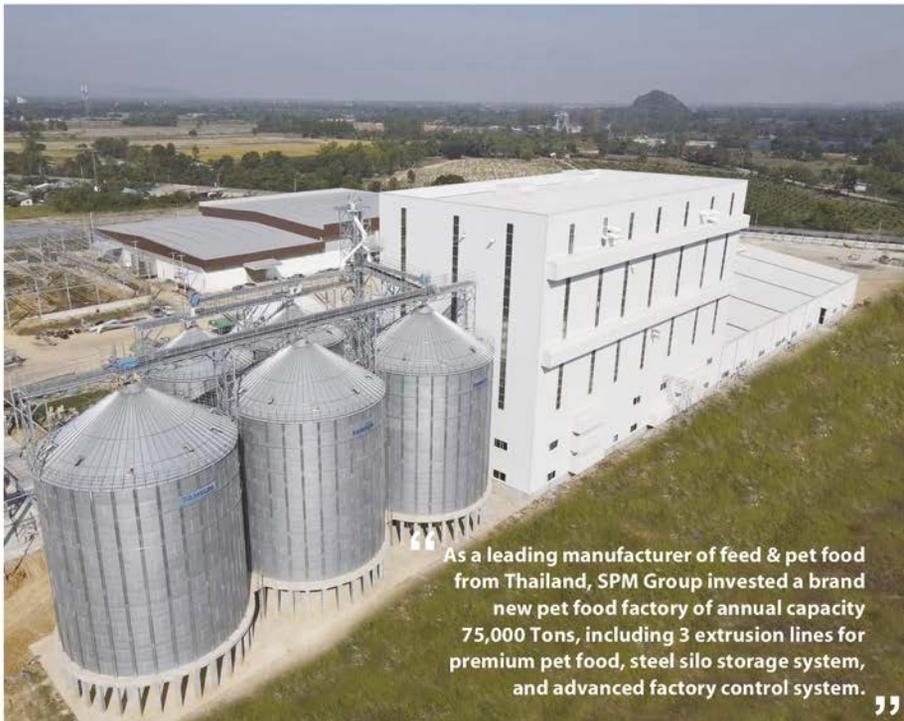
**Solutions:** We offer consulting work and provide Solutions to improve the Efficiency and Quality of your Manufacturing Processes.

**Representations:** We only work with Associated Companies that can offer the Highest Quality of products and Services for our Customers.



## CS CLIVIO SOLUTIONS INDUSTRIAL SERVICES & ENGINEERING

+54-9-2352 54-0040 ■ francisco.pantoni@clivosolutions.com ■ www.clivosolutions.com



As a leading manufacturer of feed & pet food from Thailand, SPM Group invested a brand new pet food factory of annual capacity 75,000 Tons, including 3 extrusion lines for premium pet food, steel silo storage system, and advanced factory control system.

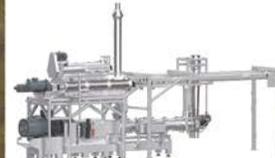
### FAMSUN Integrated Solution Provider



8000+ animal nutrition projects in 145 countries



52 agencies, sales & service sites and spare parts warehouses worldwide closed to customers



4 wholly-owned R&D institutions in China, America, Denmark and Germany



6 Production bases, one in Egypt and five in China, total 74.07 hectares

#### FAMSUN Co., Ltd.

Add: No.1 Huasheng Road, Yangzhou, Jiangsu, China 225127

#### Contact: Edison Chen

M.T.+86 15852880396 (Whatsapp)  
E-mail: chuanfei@famsungroup.com

#### Contact: Matthew Mo

M.T.+86 18852722885 (Whatsapp)  
E-mail: mjy@famsungroup.com

# SMALL ACTIONS ALSO CONTRIBUTE TO A CIRCULAR ECONOMY

The origin of the circular economy dates to the 1970s when British economist David Pearce coined the term “zero waste economy.” Pearce proposed an economic model in which waste was eliminated through reuse, recycling, and composting. There is no exact date of its origin or a single precursor, although it has been applied in economic systems and industrial processes since the late 1970s.

By MVZ. Armando Enríquez de la Fuente Blanquet



The circular economy is a production and consumption model that involves sharing, renting, reusing, repairing, renewing, and recycling existing materials and products for as long as possible. It aims to address global challenges such as climate change, biodiversity loss, waste management, and pollution. It is defined in contrast to the traditional linear economy.

It is a strategy that aims to reduce both the entry of virgin materials and waste production, closing resourcing economic and ecological flows. The analysis of physical resource flows comes from the industrial ecology school of thought, in which material flows are of two types: biological nutrients, designed to be reintroduced into the biosphere without technical incidents, and nutrients,

which are designed to circulate with high quality in the production system but do not return to the biosphere.

Currently, in the pet food market, there is a wide variety of pet food seeking to meet nutritional needs. We see on the store shelves food for young, adult, old, sporting, sedentary, large, or small breed animals, and the like. This variety of foods supports a circular economy, as they provide a precise nutrient supply without excess. There is no waste of nutrients on the part of the pet.

Pet food production has different stages: Selección de materia prima.

- Raw material selection
- Feed formulation
- Food Manufacturing
- Handling of finished food.

Many of these production stages are already part of a circular economy. Let's reflect on the food formula. The objective of formulating a balanced pet food, or "pet food," is, first of all, to meet the nutritional requirements of dogs or cats. Nutrition is not in conflict with the circular economy, and it is possible to contribute through pet diets in different ways.

Pet food has been using by-products and secondary products from the food industry processing for a long time and is always looking for new windows of opportunity.

Let's talk, for example, about the sources of fatty acids, particularly omega-3. There are sources of both animal and plant origin, for instance, flaxseed is an excellent source of omega-3 (C:18:3), and this metabolite must be converted into DHA (C22:6) to meet the needs, but unfortunately, the dog or cat is inefficient in this process. Due to the above, it is common for pet food manufacturers to resort to other sources rich in omega 3-DHA to be added directly to the food, and the traditional sources are of marine origin, the so-called oily fish. This source of DHA can be a fish meal or fish extraction, but this requires large-scale ocean fishing and, therefore, makes it an unclear, inconsistent, and unsustainable source. It does not contribute as a circular economy resource. However, there are other sources of DHA based on seaweed as an alternative that are manufactured industrially without compromising the flora and fauna of the oceans and, in addition, are more consistent and sustainable. This source can contribute to a pet food strategy committed to the circular economy.

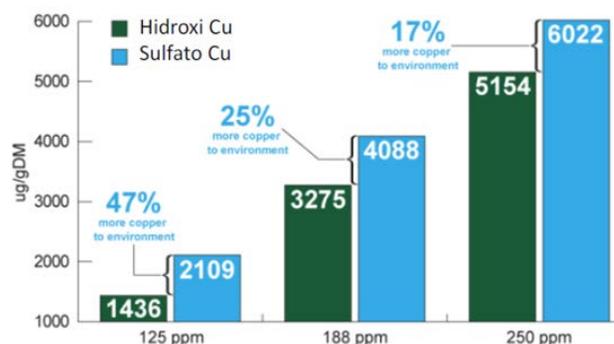
In my previous article, "How do you design a feed formula," I talked about the importance of raw material selection in the design of a premix. This contains nutrients that are added in very small quantities to the total diet of the food, and speaking of raw materials of the premix, there are different sources of trace minerals. Some of them, due to their high bioavailability, become an alternative to contribute to the circular economy. For example, as seen in Table 1, organic, or hydroxy, sources of trace minerals

have greater bioavailability of the nutrient in question, for example, zinc from a hydroxy-zinc source can be twice as bioavailable as a zinc oxide source (217.9%). That is to say, if we use a hydroxyzinc source, a smaller amount of the raw material will be required to cover the zinc requirement than if a zinc oxide source were used.

StudyR	Mineral Sources Compared	BV of IntelliBond vs. Inorganic
Miles et al., 1998	IntelliBond C vs. CuSO <sub>4</sub>	106.0%
Miles et al., 1998	IntelliBond C vs. CuSO <sub>4</sub>	112.1%
Rochell et al., 2013	IntelliBond Z vs. ZnSO <sub>4</sub>	167.4%
Rochell et al., 2013	IntelliBond Z vs. ZnSO <sub>4</sub>	143.5%
Cao et al., 2013	IntelliBond Z vs. ZnSO <sub>4</sub>	106.7%
Cao et al., 2013	IntelliBond Z vs. ZnO	217.9%
Rochell et al., 2013	IntelliBond Z vs. AvailaZn	94.8%
Rochell et al., 2013	IntelliBond Z vs. AvailaZn	101.1%

Table 1: RBV:Relative Bioavailability Value of an Hidroxi-mineral versus one inorganic or organic.

On the other hand, a hydroxy source also has an environmental impact, as seen in Graph 1. An inorganic source of Cu produces a greater number of metals in salts soluble in aqueous media, which makes it a less environmentally friendly mineral source. Small contributions help pet food contribute to a circular economy. Although a trace mineral is at levels of parts per million (ppm) within the balanced feed, and at this level of inclusion, it would seem insignificant, in the end, it is adding to the efforts of a circular economy.



Graph 1. Leachable copper level with different copper sources.

Finally, the production and management of balanced feed must have a plan of good manufacturing practices to minimize waste, operating costs, and capital investments. The circular economy is a strategy for sustainability that seeks to reduce the consumption of natural resources and the production of waste, closing material flows. The circular economy has economic, social, and environmental benefits.



**+500**  
PARTICIPANTS

**+16**  
COUNTRIES

**MANUFACTURERS  
SUPPLIERS**

**POSITION**

- CEO
- Engineering
- Nutritionists
- Department
- Shopping

- 9%
- 9%
- 10%
- 11%

- Marketing
- Commercial
- Managers
- Directors
- Chief

- 12%
- 49%





# CIPEU





# SYMRISE PET FOOD ECO-FRIENDLY PLANT IN COLOMBIA CELEBRATES ITS 3 YEARS

Sustainable by nature, Symrise Pet Food has been valorizing meat by-products into high-value-added solutions for pet food since its creation, thereby limiting the environmental impact of unwanted waste.

Aware of the need to go further to help limit climate change, the company has committed itself to becoming sustainable by design, setting an example in sustainable development. It is now striving to limit its environmental impact throughout the entire life cycle of its products - from the design and construction of its factories through sourcing of its raw materials and its production processes to product design.

By Symrise Pet Food

The factory in Colombia was the first to apply these new standards, including LEED certification – one of the most prestigious certifications of sustainable building systems. Today, the company is proud to celebrate the 3rd anniversary of this plant model.

## LEED Certification

The factory built in Colombia obtained LEED Gold certification at the beginning of 2022. The Leadership in Energy and Environmental Design (LEED) sustainable building certification system was developed by the U.S. Green Building Council (USGBC) and began implementation in 1993. It currently offers four types of certifications (Certified, Silver, Gold, and Platinum), according to 7 criteria: Sustainable Sites, Energy and Atmosphere, Water Efficiency, Materials and Resources, Indoor Environmental Quality, Regional Priority, and Innovation.

Christophe Salaün, General Manager of Symrise Pet Food Colombia, highlights the importance of Symrise Pet Food's choice to follow LEED standards:

“Not only is it one of the most widespread green certification systems in the world, it is also one of the most demanding, reflecting Symrise Pet Food's commitment to a sustainable industry that truly preserves the planet's resources.”

Salaün adds: “Some examples of key actions implemented that meet LEED criteria include rainwater collection and use for sanitation facilities, high-level treatment for liquid disposal, optimization of site energy consumption through specific ventilation systems, heating and lighting, and the installation of photovoltaic systems.”

## Water and energy

Two of the main aspects that contribute to an eco-friendly industry are the efficient use of water and energy saving. In this sense, for the Colombia plant, a water well 173 meters deep was excavated that allows pumping groundwater through its own treatment plant, capable of reintroducing much of the necessary water into the circuit. “In this way, we can reduce the amount we take from municipal water supply plants to the point that today we are taking about 90% of the water needed

for production from the well,” explains Christophe Salaün. On the other hand, rainwater is collected and used for sanitary facilities and the air purification process. In addition, it is used for irrigation of vegetation planted around and inside the plant.

In terms of energy, the installation of 240 solar panels provides the facilities with 13% of the electricity needed. A natural ventilation system generates optimal climate control inside the building, while an intelligent control system monitors the site’s water and energy consumption. Green areas on roofs and facades improve air quality, help reduce noise, and save energy.

Finally, as environmental compensation, 1,020 trees at least 1 meter high were planted. CO2 emissions were reduced by 33%.

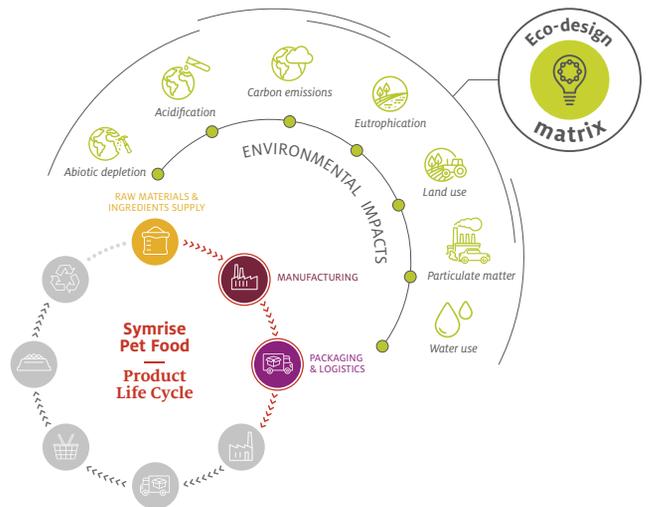
### Closer, greener

The Colombian plant serves the Andean region, supplying products to Ecuador, Peru, Colombia, and Venezuela. Before its construction, the region received products mainly from Argentina and Brazil. Following the company’s motto “The Closer, the Better,” which aims to be close not only to its customers but also to its suppliers, the Colombian plant saves gas emissions from transport: around 65% of sales are located less than 500 km or less than 8 hours by land transport, while about 52% of customers in the Andean region are in Colombia.

The local selection of ingredients also provides a significant reduction of ecological stress in the production of the product – 50% of the raw materials used are in Bogotá.

### Eco-designed products

In addition to setting eco-friendly building standards, Symrise Pet Food developed a tool that measures the environmental



impact of the product throughout its production chain. Called the Eco-design Matrix, it evaluates and supports Marketing and R&D teams in improving the environmental impacts of products throughout their life cycle, from supply to delivery to the customer. This tool allows Symrise Pet Food to know the footprint data in each of the four main steps of the product life in which it has influence – sourcing, manufacturing, packaging, and logistics– and from seven environmental impacts: carbon emissions, land use, water use, acidification, abiotic depletion, eutrophication, and particulate matter.

“With the Eco-design Matrix, we found a new driver of innovation,” explains Anderson Conejo, LATAM Marketing Manager. “We can now select ingredients and design new products taking into account not only functionality and economic performance, but also environmental impacts over the life cycle.”



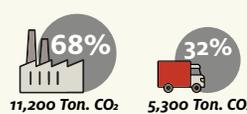
## 3 YEARS OF THE COLOMBIAN PLANT IN NUMBERS



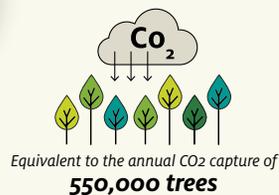
The replacement of imports from Brazil and Argentina meant a 100% reduction in CO2 relative to transport



The combination of technological ingredients with alternative raw materials helped reduce land use



\*Value corresponding to the sum of 2020, 2021 and 2022



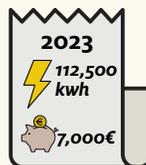
Thanks to the water well, it has been possible to reduce water stress and benefit the community



With the 240 solar panels, electricity consumption was reduced by about 13%



Annual expenditure of 51 households (colombian average households)



[https://www.upme.gov.co/DemandayEficiencia/Documents/Balance\\_energia\\_util/BEU-Residencial.pdf](https://www.upme.gov.co/DemandayEficiencia/Documents/Balance_energia_util/BEU-Residencial.pdf)

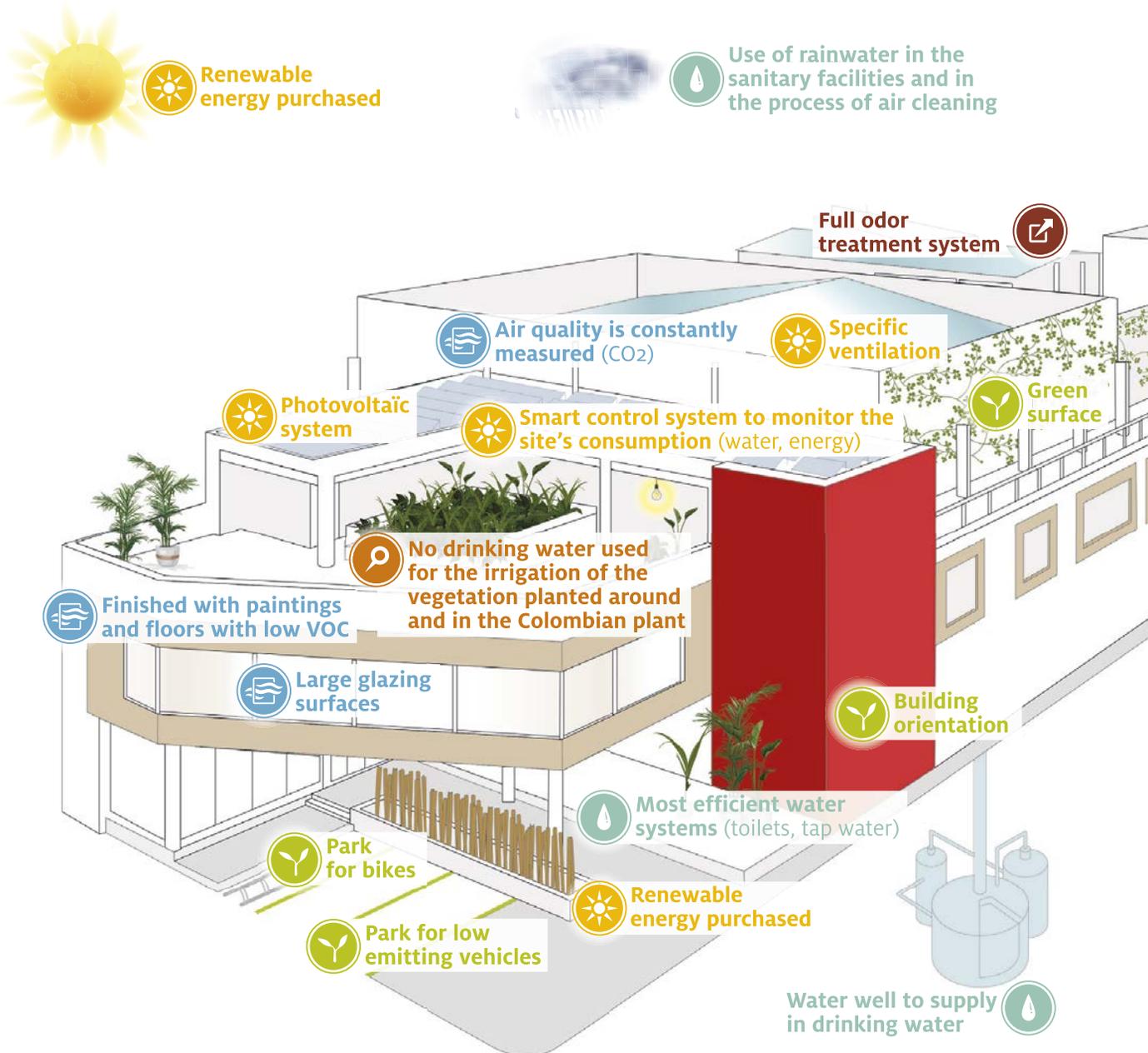
With this tool, Symrise Pet Food is now able to support customers who want to promote the sustainable development of their products.

### Joint effort

After it was confirmed that July 2023 was the warmest month on record, the Secretary General of the United Nations, António Guterres, warned: “The era of global warming is over, and the era of global boiling has arrived.” A concerted effort is now essential to combat climate change and achieve truly sustainable development. That is why Symrise Pet Food proposes to make this trip together with all the actors involved in the pet food industry. The challenge is not minor: the growing

demand depends on a limited availability of raw materials. On the other hand, regulatory and sanitary restrictions on the production and export of products are another challenge that must be faced. Finally, pet parents today demand natural, ethical, and transparent products. Symrise Pet Food proposes to consider these difficulties as an opportunity for collaboration that not only results in a product of excellence, but that contributes to caring for people, pets, and the planet. Its goal is to work together to bring to market solutions that provide sustainable sourcing, are secure, and generate long-term value.

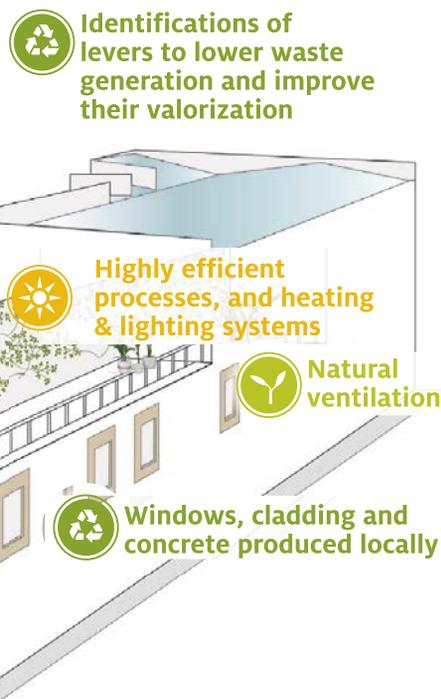
The efforts poured into the Colombian plant have not gone unnoticed: it has recently been nominated for the awards for “Business Environmental Excellence” of the Ministry of Environment of the Municipality of Tocancipá. The local



environmental authority reviewed the environmental data (carbon footprint, water, energy, gas, waste management, treatment plants, boiler) and made a tour of the plant. “We were informed that we are going to be nominated for the award for corporate environmental excellence,” said Christophe Salaün. This nomination was made by the local environmental authority in November, after visiting all the companies operating in Tocancipá. “The election will be in early 2024. We hope to have good news”, added Salaün.

From this first model experience for the entire Symrise group, Symrise Pet Food is building its new plants (the most recent in Mexico and Brazil) following LEED standards, with the intention of contributing positively to a better world for future generations.

Symrise Pet Food is a global leader in sustainable high-value solutions that improve pets’ well-being and owners’ satisfaction. The company offers multiple products and services that improve palatability, pet nutrition, and pet food protection. Symrise Pet Food is present on 5 continents with 1,750 employees, 32 sites, and 4 expert measurement centers with 1,100 dogs and cats.



## THE COLOMBIAN FACTORY FOLLOWS THE LEED CERTIFICATION CRITERIA

The Colombian factory obtained LEED Gold Certification for the following characteristics.

 <p><b>Sustainable site</b></p> <ul style="list-style-type: none"> <li>→ 1300 m<sup>2</sup> of Green Surface</li> <li>→ 10% of the car parking will be dedicated to low emitting vehicles</li> </ul>	<p>The Colombian site has been designed to take advantage of natural ventilation, and promotes sustainable means of transportation.</p>
 <p><b>Energy &amp; atmosphere</b></p> <ul style="list-style-type: none"> <li>→ 13% of the total electricity produced with solar panels</li> <li>→ 10-15% more energy efficient than a similar Diana Pet Food plant</li> </ul>	<p>The site optimizes its energy consumption through highly efficient equipment and renewable energy.</p>
 <p><b>Water efficiency</b></p> <ul style="list-style-type: none"> <li>→ 173m deep well water</li> </ul>	<p>The design of the factory has been thought out to avoid exerting water stress in the area.</p>
 <p><b>Material &amp; resources</b></p> <ul style="list-style-type: none"> <li>→ &gt;90% of materials manufactured or extracted within 800km</li> </ul>	<p>The plant, concerned about its environment, has been built with local materials and closely monitors its waste management.</p>
 <p><b>Indoor environmental quality</b></p> <ul style="list-style-type: none"> <li>→ 335 m<sup>2</sup> of glazings</li> </ul>	<p>The Colombian building has been designed to maximize the use of and deliver good air quality.</p>
 <p><b>Regional priority</b></p> <ul style="list-style-type: none"> <li>→ 240 solar panels</li> </ul>	<p>The Colombian building responds to the priority of the region by implementing various activities that reduce drinking water consumption and also optimize energy consumption.</p>
 <p><b>Innovation</b></p> <ul style="list-style-type: none"> <li>→ 20.000 m<sup>3</sup> of air per hour treated in process area</li> </ul>	<p>The Colombian building has been designed to limit disturbance around the site.</p>

**Symrise Pet Food is the global leader  
of sustainable high value solutions**  
*improving pets' well-being  
and owners' satisfaction*

**Discover our brands supporting pet food manufacturers**  
*on three essential aspects of their products:*

**Pet Food Palatability**

spf 



**Pet Nutrition**

nuvin 



**Pet Food Protection**

videka 





# MYCOTOXINS IN DOG AND CAT FOOD: HOW TO DEAL WITH THEM?

Ensuring food safety for dogs and cats is a top concern among pet food manufacturers.

By Ludmila Barbi T. Bomcompagni y Érika Stasieniuk

**Mycotoxins are toxic substances resulting from the metabolism of some fungi and molds. For the development of microorganisms that produce these toxins, several factors are necessary, such as physical-chemical factors, type of substrate, temperature, and humidity of the storage place, in addition to the amount of water present in the grains and their pH (MAZIERO and BERSOT, 2010).**

Mycotoxins do not induce protective immunity since they are not antigenic, and therefore, their effects vary with the type, dose, and even the age, sex, and health of the animal. **The main clinical signs reported in dogs and cats poisoned by mycotoxins present in their food are vomiting, diarrhea, convulsions, abdominal pain, polydipsia, polyuria, ascites, anorexia, and development of chronic liver damage.** In canine medicine, it is common to record

mycotoxicoses that occur silently, which makes differential diagnosis difficult (SILVA, 2019; WITASZAK et al., 2019).

The main mycotoxins and their respective target organs, identified in the canine species, are aflatoxins (AFLA) and fumonisins (FUMO) in the liver, deoxynivalenol (DON) in the digestive system, ochratoxin A (OA) in the kidneys, zearalenone (ZEA) in the reproductive system, patulin (PTA) in the liver and kidneys, and citrinin (CIT) in the kidneys and digestive system (SOUZA and SCUSSEL, 2012).

**Contamination of dog and cat foods with mycotoxins can occur directly or indirectly.** The first occurs when some of the ingredients are previously contaminated, and even with the elimination of the fungus during the extrusion process, the mycotoxins remain in the food, since they are resistant to high

temperatures. The direct form is related to food contamination by toxigenic fungi and the subsequent appearance of mycotoxin production (FERREIRA et al., 2007).

### **The mycotoxicosis scenario in pet food factories is quite challenging.**

Given this, we need strategies that guarantee the high quality of the ingredients used in the manufacture of food for dogs and cats or find solutions that prevent mycotoxins from being absorbed by the animals' bodies.

**Implementing a comprehensive mycotoxin monitoring program in the pet food plant is essential.** This program should include several steps, from careful selection of ingredient suppliers to accurate and reliable laboratory testing.

To address the problem of mycotoxicoses it is essential to adopt an approach that includes the identification, quantification, and understanding of the mycotoxins present in the ingredients which will be used to manufacture dog and cat foods. This involves the use of precise methodologies that allow us to determine which mycotoxins are present, as well as their concentrations, helping to evaluate ingredient suppliers and the possible harm that may be caused to animals.

Currently, the most well-known methodologies available for the quantitative analysis of mycotoxins in ingredients are high-performance liquid chromatography (HPLC), enzyme-linked immunosorbent assay (Elisa), lateral flow strips (LFD) and near-infrared spectroscopy technology (NIR). These methods allow detection at extremely low levels, ensuring compliance with food safety regulations.

### **It is important to highlight that the choice of a methodology is crucial to have a reliable analysis.**

However, the real value of managing mycotoxins found in ingredients used in the manufacture of dog and cat foods lies in the ability to interpret the results, evaluate their criticality, and implement corrective plans.

Technology is playing an increasingly important role in improving mycotoxin monitoring. Real-time detection systems and predictive analytics based on artificial intelligence are being explored to identify potential risk points in production and enable proactive response.

Mycotoxin adsorbent additive's introduction in pet foods has proven to be an effective solution to mitigate the risks of mycotoxins, mainly in factories that do not have control analysis at reception and in monitoring, the silos where these ingredients are stored.

**For an adsorbent to be considered efficient, it must present some characteristics: it must destroy, inactivate, or eliminate the toxin; not produce toxic or carcinogenic residues in final products** or in foods obtained from animals that consumed a detoxified diet; and maintain the nutritional value and acceptability of the product (FREITAS et al., 2012).

The adsorbent or chelating agent is an inert material without any nutritional principle, which could adhere to the surface of

the mycotoxins present, causing their elimination through the feces of dogs and cats, preventing the toxins from being absorbed by the body. (MOREIRA et al., 2018).

Contamination of dog and cat foods with mycotoxins can occur directly or indirectly.

Aluminosilicates (clays) are the basis for the development of adsorbent additives. In the 1980s, the ability of certain clays (bentonites, zeolites, and others) to bind to food mycotoxins in the digestive tract of animals, preventing their absorption, was discovered.

Currently, we have the most varied types of adsorbents available on the market, products based on volcanic rocks associated with other more technological and broad-spectrum compounds that combine the use of inorganic, organic, and yeast adsorbents. In addition to additives that support the immune system, they restore liver functions and help maintain intestinal integrity.

**When choosing a mycotoxin adsorbent, it is important to check the mycotoxin adsorption efficiency, which considers the percentage of adsorption and desorption in the intestine.** This evaluation includes the stability of the adsorbent-mycotoxin bond and its effectiveness in different pH ranges since the product is expected to act throughout the gastrointestinal tract (Binder, 2007).

pH values vary throughout the digestive tract, from acidic conditions to basic conditions. Therefore, the binding capacity of products can be influenced by changes in pH, creating the risk that mycotoxins are adsorbed in one part and released (desorbed) in another part of the digestive tract (Zavarize, 2021).

Furthermore, it is necessary to evaluate whether the adsorbent has a broad spectrum, that is, if it is effective for as many mycotoxins as possible.

**Another extremely important point to consider is the need for the adsorbents to have low inclusion so that they take up minimal space in the food formula and contribute an insignificant amount of mineral matter to the final product.** This is especially crucial in premium, super-premium, and especially cat foods, where the amount of mineral matter tends to be lower, compared to dog foods, due to the adjustments necessary to avoid the formation of uroliths. Furthermore, it is essential that the adsorbents do not affect the palatability of the product.





Kibbles

Pillows

Dental sticks

# Dry pet food as never before.

Years of experience in the food sector paired with customer-centric development and constant innovation, allow us to supply processing lines for a new generation of pet food.

Our food industry experience, combined with the legendary flexibility of our extrusion and drying solutions, means pet food manufacturers can set standards even higher.



Discover more on  
[GEA.com/petfoodtech](https://www.gea.com/petfoodtech)

**GEA** Engineering  
for a better  
world.

# TECHNOLOGY SHOWCASE

In this issue of All Pet Food Magazine, we highlight the latest innovations that can optimize your pet food operations. We take a look at innovations from different leading companies in the Pet Food market.



## **Biorigin** HICELL - ONE INGREDIENT, TRIPLE BENEFIT!

**HiCell**, HiCell, Biorigin's autolyzed yeast obtained from the fermentation of a strain of *Saccharomyces cerevisiae*, is an alternative protein source due to the high content of essential amino acids and an excellent profile of B complex vitamins.

This ingredient also improves palatability in dog and cat foods, in addition to being a source of dietary nucleotides, important components for cell regeneration, and various metabolic processes that contribute to the animal's health.

### One ingredient, triple benefit!

1. High protein digestibility
2. Low molecular weight protein
3. Palatability

Scan the QR code for more information. You will find complete information with the description of each benefit.

Committed to adding value to its clients' products, Biorigin guarantees traceability, sustainability, food safety, and quality throughout the production process, from the raw material, sugar cane, to the finished products. HiCell is Kosher, Halal, and Bonsucro certified.



## PREMIUM AND SUSTAINABLE INSECT-BASED INGREDIENTS FOR A BALANCED DIET

Pets consume insects naturally. From dogs and cats to fish, rodents, and reptiles. *Tenebrio molitor* (mealworm) protein is obtained using a circular production model and is 90% digestible, which means our pets will enjoy 90% of its nutrients. Our feed ingredients also contain all the essential amino acids that puppies need as they grow and are rich in polyunsaturated fatty acids.

We manufacture 3 natural, sustainable, and highly nutritious products

- **oProtein:** Protein meal extracted from the insect in its larval stage. It contains more than 70% high-quality protein and less than 5% ash.
- **oLipids:** Low acid oil resulting from pressing the larvae. Unsaturated fat  $\sum$ UFA > 75% and high oleic content > 40%.
- **oMeal:** Dehydrated larvae in the form of meal.





**PLP Systems**  
Technology in Liquid Handling & Powder Dosing

### DRUM COATING MACHINE

PLP Systems is specialised in liquid and powder weighing equipment for the Pet Food industry. Making kibbles tasty and palatable with liquid or powdered palatants has been one of PLP main focuses.

For this reason PLP has developed a technology called “Drum Coater”: a coating system suitable for in-line coating of kibble.

It is used for the addition of liquid additives, such as: enzymes, fats, digest and it’s optimal, thanks to its “soft” movement that does not damage the product, for the treatment of: semi-moist products, biscuits, snacks, pillows, sticks or other fragile products.

The system is composed of:

- Top hopper with load cells to keep the level of the product constant;
- Weighing screw to detect the amount of product to be coated;
- System for the preparation and dosage of the additive;
- Complete with stainless steel or painted support structure;
- Motorized or static sprayers;
- An electronic device used to identify the instantaneous flow of the product and to determine the right amount of additive;

Thanks to the special design of the drum walls, which rotate the croquettes, the entire surface of the croquettes is exposed to atomisation, the product is remixed several times, providing an excellent homogeneity of coverage over the entire surface of the croquettes, until the product leaves the drum.



### RECOVERY OF DRY AND WET BY-PRODUCTS, WITH THE INSTALLATION OF THE SRS

In the pet food manufacturing processes, between 3% and 5% of fines are generated in the dryer, cooler, screens and pneumatic conveyors, in addition to the wet particles generated during extruder starts and stops.

At Clivio Solutions together with Sati we provide the ideal solution for the recovery of dry and wet by-products, with the installation of the SRS they can be Reduced, Reused and Recycled in a safe, immediate, and controlled manner, avoiding the proliferation of flies and unwanted organisms.

The advantages for the end user are:

- Recovers of 99.9% of the by-products generated
- Save costs and reprocessing times
- Optimize the manufacturing process
- Improve traceability
- Quick recovery of investment

If you want to know more about SRS and our quality solutions, contact us at: [info@cliviosolutions.com](mailto:info@cliviosolutions.com)



More info:  
<https://plp-systems.com>





---

## THE INTERVIEW

---

# LUCAS CYPRIANO

Technical Coordinator of the Brazilian Animal Recycling Association (ABRA) and Technical Director of the World Renderers Organization (WRO)

Lucas Cypriano is currently the Technical Coordinator of ABRA and Technical Director of WRO, and, in this interview, he gives us information about his professional career and his roles within both organizations, and describes the Rendering industry, among other relevant topics.

Dear Lucas, to begin, **could you tell us about the positions you currently hold in ABRA and WRO? What was the path taken to reach both positions? What are the main activities carried out in each of them?**

Since I graduated in 1998 as a Zootechnician until I started working at ABRA, I have always worked with the microbiological safety and quality of ingredients and animal feed. In 2011, I started working at ABRA as a Technical Coordinator. Since then, I have been helping companies with sector regulations, proposing adjustments to current standards, developing the AATQ Hygienic Manufacturing Program for Animal Meals and Fats (ABRA Qualidade), training technicians, and teaching courses for the sector.

In 2012, ABRA nominated me to represent the association in the WRO, and in 2013 I was invited to be part of the SAP/WRO (Scientific Advisory Panel). In 2019, New Zealand invited me to take on the role of the first WRO Vice President that would be filled by them. And between 2019 and 2021, I was the first Vice President of the WRO. In 2021, I was elected President of WRO, remaining in that position until June 2023, when I was, again, invited to take on the role of WRO Technical Director, a position I currently hold alongside ABRA Technical Coordinator.

Fun fact: in my personal life, I have been a Norwegian Forest cat breeder since 2008: I attest daily to what quality animal flour and fat, in a balanced diet, can do for our friends.

The slaughter of animals generates parts that, for cultural reasons, characteristics of animal tissue, or regulatory ones, cannot be used for human consumption. For example, in many societies, they no longer consume:

- Liver, heart, kidneys, lungs, blood, tendons, cartilage, and other tissues, despite being very rich in nutrients.
- Feathers, hair, bristles, skin, and scales, among other tissues that have reduced nutritional value in their original form.

Our sector recycles all these unconsumed tissues, processing them with technologies appropriate for each tissue, either maintaining or improving their excellent intrinsic nutritional value or subjecting them to technological processes that allow the use of nutrients such as, for example, through the action of enzymes or cooking under high pressure and temperature,

which means exposing the nutrients and allowing their absorption.

In all countries where WRO operates, the sector is highly regulated, with manufacturing and environmental rules that mean sourcing ingredients that are not only nutritious but also extremely safe.

Based on the transformation process described above, **could you tell our readers what ingredients are generated for pet food production? Are new products being developed?**

The pet food manufacturing sector stands out for using the noblest and palatable ingredients manufactured by our sector, such as flour (processed protein) from poultry and pork viscera, blood meal, plasma, red blood cells, pork rind flour, fish meal, poultry oil, and fish oil.

If we imagine that, in nature, carnivorous predators first consume the thoracic viscera (heart, liver, lungs) and others (kidneys, spleen, pancreas, mesenteries) rich in nutrients, these are exactly the parts most present in the raw and key material of the flour purchased by the pet sector. But it doesn't stop there: we know that dogs and cats love the taste of fried skin (chicharrón flour), and this is another ingredient widely used in diets. For physical reasons, in the process of manufacturing food kibbles, it is sought to prevent the material from being extruded from being rich in fats. Therefore, feed manufacturers add animal fats to the kibbles after extrusion, which, in addition to providing energy, brings an important benefit: a pleasant taste!

Therefore, the rendering sector works alongside the pet food industry to offer our friends the best for our pets. Proof of this is the surprising increase in dog life expectancy, and especially of cats as strict (obligatory) carnivores. 20 years ago, a cat lived an average of 6 to 10 years. Nowadays, due to several factors, mainly current diets, it is common to see cats that reach the age of 20 healthy, something very rare in the past.

Considering the global problem of food waste, **what are the multiple benefits generated by transforming it to reuse it and, therefore reducing it? Does this sustainable recycling process resemble the “circular economy” production process?**

You see, the objective of any animal sacrifice is the production of products intended for human consumption, and slaughterhouses seek to improve their performance every day. What the recycling industry does is prevent this waste from being produced: we safely, responsibly, and sustainably process and recycle all animal tissues not wanted for human consumption. Regarding the concept of circular economy, FAO is currently designing it better. It is still unclear whether the pet food sector would be a circular economy, since once used in this type of food, this nutrient will never return to the chain. If flour and fat are used to feed poultry, pigs, and fish, part of these nutrients can be consumed as food for humans or recycled again in slaughter, considering the concept of circularity.

However, animal meals and fats are among the most sustainable ingredients available to the pet industry: our products' carbon footprint is smaller than that of many "traditional" sources.

Without a doubt, renderers contribute positively to local, national, and international economies. **How do you see**

### the Rendering market currently in your country of residence? And what percentage of total production is destined for pet food?

I am from Brazil, and the national rendering sector went through a major technological revolution during the 2000s. Locally, the sector contributes almost 60,000 direct jobs and a GDP of something close to 5 billion dollars, generating local opportunities, reducing environmental impacts, and avoiding raw materials waste with excellent nutritional value. Today, the sector has learned to segregate raw materials from slaughter, delivering the best of our products to the pet food sector. Today, in absolute volumes, the main market for our products still is manufacturing feed (58.2%) for monogastric animals (poultry, pigs, fish, shrimp, etc.) raised in Brazil. The pet food market is the second buyer (13.8%), with biofuels in third place (13.1%) and the cleaning and hygiene sector (10.3%) as the fourth one. Exports and other industries correspond to only 4.7% of the destinations of our products.

We want to thank you very much for your time and for all the information shared that will undoubtedly be very useful for those who are part of the pet food industry.



# NorthWind

## Industry Leader in PET FOOD AUTOMATION

### MAXIMIZING PLANT EFFICIENCY WITH INNOVATIVE SOLUTIONS

- Process Controls
- Plant Integration
- Formula Management
- Lot Tracking
- Data Collection
- Alarm Management

Learn more about our pet food automation solutions at [www.northwindts.com](http://www.northwindts.com)







# FIBER INNOVATIONS – TIME TO SHINE

Ultra Long Fiber

In past years, there has been a steady stream of new product developments in the pet food and treat market. Increased awareness of the nutritional and technological benefits of ingredients such as fiber allows manufacturers to develop more holistic solutions.

By Dr. Astrid Bosse, JRS Petfood & Aquafeed

## Gut Health

Feeding complete foods rich in natural fiber is undoubtedly good for a pet's health – a fact that is backed up by an array of scientific studies. As components of pet food and functional ingredients, specific fiber sources are primarily known for their ability to keep a pet's digestive system healthy and balanced. Clinical studies have shown that supplementing dry and wet cat food with cellulose fiber helps to reduce typical hairball symptoms and to raise fecal hair excretion in cats.

## Preventing obesity

As in humans, pet obesity numbers continue to increase year by year. According to the Association for Pet Obesity (APOB), nearly 60% of cats and 56% of dogs in the US are overweight or obese. Weight management foods enriched with concentrated cellulose fiber can help to better control weight in cats and dogs without affecting food palatability.

## Dental care

Oral health is another top concern among pet owners. Approximately 70% of cats and 80% of dogs develop some form of oral health problem by the time they are three years old. Clinical studies have proven that dental foods and snacks enhanced with specific cellulose fibers work more effectively to promote oral health in dogs when compared with fiber-free control products.

## Standardized quality

Consistency, texture, and uniformity of pet food products are key quality attributes that are important to consumers but may be difficult to maintain. Given the variable nature of ingredients and the complexity of the manufacturing process, creating the right consistency can be a challenge for the manufacturer. Well-known binders such as spray-dried plasma (SDP), wheat gluten, or egg white/albumin commonly are used in so-called restructured meat products like chunks and in all

meat applications for their high swelling, water retention, and emulsion capabilities.

With a series of long-term pilot scale tests at their Technical Competence Center in Rosenberg (Germany), JRS demonstrated that a favorable cost-benefit is achieved by partially replacing conventional binders with functional cellulose fibers. Regardless of the type of meat ingredient tested, replacing 2% SDF with 1% cellulose helps optimize the key parameters in a steam tunnel process and improves the textural parameters of the chunk before and after retorting.

### Fiber as a tool

Fiber research is also currently underway into capturing product quality features in dry grain-free products with high meat inclusion in order to overcome typical extrusion challenges such as stickiness, reduced throughput, or poor product integrity.

### Natural products for the future

As pet food trends follow our tastes and expectations discovering the functionality of simple, natural plant fibers is a key field of innovation. These special natural fibers can help develop vegan meat alternatives giving the substitute products the right consistency and the desired structure. Moreover, many pet owners are exploring raw feeding with product convenience being a strong argument for consistent purchase. Natural plant

fibers can make raw pet food firmer and more comfortable to handle while contributing to good digestion.

### Energy Savings Opportunities

Each pet food and treat product format offers opportunities for cost savings and improvement in overall efficiency, especially during a global energy crisis, this fact is the focus of every entrepreneur. Specialized cellulose fibers have proven to make production processes more sustainable. In dry pet food, the drying time in production can be reduced by 50% making way for lower power consumption and relieving the bottleneck in drying, allowing for higher product throughput.

### Tailored Fiber Solutions

With enormous demand across the pet industry for innovative products, manufacturers are looking for unique marketable, and functional ingredients.

Specialized plant fibers can be considered the pet food technologist's toolbox for providing a wide range of functionalities across the whole spectrum of pet food products: dry to wet, frozen to sterilized, and even dietary supplements such as tablets.

As a leader in fiber products, JRS offers a comprehensive range of fiber ingredients that are suitable for all manufacturing processes and formulation options. Fibers that can help create sustainable pet food for better differentiation and improved pet health.



Fibers for Life.

## The Right Fiber for Every Trend

- › Pet Health
- › Natural
- › Sustainable
- › Affordable Nutrition





# RAISING THE BAR IN PET NUTRITION: ANDRITZ'S TWIN-SCREW EXTRUDERS FOR HIGH-MEAT FORMULATIONS

As pet owners increasingly seek the best for their furry companions, a new trend has emerged: high-meat pet food. This trend brings with it both excitement and challenges, especially when it comes to incorporating fresh meat into pet food production. Addressing these challenges, ANDRITZ Feed & Biofuel, a leading innovator in engineering solutions, introduces its twin-screw extruders, offering a breakthrough solution for efficient high-meat pet food production.

By Andritz

## The Rise of High-Meat Pet Food

Pet owners today are becoming more mindful of what goes into their pets' bowls, and the high-meat pet food trend is a result of this growing awareness. High-meat pet food refers to formulations that contain over 30% fresh meat content. This demand stems from a desire for better digestibility and premium nutrition for pets. However, this shift presents its own set of hurdles, particularly in achieving the right cooking temperatures due to the moisture and fat content in raw animal ingredients.

## Challenges in High-Meat Pet Food Production

Creating high-meat pet food formulations comes with unique challenges. The variability in raw animal ingredients

complicates the manufacturing process, demanding careful handling to maintain consistency. As Niels Bengt, Sales Director KA, LATAM at ANDRITZ, explains, *“Dealing with the diversity of raw animal ingredients requires innovative solutions to ensure uniform processing, which is vital for preserving the nutritional quality of the final product.”*

As a result, the production of high-meat pet food often requires the employment of twin-screw extruders, known for their superior capabilities compared to single-screw counterparts. These extruders offer advanced kneading and mixing capabilities, pivotal for upholding the desired texture in high-meat formulations. Yet, the pursuit of elevated throughput rates while adhering to compact machine dimensions adds an additional layer of complexity to the manufacturing process.

## Striking the Balance Between Efficiency and Nutritional Integrity

In the face of these challenges, ANDRITZ's twin-screw extruders, ExTS 616 & 718, emerge as a transformative solution for high-meat pet food production. Specifically designed to excel in extruding pet food enriched with elevated meat inclusion ratios, ANDRITZ's twin-screw extruders ensure optimal starch utilization, affording unparalleled formulation flexibility and optimized feed conversion ratios. The synchronized, high-shear twin screws guarantee the complete material discharge, minimizing waste and expediting recipe transitions.

*"Our twin-screw extruders are crafted to tackle the intricacies of high-meat pet food production. We are resolute in our commitment to efficiency while upholding nutritional integrity. ANDRITZ's twin-screw extruders stand as the definitive solution that not only meets but surpasses the challenges of high-meat pet food production,"* says Niels Bengt, Sales Director KA, LATAM at ANDRITZ.

*"Our approach is centered on achieving a harmonious synergy between the seamless functioning of our machines and the preservation of the vital nutrients within high-meat formulations. With precise control over cooking temperatures and meticulous handling of diverse ingredients, our twin-screw extruders stand as a testament to our dedication to delivering pet food that not only excels in quality but also upholds the nutritional essence of each ingredient,"* Niels Bengt adds.

This distinctive approach has been expertly crafted to tackle head-on the intricate challenges that arise from incorporating raw animal ingredients into recipes. **By providing pet food producers with meticulous control over cooking temperatures, ANDRITZ's solutions effectively address the nuances associated with different ingredients,**

**ensuring that each element is handled appropriately.** This attention to detail serves as the linchpin for safeguarding the nutritional richness present in high-meat pet food formulations, ultimately resulting in a final product that not only offers exceptional palatability but also remains an optimal source of nourishment for our loyal animal companions.

## From Conscious Consumers to Circular Economy

**Moreover, as societies worldwide increasingly embrace environmental consciousness, consumer interest in the food supply chain has surged due to growing sustainability concerns.** Transparency in sourcing and production is no longer sufficient; consumers now demand an understanding of how food production impacts the planet. This scrutiny extends even to pet foods and treats.

As the world transitions toward a circular economy, driven by the urgency to mitigate greenhouse gas emissions and reduce landfill waste, it's essential to recognize the role of rendering as a form of recycling. Rendered ingredients include proteins sourced from animal muscles, organs, and bones not suitable for human consumption but perfectly safe for animals. This holds particular significance as approximately 50% of an animal is unsuitable for human consumption, and without rendering for alternative uses, this portion would go to waste.

**Therefore, integrating fresh meat into pet food aligns with the principles of the circular economy, promoting resource efficiency. ANDRITZ's twin-screw extruders play a significant role in advancing this circular economy in the pet food industry.** By efficiently processing raw animal ingredients and minimizing waste, ANDRITZ machines contribute to a more sustainable pet food production process, while maintaining the nutritional quality that pets deserve.



The twin screw extruders, ExTS 616 and ExTS 718, are the ideal solution for the extrusion of pet food with high inclusion rates of meat slurries or fresh meat.

The twin screw extruders ensure complete utilization of starch, allowing for higher flexibility in the formulation and enabling a higher feed conversion ratio.

The high-shear, co-rotating twin screws guarantee complete material discharge, and there is no residue in the barrel after production. These factors allow for rapid change over to the next recipe.



Pet food

## ENGINEERED SUCCESS

ANDRITZ Feed & Biofuel A/S  
Europe, Asia, and South America: [andritz-fb@andritz.com](mailto:andritz-fb@andritz.com)  
USA and Canada: [andritz-fb.us@andritz.com](mailto:andritz-fb.us@andritz.com) / [andritz.com/ft](http://andritz.com/ft)

# ANDRITZ

## The Way Forward: Nourishing Pets and the Planet Simultaneously

As the pet nutrition industry evolves, the high-meat pet food trend poses challenges that require innovative solutions. ANDRITZ rises to the occasion, ensuring efficient processing of fresh meat ingredients while upholding their nutritional value. Beyond efficiency, ANDRITZ's twin-screw extruders exemplify a commitment to sustainability, ushering in a more environmentally conscious era for pet food manufacturing.

Niels Bengt, concludes, "Our solutions not only address the demands of the pet food industry but also contribute to a more sustainable future. By providing highly efficient machinery that produces high-quality, high-meat pet food, we're meeting the needs of pets, their caring owners, and our planet."

In the future, ANDRITZ aims to continue pushing the boundaries of innovation to further enhance pet food production. "Our innovations are not just products; they are promises of a brighter, more exciting future for our customers."

## SOLUTIONS IN COMPLETE FEED MILLS AND EQUIPEMENTS FOR ANIMAL NUTRITION

>> MORE THAN 50 YEARS OF EXPERIENCE.

### EXTRUDERS



### HAMMER MILLS



### BAG MACHINES



### COATING SYSTEM FOR FATS FLAVORS OPTION WITH VACUUM

>> POSSIBILITY OF SUPPLYING THE "TURN KEY" MODEL. WE PROVIDE ALL THE EQUIPMENT AND SERVICES NECESSARY FOR AN EXTRUDED FEEDS FACTORY.



Via Anhanguera, km 320 - Ribeirão Preto - SP - Brazil  
Phone: +5516 3934 1055 +5516 99624 8076  
vendas@ferrazmaquinas.com.br - www.ferrazmaquinas.com.br



## Trading Unit

Cosal, es el departamento Comercial del grupo Setop, que comercializa Aceites y grasas de diferentes tipos, en numerosas partes del mundo, estas se utilizan para proporcionar mezclas y productos optimizados en la industria de alimentos para animales.

Buscamos activamente los productos que nuestros clientes necesitan, para ofrecerles un producto testeado y de calidad certificada.

### Servicios



Comercialización de productos oleosos



Mezclas a medida como sustitutas de aceites



Obtención de aceites y grasas



Análisis y gestión de la calidad

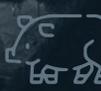
### Productos

#### Marino



Aceite de pescado crudo  
Aceite de pescado neutralizado  
Aceite de pescado salmón  
Aceite de tilapia  
Aceite de pangasio

#### Animal



Aceite de ave  
Sebo Bovino  
Grasa de cerdo

#### Vegetal



Aceite de soja  
Aceite de canola  
Aceite de linaza  
Aceite de camelina  
Aceite de palma  
Aceite de maíz  
Lecitina de soja

### Mezclas hechas a medida

#### Acuicultura:



Diseñado para optimizar fórmulas de alimentos balanceados para acuicultura con nuestra exclusiva mezcla de aceites ricos en Omega-3 (EPA+DHA) y componentes nutricionales.



Descubra el futuro de la nutrición sostenible con nuestra revolucionaria mezcla de aceites de microalgas, enriquecida con fuentes nuevas y ecológicas de EPA+DHA.

#### Mascotas:



Sustituto del Aceite de Pollo, garantizando ácidos grasos esenciales como linoleico, linolénico y araquidónico, aportando alta palatabilidad y brillo excepcional en el producto terminado.



Aceite de salmón con adición extra de Omega 3 especialmente formulado para la industria Pet Food.



### Contacto

- Chile | Oficina Central  
Av. Chacabuco 149, Concepción.
- Chile | Planta  
Calle Central S/N, Sitio 3, Lote 4 Manzana C, Parque Industrial Escuadrón 1 Coronel, Región del BíoBío, Chile.
- Perú | Oficina Central  
Avenida la Paz 910 departamento 402, distrito Miraflores, Provincia y Departamento de Lima.
- Perú | Planta  
Pueblo Joven Villa María, Mz.N.Lt N° 6 Distrito de Nuevo Chimbote, Provincia del Santa, Ancash.

www.setop.com consultas@setop.com +56 41 218 6720

**THINK  
PLASTIC  
THINK  
BRAZIL**

Take part of the most importante Brazilian Events  
for Converted Plastic



**12-15**  
AUGUST  
**2024**  
São Paulo - Brazil

**REGISTER HERE**



SUPPORTED BY



PROMOTED BY

MINISTRY OF  
DEVELOPMENT,  
INDUSTRY, TRADE  
AND SERVICES





# PROCENS, THE COMPANY THAT PRODUCES 100% NATURAL PROTEIN FLOUR AND OIL FROM INSECTS THROUGH A CIRCULAR ECONOMY MODEL

A few years ago, Procens began a project to develop animal feed based on insect breeding. Initially, it was in Córdoba, Argentina, and in 2020 it relocated to Balcarce, Buenos Aires. Currently, the company aims to lead the development of an insect-based industry in Argentina and Latin America, proposing a sustainable nutrient recycling solution.

The key to success? The development of bioplants for breeding black soldier fly larvae to convert food waste into quality protein for animal feed and biofertilizer for soil regeneration through a 100% natural and sustainable process.

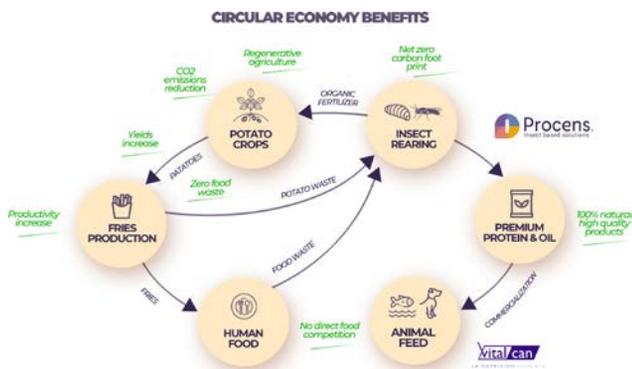
Recently, they sealed their alliance with VitalCan, a leading company in the sector, to develop innovative products based on natural insect ingredients. They also signed an agreement with a firm from Balcarce to convert their potato waste, peels, and defective fries, into an organic amendment to incorporate into potato crops.

## Towards a circular economy in the pet food industry

**Procens creates solutions for a market segment seeking new sources of healthy and sustainable insect-based proteins.**

In the current context where sustainability is increasingly important, both for producers and consumers, collaborations such as the one achieved with VitalCan are a great step forward so that companies already established in the market can begin to offer balanced feed based on insect proteins in some of their products.

Thus, **this sustainable production model development in the industry remains at the center of the intentions, seeking to promote a circular economy that transforms food waste into high-quality protein for animal feed and organic amendment for crops.**



## So, how does this process work to transform food waste into protein flour and insect oil?



Insect transformation plant

The first step, as stated by Julien Laurencon, one of the founders of the project, is to recover food waste from potatoes, fruits, and vegetables for example. These are finely grinded and mixed, which allows them to obtain a balanced substrate to feed the larvae and ensure their optimal development. We achieve this without adding any chemicals or antibiotics, only with a natural fermentation process in which efficient microorganisms intervene.

On the other hand, there is the breeding of flies (adults) in captivity and under controlled conditions. Flies live an average of ten days. This endemic fly, the Black soldier, (*Hermetia illucens*) does not feed in its adult stage, so it does not carry contamination, and its only purpose is to mate and lay eggs.

*"We give them ideal conditions, with 30 degrees of constant temperature, more than 70% humidity, and 12 hours of light and 12 of darkness so that they can reproduce. They lay eggs in a place adapted for this purpose, which are harvested daily to be hatched, recovering what is called a neonate, a newly hatched larva, tremendously efficient to biodegrade food waste. With our technological development, they reach maturity in only 12 days multiplying their weight by ten thousand, eating the substrate that we prepare from the mix of food waste."*

This leads, then, to the biodegradation process: the larva eats and defecates the matter processed through its digestive system while accumulating protein and fat in its body to prepare for its pupation cycle to transform into fly. 5% of the eggs are recovered to maintain what we call the breeding stock (the colony of flies to continue having eggs, larvae, and flies); The remaining 95% goes to this growth process to finally harvest the larvae once they reach maturity.

On the one hand, the biodegraded matter will be processed to become an organic amendment for soil regeneration (like a biofertilizer) that will allow reducing the use of chemical fertilizers while improving the biology of the soil and allowing carbon sequestration. On the other hand, the larvae are an excellent source of protein and fat. Fat is extracted through a centrifugation process. The product obtained is an oil of similar quality to coconut oil. The leftover dough is an expeller that is dried and ground to get a 58% protein flour used for animal feed.



- 58% easily digestible animal protein
- 100% natural product: without antibiotics or genetically modified organisms (GMO)
- High palatability
- Hypoallergenic property
- Alternative for animals with food sensitivities
- Antioxidant potential



- 41% lauric acid, modulator of intestinal flora
- 100% natural product: without antibiotics or genetically modified organisms (GMO)
- High palatability
- Has antimicrobial activity

**At Procens, for every 1,000 kilos of waste with which they feed the larvae, they achieve 150 kilos of fresh larvae that will become 50 kilos of protein flour and about 16 kilos of oil and generate 140 kilos of organic amendment.**



INSECT BREEDING BIOPANT (5 Tn of waste per day)

## Procens, a company that works to help transition to a more sustainable animal feed industry

At this first stage, its products are aimed at pet food and fish, but in the future, it will also be found for pigs and chickens (in the early stages of breeding). Without a doubt, the company, which has just raised its evaluation to certify as a B Corp with a score of 106pts, well above that requested, is making a lot of progress on the Latin American continent to be able to promote a circular economy model where the current production does not negatively impact future capacities and is on the way to fulfilling its purpose of preserving, fostering and regenerating life on earth.

More information, visit their website <https://procens.org/>

# Conoce

Nuestros próximos  
Eventos

**Fabián Ortiz**

fabian@foromascotas.mx  
info@rendimiento.com.mx  
Cel. (+52) 55 5408 3909

**Miguel A. López**

miguel@foromascotas.mx  
info2@rendimiento.com.mx  
Cel. (+52) 55 8532 7107

## FORO MASCOTAS PET FOOD 2024

27 y 28 de junio Expo Guadalajara

Es el principal evento de actualización y networking de la **industria pet food en México y Latinoamérica**. Un foro internacional de alto nivel con mega salas de conferencias interés y un área comercial con la participación de las principales empresas del sector.

Más información en [www.foromascotas.mx](http://www.foromascotas.mx)

## FORO MASCOTAS VIRTUAL 2023

Jueves 9 de noviembre - Evento gratuito

Durante un día de conferencias sobre el mercado pet food en **América Latina**, reuniremos a productores, comercializadores y proveedores, además de personas interesadas en la industria.

Inscríbete en [www.foromascotasvirtual.mx](http://www.foromascotasvirtual.mx)

## CONGRESO INTERNACIONAL

DE LA INDUSTRIA DEL RENDIMIENTO 2024

12 al 15 de marzo - Iberostar Complejo Paraíso, Riviera Maya

Es un espacio de actualización y networking de la **industria del rendimiento, pecuaria y de mascotas en México y América Latina**.

Más información en [www.rendimiento.com.mx](http://www.rendimiento.com.mx)

2024 **Foro Mascotas  
PET FOOD  
Internacional**



Agéndanos en tu calendario

#SomosIndustriaPetFood

# STRUGGLING WITH KIBBLE QUALITY?

PLASMA INCLUSION SOLVES MANUFACTURING CHALLENGES

In a series of tests at the Wenger technical center, including plasma in the dry blend formula provided improvements in single and twin screw extruders, in both grain and grain free diets and increased final formula palatability for cats and dogs.

- ✓ Increase fresh meat inclusion in higher meat formulas
- ✓ Increase palatability for better pet acceptance
- ✓ Increase durability for fewer fines & less rework



## UPCOMING WEBINAR



Scan for details & to register

**SOLVING KIBBLE QUALITY CHALLENGES:**  
Optimize Extruded Formulas with Functional, Palatable & Nutritious Ingredients

**APC**  
APCpet.com



## 25 YEARS OF INNOVATION AND COMMITMENT IN ANIMAL NUTRITION



### CONNECTED TO THE WORLD



[www.porfenc.com](http://www.porfenc.com)



@marketingporfenc8122



porfenc



facebook.com/porfenc

A leading company in the introduction of innovative additives to the animal nutrition market. Scientific endorsement, productive efficiency, innovation, and assured supply.

### How it all started:

A legacy of value and vision: **25 years ago, in 1998**, we began a journey with a clear vision: revolutionizing the animal nutrition market by introducing natural products that provide exceptional value. Our focus was on improving the quality of life of production and companion animals, thus driving efficiency and sustainability in the industry.

A solid base in Argentina: We have an additive manufacturing plant located in the COMIRSA industrial park in the town of Ramallo, Buenos Aires, Argentina, where, in addition to producing our own brand products, our laboratory and development analysis are located. It is the heart of our innovation, where we dedicate tireless efforts to create products and services that exceed our customers' expectations. We have just added a solar energy generation park, demonstrating our firm commitment to contributing to reducing environmental impact.

Pioneers of change: Since 2002, **we have led the way in the progressive elimination of antibiotic growth promoters in favor of naturally derived nutritional additives**. We recognize our responsibility in this issue and are committed to being agents of change, setting the tone for a more responsible approach to animal nutrition.



Fabián Nahara and Cristian Lago, partners and founders of Porfenc.

Innovation resisting the test of time: The soul of our innovation lies in the acquired ability to develop and apply natural antioxidants in the rendering and pet food industries. Our laboratory is the place where these solutions take shape, even using an oxygen pump for accelerated aging tests on raw materials and finished products. Passion for excellence and continuous improvement drives each of these advances.

### SOLUTIONS FOR THE INDUSTRY

Nourishing intestinal health: We offer a portfolio of additives for the intestinal health of production and companion animals, among which acidifiers, prebiotics, probiotics, mycotoxin

deactivators, and soluble and insoluble functional fibers stand out. These options are backed by years of research and rigorous testing, ensuring that each product contributes to the health and well-being of animals.

### THE COMMITMENT

Un mundo de impacto positivo: A medida que crecemos, A world of positive impact: As we grow, we also expand our footprint worldwide. We are present in several countries: Argentina, Brazil, Colombia, Chile, Ecuador, Peru, Thailand, and Vietnam, collaborating both directly and through distributors to ensure that our solutions reach those who need them most. Our commitment transcends borders.

Forging a sustainable future: We recognize the changing trends in the market and are committed to being ahead of the curve. In a world where food safety, natural products, and sustainability are essential, we work tirelessly to align ourselves with these premises. We have quality certifications such as **IRAM MN 324:2010 and GMP+ (B1, B2, and B3)**, demonstrating our commitment to high standards and responsible practices.

An invitation to the future: We know that success is not based solely on looking at the past but on the ability to look forward. Anticipating and embracing new trends is essential for us. As we celebrate 25 years of innovation and commitment, we are excited for a future full of possibilities. We will continue to work with passion and dedication to improve the animal nutrition industry and contribute to global well-being.

### PORFENC IN VIDEO:



<https://youtu.be/g425jkCvRUk>



**PLP Systems**  
Technology in Liquid Handling & Powder Dosing

#### Specialized in:

- Post pellet coating
- Liquid dosing and sprayers
- Micro-dosing of powders

### CONTINUOUS TWIN SHAFT PADDLE COATER MT SERIES

The best application for a premium quality pet food

Example of a pet food coating line using the MT series coater, gravimetric feeding belt, Dosamix for multiple oils inclusion and separate dosing of digestes.



come visit us



**P.L.P. SYSTEMS s.r.l**  
Sp21 N.303 29018  
Lugagnano Val D'Arda  
(PC) Italy  
[www.plp-systems.com](http://www.plp-systems.com)



Tel. + 39.0523.891629  
Fax +39.0523.891013  
[info@plp-systems.com](mailto:info@plp-systems.com)



## PET TREATS CONTINUE ON AN UPWARD TRAJECTORY



Pet treats still on the rising and gaining space in the pet food market-

As of May 2023, nearly three-quarters (73 percent) of dog and cat owners used treats to bond and spend quality time with their pets, and nearly half (49 percent) were treating their dog/cat more frequently as a result of spending more time at home.

<https://tinyurl.com/ymuyd2ov>



## ARABIA SAUDI IS GROWING ITS PET FOOD INDUSTRY BUSINESS OPPORTUNITIES



Due to the changes in Saudi society, with fewer people getting married and having pets instead of children, the government is implementing a strategy that focuses on bringing as much business as possible to the country. In the past 2 years, 5 new pet food factories owned by Saudi companies have opened in the central region of the country with the help of the authorities in Riyadh.

<https://tinyurl.com/yl2wg6th>



## KEMIN INDUSTRIES IS WORKING ON NEW LAUNCHES AND PRODUCTS



The company is currently working on a product that is a blend of antioxidants and antimicrobials for pet food. They are also working on launches of palatability agents for wet food as well as innovations in synthetic and natural antioxidants.

<https://tinyurl.com/ykcg8u>



## BIOFLYTECH MAKES PROGRESS IN THE CONSTRUCTION OF ITS SECOND PLANT IN SPAIN



The objective for the first phase is for the new plant to produce 12,000 tonnes of fresh black soldier fly larvae per year. The plant has a rendering facility of its own design, which allows it to manufacture flour with protein and fat percentages tailored to customers' requirements.

<https://tinyurl.com/ywymf4gy>



# FENAGRA 2024

Feira Internacional da Agroindústria

## FEED & FOOD

TECNOLOGIA e PROCESSAMENTO

# EXPO PET FOOD

# 05 - 06

## Junio / 2024

10h00 às 19h00

    /editorastilo

contato@editorastilo.com.br  
+55 11 2384-0047

[www.fenagra.com.br](http://www.fenagra.com.br)

## SÃO PAULO

DISTRITO  
**ANHEMBI**

GL  
events

Promocion:

 Stilo  
editora

# MARKETPLACE INDUSTRY SUPPLIERS

## Nutrition/Palatants



### Symrise Pet Food

+55 19 99266-3331  
marcio.ponce@symrise.com  
www.symrise.com



### AFB International

+54 11 4 894 8570  
argentina@afbinternational.com  
https://afbinternational.com/



### Callizo Aromas

+57 (305) 814 9448  
info@callizoaromas.com  
www.callizoaromas.com

## Nutrition / Immunity



### Yeruvá

+54 (0)3496 425474 /475 /476  
federicoguida@yeruva.com.ar  
www.yeruva.com.ar



### APC

+55 11 93472-2145  
marcos.razze@apcproteins.com  
https://apcproteins.com/



### Biorigin

+55 (14) 3269 9200  
biorigin@biorigin.net  
www.biorigin.net

## Nutrition / Additives



### Kemin

Tel.: +55 19 3881-5700  
guilherme.fray@kemin.com  
https://www.kemin.com



### JRS

Tel.: +49 7967 152 663  
sandra.kupfer@jrs.de  
https://www.jrspetfood.com



### Porfenc

+54 (011) 4704 9000 / 7777  
info@porfenc.com  
www.porfenc.com

## Nutrition/ Gut health



### Biorigin

+55 (14) 3269 9200  
biorigin@biorigin.net  
www.biorigin.net

## Nutrition/Supplements



### Setop Group

+56 (9) 5406 9955  
sales@cosal.com  
www.setop.com

## Nutrition/ Proteins



### Tebrio

+34 (923) 048 049  
javier.prieto@tebrio.com  
www.tebrio.com



### Procens

+54 (226) 6637777  
info@procens.org  
www.procens.org

## Automation



### NorthWind Technical Services LLC

+1 7 852 840 080  
kastorga@northwindts.com  
www.northwindts.com



### KSE

+31 6 11820906  
info@kse.nl  
https://www.ksegroup.com/es

## Processing/Machinery



### Andritz

+52 331 574 9593  
niels.bengt@andritz.com  
www.andritz.com/group-en



### Buhler Group

+52 722 262 05 12  
info@buhlergroup.com  
https://www.buhlergroup.com/



### Extru-Tech

+1 (785) 284 2153  
extru-techinc@extru-techinc.com  
www.extru-techinc.com



### Famsun Group

+86 (514) 878 48880  
mypublic@famsungroup.com  
www.famsungroup.com



### Ferraz

+55 (16) 3934 1055  
vendas@ferrazmaquinas.com.br  
www.ferrazmaquinas.com.br



### Gea Group

+569 3402 3810  
info@gea.com  
www.gea.com



### Wenger Manufacturing, Inc

+1 (785) 284 2133  
info@wenger.com  
https://wenger.com/



### Schenck Process

+1 (816) 891 9300  
americas@schcnckprocess.com  
https://www.schenckprocess.com/



### Industrias Bartoli Hnos

+54 (0343) 486 2707  
info@bartolihnos.com.ar  
www.bartolihnos.com.ar



### CPM

+54 (9) 11 5389 5312  
sales.sa@cpm.net  
www.onecpm.com

## Cleaning and sanitation equipment



### Goodway Technologies Corp

+1 800 333-7467  
goodway@goodway.com  
https://www.goodway.com/

## Conveyors



### Cablevey Conveyor

+1 (641) 673 7419  
info@cablevey.com  
www.cablevey.com

## Weighing and Dosing



### PLP Systems

+39 (0523) 891629  
info@plp-systems.com  
www.plp-systems.com



### KSE

+31 6 11820906  
info@kse.nl  
https://www.ksegroup.com/es

## Packaging Equipment



### Statec Binder

+43 (3112) 38580 0  
office@statec-binder.com  
www.statec-binder.com



### Payper

+34 973216040  
david.pernia@payper.com  
https://www.payper.com/

## Consultancy



### Clivio Solutions

+54 9 2352 540040  
francisco.pantoni@cliviosolutions.com  
www.cliviosolutions.com

## Market Consulting



### Triple Three International

+521 (552) 187 4357  
ifranco@triplethreeinternational.com  
www.triplethreeinternational.com

## Rendering

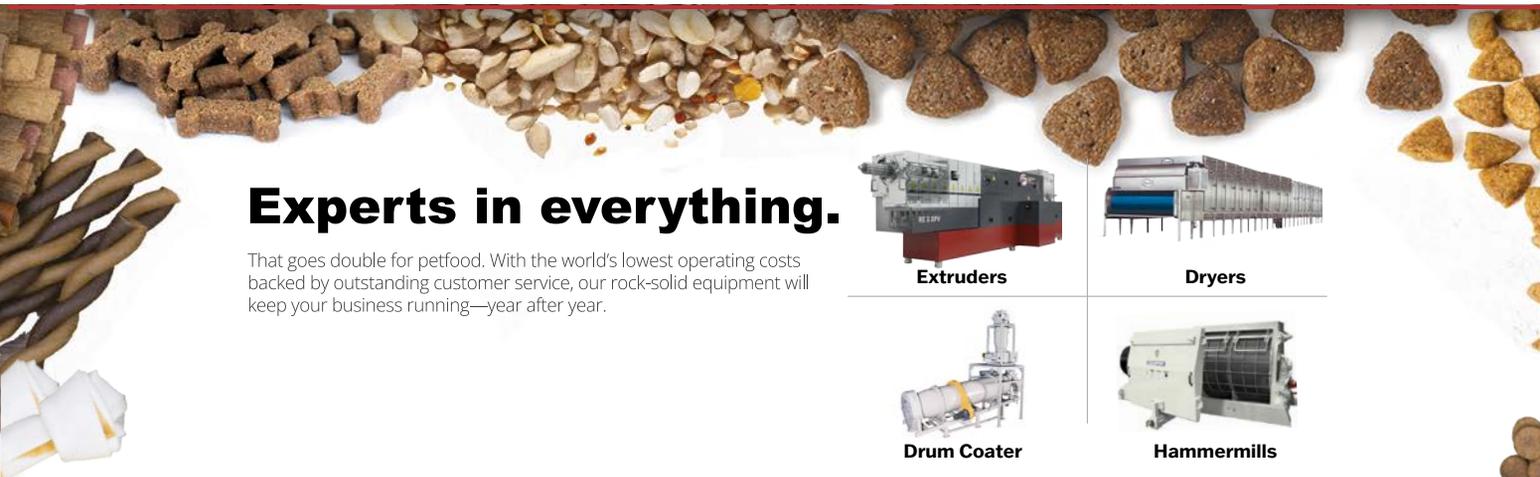


### North American Renderers Association

+52 55 59806080  
gdavalos@nralatinamerica.org  
https://nara.org



Feeding, Fueling & Building a **Better World**



## Experts in everything.

That goes double for petfood. With the world's lowest operating costs backed by outstanding customer service, our rock-solid equipment will keep your business running—year after year.



Extruders



Dryers



Drum Coater



Hammermills



IDAH

BETA RAVEN



WOLVERINE PROCTOR



Roskamp



PLANET DRYERS



EXTRICOM

CPM Latam  
onecpm.marketing@cpm.net

onecpm.com

7–10 May 2024 | Nuremberg, Germany

# Interzoo 2024

38th International Trade Fair for Pet Supplies

## PARTICIPATE AS AN EXHIBITOR!

Present your company and take advantage of the great sales and marketing potential of this global gathering.

Book your stand at the world's leading trade fair for pet supplies.

REGISTER NOW FOR 2024!



INTERZOO.COM/EN

Follow us!



Admission granted to authorized trade visitors only.



Organizer



Honorary sponsor



Organization on behalf of the organizer

NÜRNBERG MESSE



# INDUSTRIAS BARTOLI HNOS S.R.L.

“Todo en equipos para la industria del Petfood:  
Dosificación, Molienda, Mezclado, Extrusión, Secado,  
Aceitado y Enfriado. Desde 2 hasta 8 Tns/h”.



☎ +54 0343 486 2707

📍 RUTA 32 E INTENDENTE RIVERO  
PARQUE INDUSTRIAL  
C.P. 3133 - MARÍA GRANDE  
ENTRE RÍOS - ARGENTINA

✉ info@bartolihnos.com.ar  
🌐 www.bartolihnos.com.ar  
📌 IndustriasBartoliHnosSrl  
📧 @industriasbartoli



ALTA  
PALATABILIDAD

MAYOR  
DIGESTIBILIDAD

Acércate a la asociación para  
conocer las ventajas y soluciones que  
ofrecemos para la industria Pet Food.



NORTH AMERICAN RENDERERS ASSOCIATION

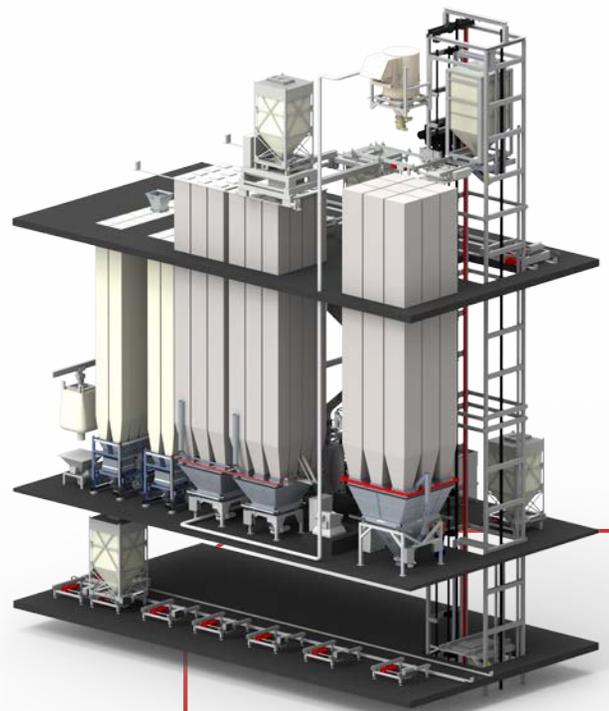
Oficina para Latinoamérica  
Sierra Candela 111 oficina 501, Lomas de Chapultepec  
11000 Ciudad de México, México.  
Tel: +(52 55) 5980 60 80 Email: nramex@nralatinoamerica.org



**Together we design your  
optimal pet food plant:**

- Dosing & weighing equipment
- Process automation
- Projects & consultancy
- 24/7 service

ksegroup.com





# BUSINESS CENTER

+150 leading national and international companies in a single venue

# DON'T MISS

EXPOGUADALAJARA

# ¡SEE YOU!

11<sup>o</sup> Edition

# EXPO FIGAP 2024

## OBLIGATORY MEETING POINT AND COMMERCIAL EXCHANGE

# AGRIBUSINESS



DOWNLOAD APP AND STAY INFORMED



DISPONIBLE EN Google Play

Descárgalo en el App Store

CONTACT US INFORMATION AND SALES

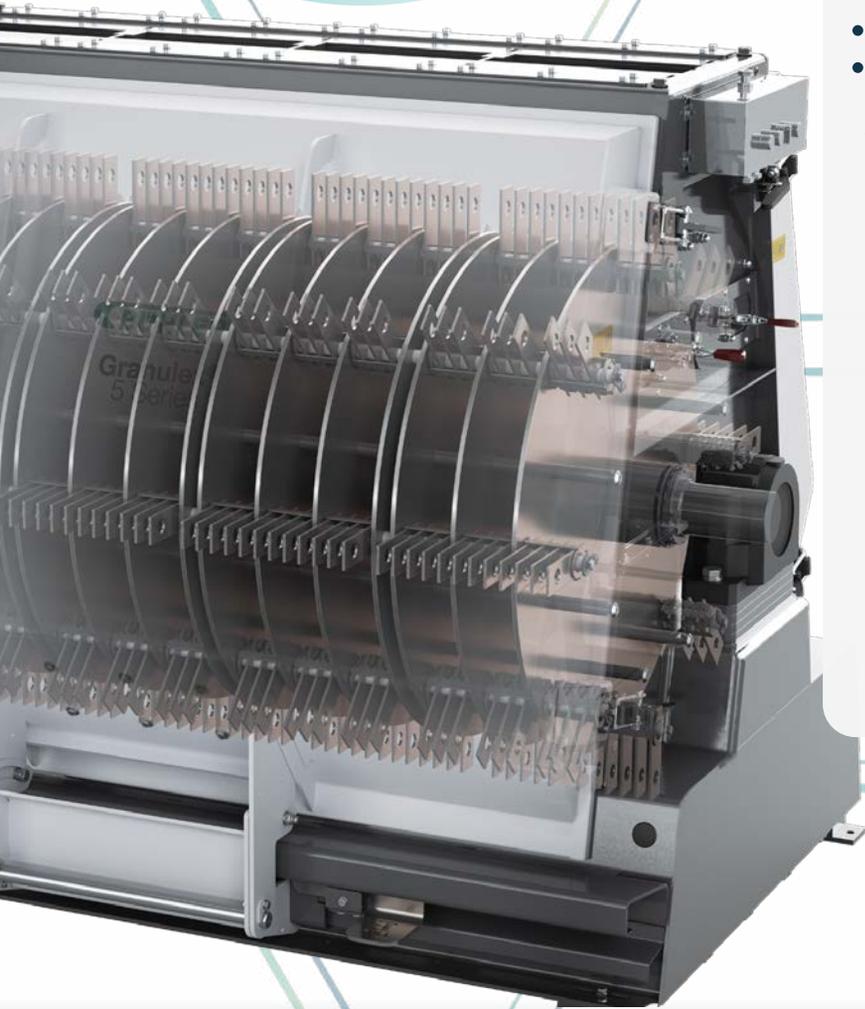
Av. México 3370, Plaza Bonita interior 19-C, Col. Monrraz, 44670. Guadalajara, Jalisco, México.

+52 (33) 3641 8119 atencionaclientes@figap.com

+52 (33) 3641 1694 pjazo@figap.com, info@figap.com

FREE ONLINE REGISTRATION FORM > [figap.com](http://figap.com)

# Granulex® 5 Series.



**Granulex® 5 Series hammer mills** offers ground-breaking production throughput and energy efficiency rates, an optimum particle size profile and ease of maintenance and operation for a wide range of products.

Key benefits:

- Reduced energy consumption
- Increased throughput
- Ease of operation

**We invite you to have a closer look at this new reference in the field of grinding!**



**More info?**

Scan the QR code  
and contact us!