



# INDUSTRIAL PROCESSES





## Our Company

- Proglobal has more than 40 years of experience in the market, and is a leader at both local and international level. We help our customers to achieve their productivity targets based on their critical needs.

In the development of our activity as a solutions provider company for the movement of solids, process equipments and agro-industrial components, it is of vital importance to offer both high quality products and services at competitive prices and with timely delivery.

Thanks to the success and growth of the company throughout the years, which allowed its consolidation at a domestic level, a decision was made to expand geographically to Brazil and Europe, creating new market possibilities and increased reach. The new geographical positioning has the objective of offering our customers an integral service which expedites and reduces operating costs.



### Mission

To be a point of reference in movement of solids, process equipments and components, by being the most convenient "partner" for our customers and suppliers.



### Vision

To be the primary channel for helping our suppliers and customers at the time of applying differentiated solutions.



### Values

Collaboration (Synergy)  
Commitment to work  
Agility  
Creativity  
Professionalism







CAMPINAS, Brazil Agency



ARGENTINA, Headquarters

## Size classification: high-precision screeners



### BM&M

- Designed to meet the demanding market requirements with a large processing flow.
- Unbeatable performance with a high grade of precision.
- The equipment's elliptical motion guarantees uniform feeding in all decks.
- Robust and compact low-maintenance design.

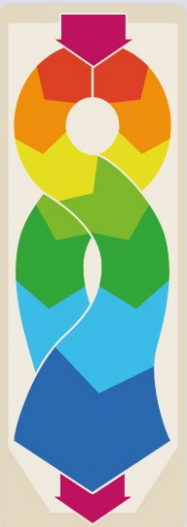
### Apex

- Efficient design which allows optimizing downtimes and increasing total production.
- The equipment's side access for screen replacements requires fewer personnel and reduces downtimes.
- The ergonomic design positions the equipment as the latest innovation in the screeners' market.



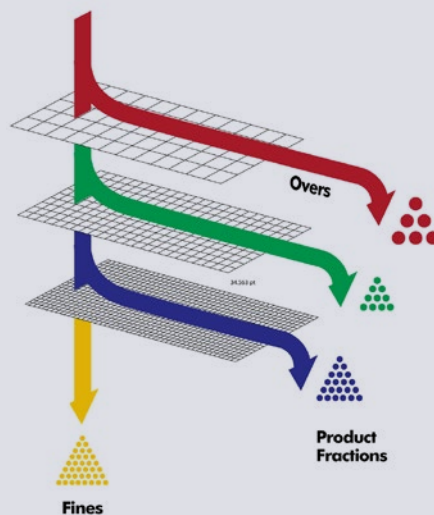
### Rotex

- Compact and robust screeners designed for 24/7 operation.
- Their counterweight transmission system marks the difference regarding the rest of the competitors.
- This equipment is the most used in the oil industry due to its simplicity and low maintenance cost.



### Gyratory Motion

- › The gyratory reciprocating motion distributes, stratifies and quickly separates the product as it passes through the screens towards the discharge area, resulting in a more efficient process.



### Material Flow

- › The material enters through the top and is distributed across the entire width of the screen and transported towards the discharge area. The large particles remain at the top while the smaller ones pass through the lower screens. Performance improvements shall result in increased profits.





## Size reduction, Pelletizing and Cooling



**PROGRINDER**  
Particle Size Reduction Provider



## Hammermills

- Designed to work under the toughest requirements.
- Capable of handling all types of materials at the lowest energy and operating costs.

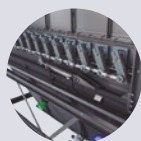
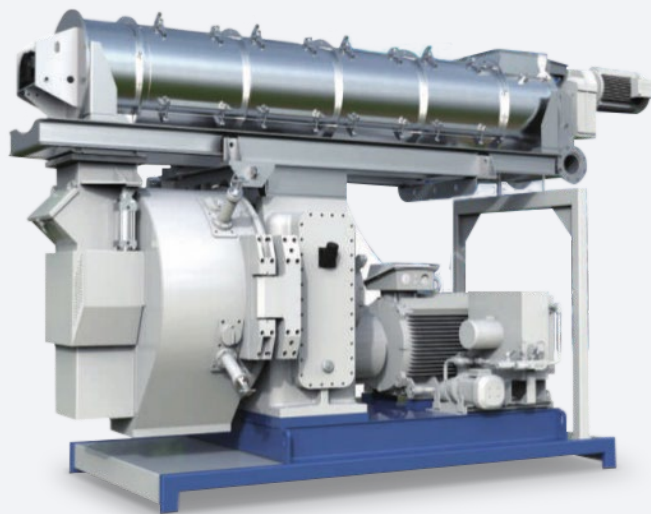


## Pelletizers

**PROPELLET**



Pelletizing equipments for all types of products.  
Depending on the flow, the product and the pellet diameters,  
these equipments are designed for - and adapt to - both direct  
or belt transmission.



**PROCOOLER**



## Coolers / Dryers

Based on the concept of "counterflow air", ProCooler equipments are the most efficient equipments in the market. Due to their fewer moving parts, the maintenance costs are minimal and this creates increased energy efficiency and uniform product moisture.



## Classification by density, dust suppression and pneumatic conveying



### 1 › Rotary valves

Robust and high-precision valves. Machined with a clearance of up to 0.07 mm between the rotor and the stator.

### 2 › Diverter valves

Robust and high-precision valves. Their excellent machining allows reducing air loss.

### 3 › Fans

Centrifugal fans of different types and sizes.

### 4 › Blowers

Designed to work with negative or positive pressure. They include pressure meters, silencers, filters, check valves and relief valves.

### 5 › Cyclones

High-efficiency cyclones that handle flows of between 65 and 50,000 CFM.

### 6 › Bag filters

Different models and types. Low-, medium- and high-pressure filters are used in every area of the plant. Autonomous filters for controlling specific areas are also available.

### 7 › Multi-aspirators

Equipments that take into account the shape, size and density of the material to perform a high-efficiency separation.

### 8 › Aspiration ducts

Built in several sizes to fit each case. Their proper sizing plays a crucial role in the success of a project.

## **Mechanical Conveyors**

### **Industrial aero-mechanical conveyors**

Unique material handling conveying system for dry powders and granules.

Careful conveying of materials, minimal residues and easy-clean systems.



**FLOVEYOR**  
INDUSTRIAL

**M Mitchells**



### **Bulk flow conveyor**

- Fully enclosed conveyors which prevent contamination to the outdoor environment and the impact of external agents.
- Less need of a support structure.
- Suitable for heavy service.
- They allow horizontal and vertical curves.
- Increased life of the conveying belt.
- Highly safe operation due to the fact of avoiding pollution and dust accumulation.



### **Mixers and special equipment**



**S. HOWES**



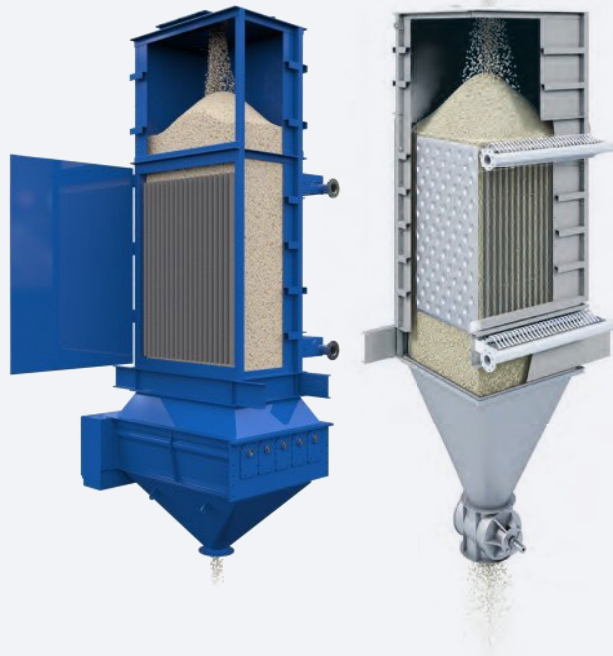


## Drying and cooling



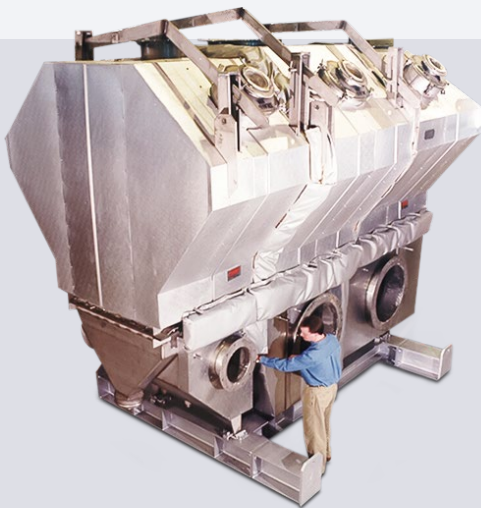
### Bulk solids drying and conditioning

Unlike conventional drying and conditioning technologies which blow hot air across the product as the heat source and to remove moisture, the vertical plate dryers use a combination of cutting-edge plate heat exchange technology to provide the heat source and independent sweep air to remove moisture. This approach largely reduces the air flow requirements and this provides a significantly higher efficiency and improved process control.



### Cooling bulk solids with 90% more efficiency

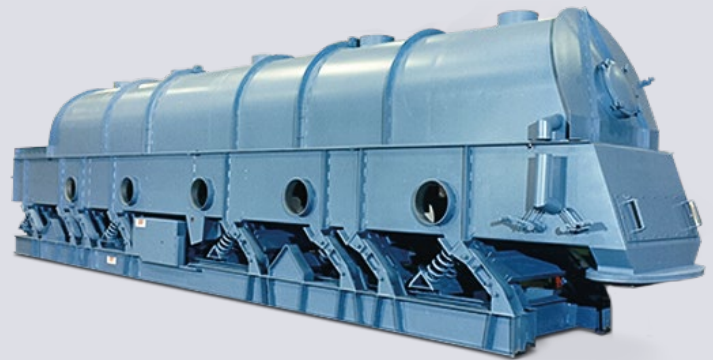
The technology of their heat exchanger is capable of cooling bulk solids of up to 2,000°C indirectly by conduction, with up to 90% less energy. The equipment is designed to handle considerable thermal stresses without cracking or becoming damaged, while offering guaranteed thermal performance for a superior finished product.



### Dryers

The fluid bed industrial dryers effectively and efficiently remove moisture from large amounts of practically any type of material.

- › Vibrating fluid bed dryer
- › Conventional fluid bed dryers
- › Tornesh dryers
- › Industrial flash dryers
- › Coal dryers
- › Aggregate and sand dryers



### Coolers

The fluid bed industrial coolers efficiently and effectively cool large amounts of practically any type of material.

- › Vibrating fluid bed coolers
- › Conventional fluid bed coolers
- › Sand coolers
- › Aggregate and sand dryers / coolers
- › VibroCool coolers
- › Bulk material heat exchangers



## Color Sorting

**PROSORTER** 

Color sorting is crucial in any process. Sorting of grains, food and plastics contributes to satisfy the requirements of food safety and to obtain a product with the purest quality.

The ProSorter color sorting equipments use different technologies for detecting and removing mold, split grains and foreign matters such as glass, in the raw material and sort the product based on color, shape and other differences.

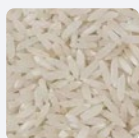
The sorter scans each grain and accurately classifies it as accepted or rejected, minimizing resorting. This reduces energy consumption, ejectors' wear and downtime by

eliminating grain accumulation.

The ProSorter machines offer a service of excellence: professional, full and intelligent sorting.



The ProSorter color sorters allow working with several materials.



^  
Rice



^  
Tea



^  
Wheat  
and Corn



^  
Small  
grains



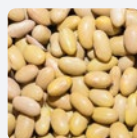
^  
Nuts



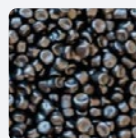
^  
Cashews



^  
Peanut



^  
Beans



^  
Plastic



^  
Other  
materials



## Acrison

### < High-precision feeders

These high-precision feeders are universally recognized for their unmatched capacity to accurately and reliably feed a wide variety of dry solid materials. Their innovative and technologically superior designs provide a high degree of versatile feeding.

› Volumetric Feeders

› Gravimetric Feeders



## Complete lines of pet food and animal feeds



### Pet Foods

#### Container and Custom-built Plants

The entire production unit is prefabricated to allow reducing the on-site installation time by approximately 80%.

The production units in containers can be built for yields of between 1 and 45 tons/hour. The equipments are installed inside 20 or 40 ft (6 or 12 m) containers which can be handled as independent modules.

The container frame has two functions: it not only serves for shipping, but also serves as a steel structure to the tower of the machine.

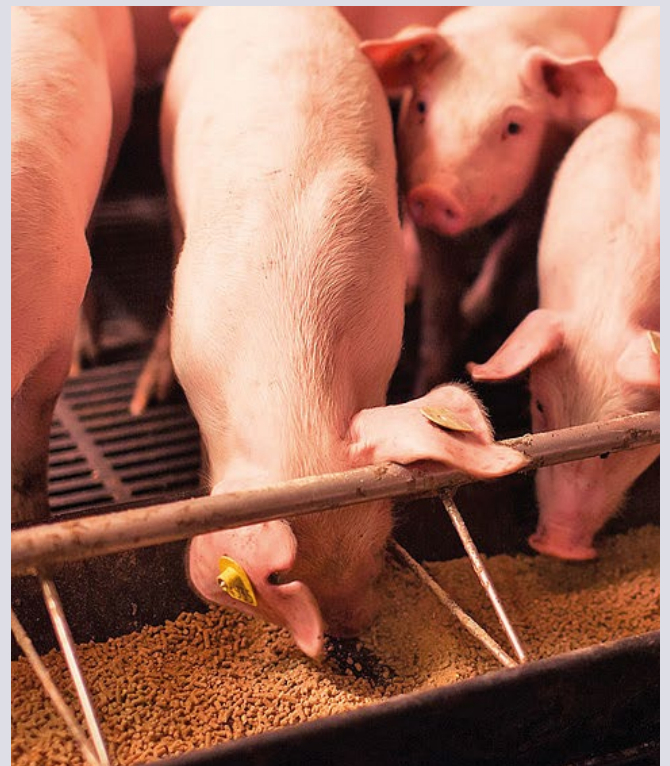
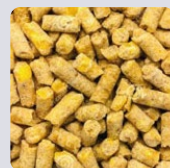
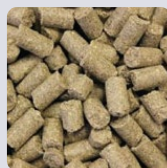
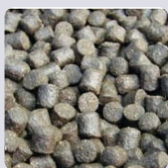
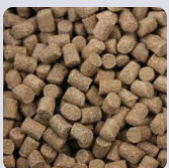
- › Production of Balanced Foods for animals
- › Pet Foods
- › Aquaculture Feed



### Animal Feeds

#### Advantages of the Container Plants

- › All components are reliable and undergo testing
- › Minimal on-site installation time
- › Reduced transportation costs and easy handling
- › Provision of the whole product includes the support frame
- › Complete with all electrical and compressed air systems
- › Factory assembled and checked before provision
- › Savings in construction and civil engineering costs
- › Low energy consumption
- › Short installation time
- › Easy to expand





## Complete processing lines

### Rice

#### Cleaning

Due to the uneven quality of the raw rice, the purpose of cleaning is to remove all type of impurities present in the grain by using several equipments.

#### Dehusking

Once the paddy rice is clean, dehusking is performed using rubber rollers that work at different speeds for removing de husks and this forms two flows: husks that are transported for selected applications and brown rice. As it happens in all industrial processes, when dehusking is done some husked grains follow the flow of the dehusked ones, and all of them pass through a paddy table that separates the husks with high precision and transports them back to the dehusker.

#### Polishing, shining and sizing

The brown rice can be used "as is" or the peel layer can be removed with polishing machines until the rice becomes white; then, shining machines – that operate with water pressure – are used to

improve the aspect of the grain. Subsequently, the different flows of grains are classified according to their size using a screener and a trieur separator and are finally stored in different hoppers for preparing the mixtures that each market requires. After using the

trieur separator and before the hoppers, chromatic sorters – which remove unwanted materials and also separate by tonalities – are used to increase the quality of the final product.

#### Packaging

Since some mills sell their products in bulk, and others in bulk bags, or in 1, 5 or 25 Kg containers, we offer the adequate equipment to satisfy the different needs.



### Wheat

#### Reception and storage

At reception, the incoming trucks unload the wheat into hoppers; the wheat is then screened and aspirated and immediately transported to the storage silos.

#### Cleaning and conditioning

In this area, vibrating and gyratory screeners with aspiration columns, densimetric tables and rotary sieves are used to thoroughly clean the wheat for further storage in the process silos.

#### Milling

After the wheat passes through a magnetic trap and a weighing scale, it is milled in various types of benches that will distribute the different products to the plansifters in which the finer fractions are thoroughly purified and classified before being transported to the silos for their mixing and packaging.

#### Packaging

This product can be dispatched in bulk by using pneumatic conveyors to load the trucks, and it can also be packaged in several types of packagings, which in many cases require cutting-edge packaging technologies.





## ▼ Auxiliary equipment

**PROMAGNET**



### » Magnets

Designed to allow the continuous production line to eliminate the residues of ferrous metal materials without disruption.



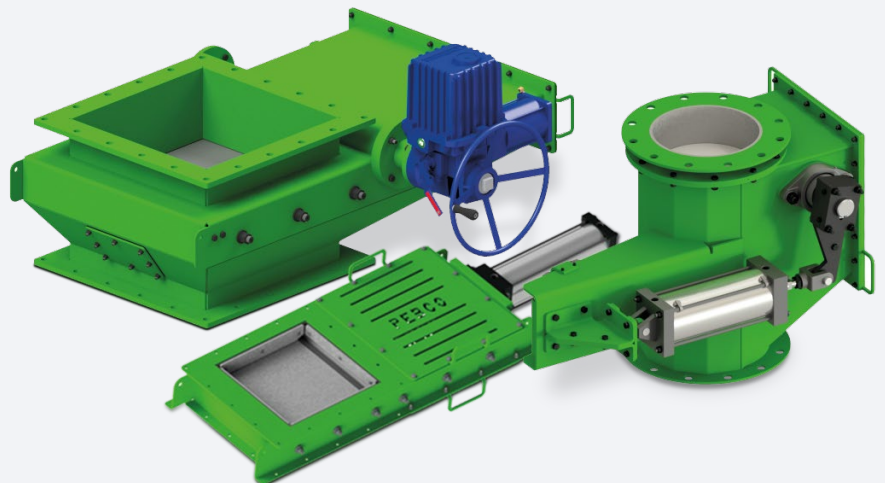
## ◀ Anti-explosion Safety

By using the adequate anti-explosion protection it is possible to significantly reduce the negative effects of potential accidents within the industrial plant, providing protection to considerable economic resources, such as the health and the lives of the operators.

 **PEBCO®**

### » High-precision valves

Exclusively designed to achieve the highest productivity of your system and built to stand the test of time.





## Post-sale service / components



### Project analysis

A technical team with expertise in various plants helps with the daily problem solving situations that arise in any industrial process.



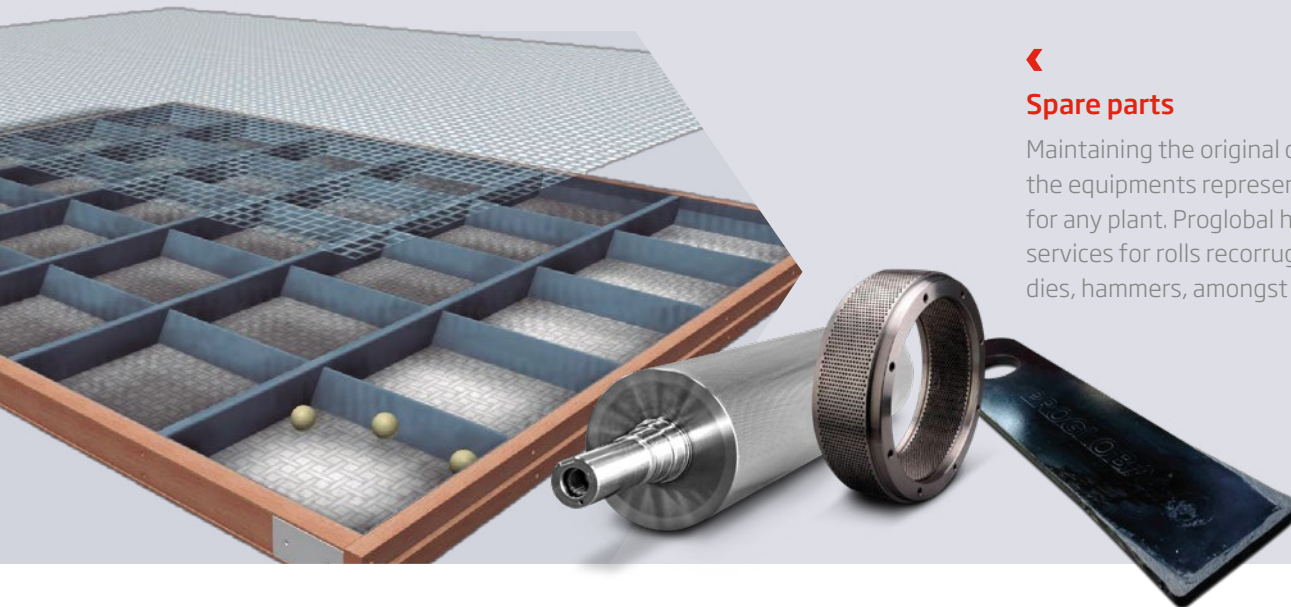
### Maintenance analysis

Proglobal's technical team can help to gather information about the condition of every piece of equipment and their critical parts to prevent unexpected failures which cause significant plant downtime costs.



### Spare parts

Maintaining the original condition of the equipments represents a major challenge for any plant. Proglobal has authorized technical services for rolls recorrugation, screener frames, dies, hammers, amongst others.





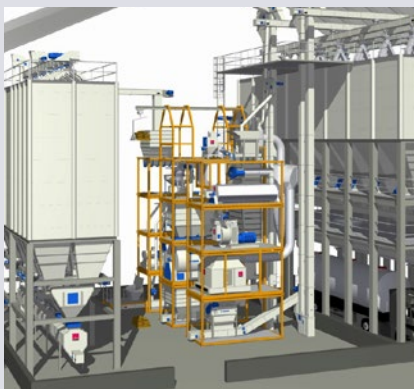


## Engineering and control services

Proglobal is the only company that works to adapt the existing equipment in improvements and expansions. The development of viable projects and improvements with minimum investments as a way for customers to save money is part of our DNA. More than 200 customers feel very comfortable and satisfied working with us because our main goal is for them to earn money.



**1.1. Conceptual engineering**



**1.2. Detail engineering,  
control and automation**



**3. Execution**

We develop the best cost/benefit relationship under customer requirements. Proglobal works together with the customer to find a unique design for each project.

After approval of the conceptual design, different options are presented in a 3D model to see how the project will work out.

We finish the project working together with our main partners - our customers - on its construction and supervision.

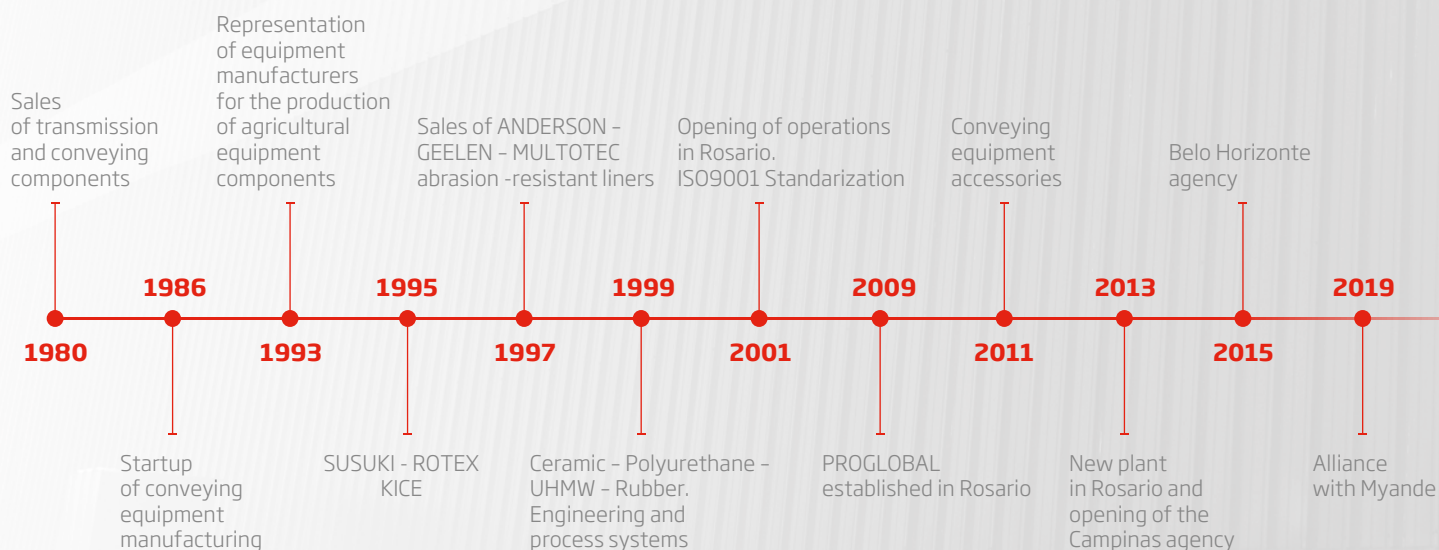


# +40 YEARS

of experience  
and trajectory



# PROGLOBAL





**ROTEX**  
HIGH PERFORMANCE SCREENERS

**PROGRINDER**  
Particle Size Reduction Provider

**PROPELLET**

**PROCOOLER**



**FLOVEYOR**  
INDUSTRIAL

**Mitchells**

**S.HOWES**

**PROSORTER**

**Acrison**

**APEC**  
Automated Process Equipment Corporation

**milltech Co Ltd**

**PROMAGNET**

**rsbp**  
we limit risk

**PEBCO**



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