INGETECSA

Company portfolio

2025

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•Monument Sagrada Familia, Barcelona.

Index

Welcome to our portfolio

German engineer and immigrant Fritz Hailer founded our company back in 1966. He established our head office in the vibrant city of Barcelona. The aim was to combine German quality design and workmanship with inspirational entrepreneurship. We started as a sales office and soon after expanded with a technical office and a local production network. From the very beginning, we specialised in drying and cooling equipment and processes.

Now in its third generation, Ingetecsa is family owned and has maintained the focus of specialisation, offering a wide range of thermal drying, cooling and mixing technologies for continuous productions. The core of the company is a team of very experienced engineers with a passion for the challenges that industrial drying and cooling represent.

The firm has a global presence with an expanding number of international offices, sales agencies and test locations in Barcelona and in New Zealand. Recently, we relocated our headquarters to a beautifully renovated characteristic brick building in the outskirts of Barcelona to better integrate all our disciplines and test facilities.

After almost 60 years, Ingetecsa has evolved into a highly expert and flexible engineering company, of which we are very proud.

Spiral Flash Dryer

The Spiral Flash Dryer is the latest addition to our portfolio and is a unique drying technology. The Spiral Flash Dryer combines the advantages of flash drying and of fluidised bed drying.

Unlike a conventional or a spin flash dryer, the Spiral Flash Dryer lacks moving parts in the drying stage. Additionally, its extremely fast heat transfer and turbulence across the entire product chamber results in lower product temperatures and in measurable lower energy use. It makes the Spiral Flash Dryer stand out of other flash dryers.

The superior product quality it delivers in just seconds, and the lower energy need are most valued. Its compact, low-build design can be installed almost anywhere. Under the roof, or outdoors.

Spiral Flash Cooler

The same Spiral Flash technology can be employed for cooling applications. Flakes, powders, and granules are cooled in a matter of a few seconds. The product can be pneumatically transported while being cooled to a holding silo at the same time.

“The superior product quality and lower energy need are most valued.”

Conventional Flash Dryer

The conventional Flash Dryer is one of the oldest drying technologies in our program. Like the Spiral Flash Dryer, it performs best when drying smaller particles.

In the conventional Flash Dryer, products are introduced into a fast-spinning rotor that disperses the wet particles into a concurrent hot air stream. The special top bend enforces a downward motion, enhancing overall thermal efficiency.

Products are fully dried in just a matter of a few seconds. Start-up and shut-down of the line take significantly less time compared to conductive drying technologies.

The conventional Flash Dryer, or also called the traditional Flash Dryer, is ideal when high gas temperatures – for instance from waste energy or combustion – are available to use. It makes this type of Flash Dryer apt for products that can be subjected to a slightly higher thermal load. More often these are chemical or mineral products.

"Ideal when gas temperatures are high."

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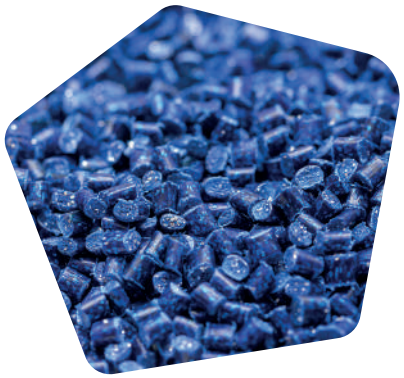
Fluidised Bed Dryer

Delicate particles or larger, uniform granules are ideal candidates for Ingetecsa's static Fluidised Bed technology. The Fluidised Bed Dryer accommodates a wide range of moisture contents and particle sizes. With precise control over airflow, temperature, and residence time, it delivers a final product that meets the most stringent specifications. The entirely static technology and the gentle air flow cushions product impact ensuring utmost care for delicate particles that could otherwise break or create dust as happens in most other drying technologies and in vibrating fluidised beds.



The longer processing time in combination with the typical cross airflow results in lower product drying temperatures. It makes the fluidised bed technology one of the most energy efficient convective concepts.

"Delicate particles or larger uniform granules are ideal candidates for Ingetecsa's Fluidised Bed technology."

Fluidised Bed Cooler

Particle cooling can be seamlessly integrated directly after the drying stage by extending the housing and incorporating a cooling section. If another drying or heating technology is employed, a stand-alone Fluidised Bed Cooler is advantageous for particles requiring careful handling or extended processing times. Both the Fluidised Bed Dryer as the Cooler find their way in almost any industry.

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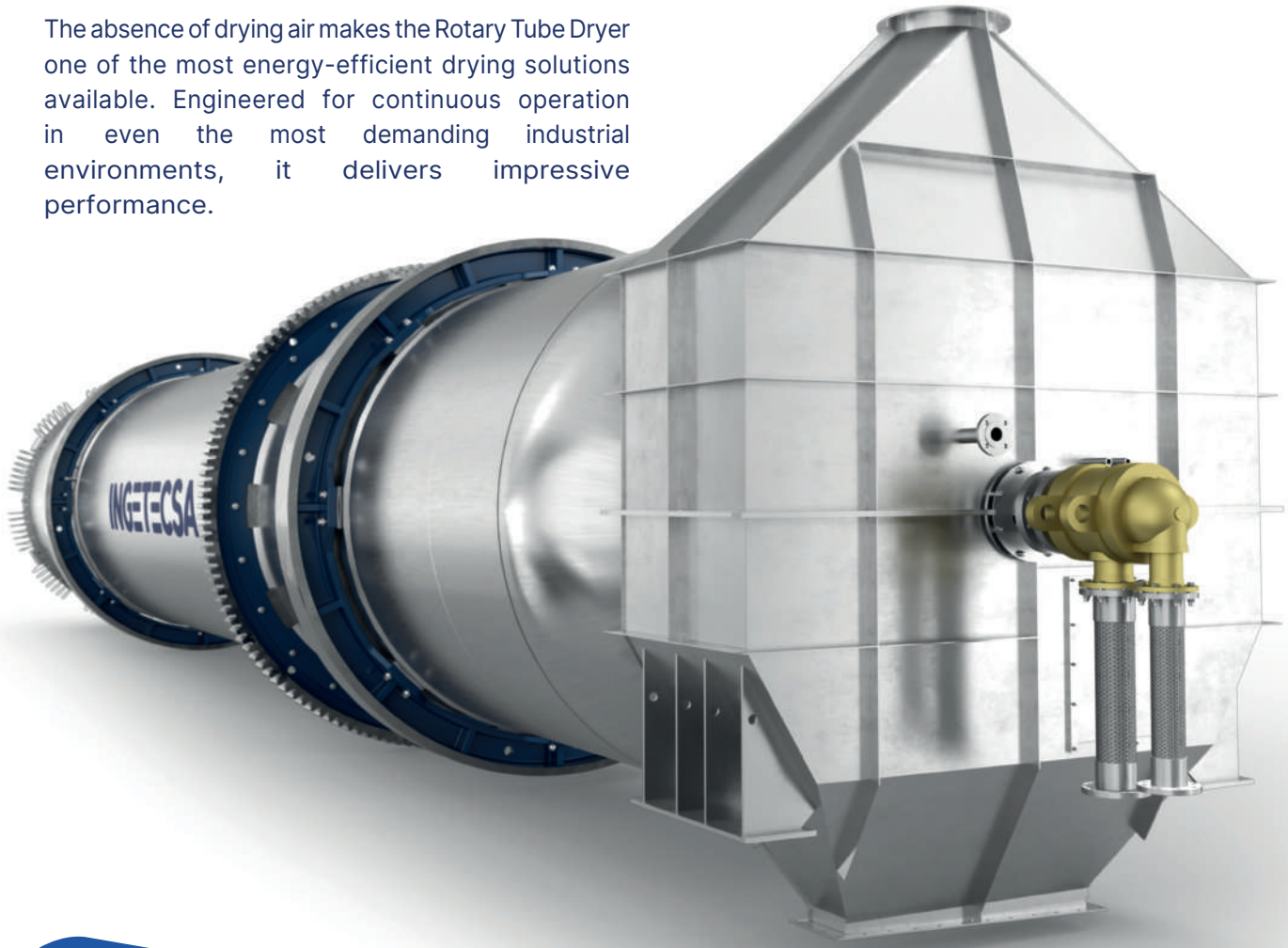
Rotary Tube Dryer

The Rotary Tube Dryer represents our premier conductive drying technology. Its design features a slowly rotating drum fitted with internal steam heated tubes. Product introduction occurs at the dryer's front, where it traverses around the heated tubes. The dried product and vapours are discharged at the opposite end.

The absence of drying air makes the Rotary Tube Dryer one of the most energy-efficient drying solutions available. Engineered for continuous operation in even the most demanding industrial environments, it delivers impressive performance.

This heavy-duty unit is capable of high throughputs and processing a wide range of particle sizes. Additionally, it is exceptionally well-suited for handling abrasive products, as it operates without shear forces. Versatile and reliable, the Rotary Tube Dryer caters to the diverse needs of various industries, especially in the chemical and mineral sectors.



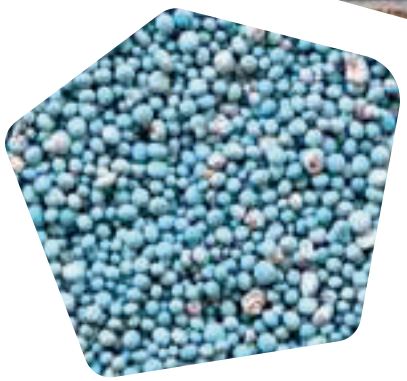
"The Rotary Tube Dryer is one of the most energy efficient drying solutions available."

Rotary Drum Dryer

The Rotary Drum Dryer is a well-established drying solution, ideal for processing coarse products or those with a wide particle size distribution. Its extended processing time is particularly beneficial for such materials.

Depending on the product's requirements, hot air drying can be implemented in either concurrent or counter-current flow. Thermal efficiency is greatly enhanced by specially shaped cruciforms. Sticky or fouling behaviour is also effectively managed.

Each Rotary Drum Dryer is custom designed, ensuring optimal performance and efficiency. Its robust design ensures reliability and minimizes downtime. This makes it an excellent choice for industries such as chemicals, minerals, and more.

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Engineering capabilities

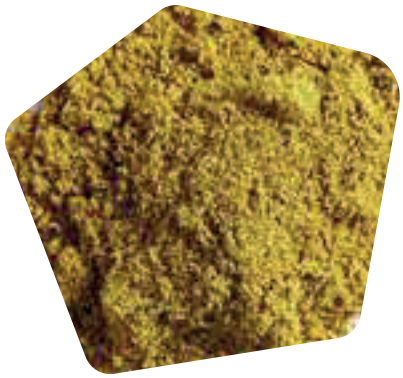
More than just an equipment supplier, Ingetecsa is a highly specialised engineering firm with almost 60 years of experience in industrial thermal drying, cooling, and mixing processes enriched with decades of hands-on project knowledge.

Our engineering expertise focuses on creating complete thermal drying, cooling, and mixing lines. We engineer all necessary equipment around our core, proprietary technologies, ensuring seamless integration. Our deliverables range from engineering-only services to the supply of complete lines, all backed by process guarantees.

Our engineers adopt a flexible and comprehensive approach, participating in pilot test work, process engineering, project management, and commissioning. This holistic involvement builds a team of practical, knowledgeable engineers dedicated to the success of the project.

Flash Cooler

The Flash Cooler is the perfect solution for fine powders that need cooling before bagging, or storage in a silo. Utilising ambient air, the Flash Cooler very efficiently instantly cools products to almost ambient temperature while simultaneously transporting them to the discharge area. This is often located at the top of a storage silo.



"The dual functionality of cooling and pneumatic transport, results in significant savings."

The dual functionality of cooling and pneumatic transport, even over long distances, results in significant savings by eliminating the need for separate cooling and conveying equipment.

The absence of moving parts in the cooling zone ensures minimal maintenance. Additionally, the system's closed design prevents spillage and keeps the site clean and safe.

The Flash Cooler can be seamlessly integrated with the discharge point of any drying technology, making it an adaptable and user-friendly option for various processes and for any industry.

Multi Chamber Cooler

The Multi Chamber Cooler is capable of cooling fine and coarser granular products, with high throughputs at high temperatures. It flawlessly handles temperatures of almost 1000 °C and can withstand substantial fluctuations in product flow and properties.

The Multi Chamber Cooler's design is optimised that it requires no refractory fabrication materials. Also, as it lacks shear forces, abrasive products can be reliably processed.

The key to this technology lies in its cooling system. An ingeniously simple yet unique water distribution system guarantees a high thermal efficiency and mechanical integrity. Its robust construction provides maximum performance and reliability, even in the most demanding applications. The Multi Chamber Cooler boasts a proven track record for industries seeking superior performance.

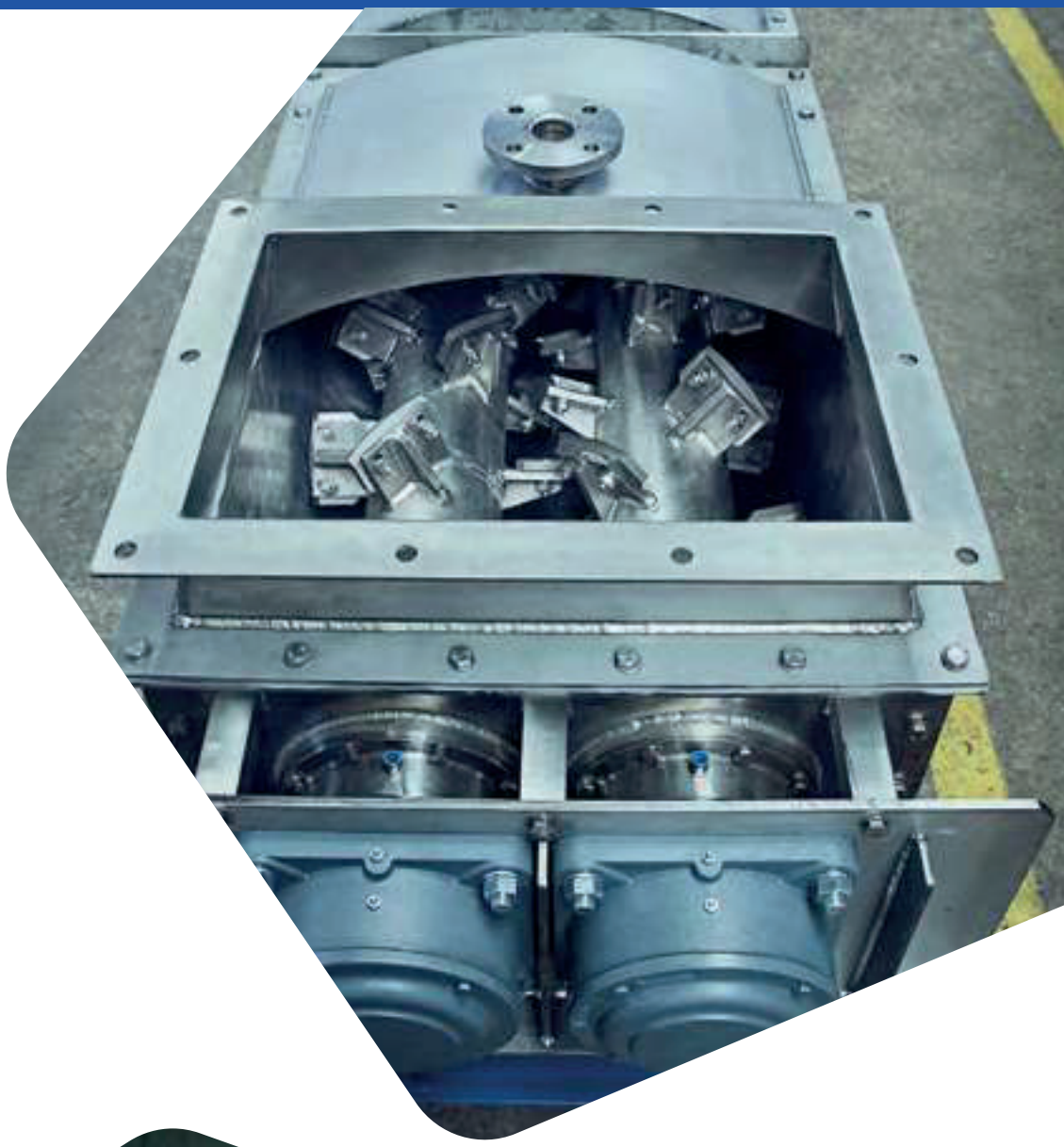
"Maximum performance and reliability, even in the most demanding applications."

Mixer/granulator

The twin-shaft mixer/granulator excels in demanding conditions where mixing, acid injection, reaction, or granulation are required. Its design has been tested under harsh process situations, consistently proving its reliability and robustness. Its flexibility results in exceptionally high availability, with cleaning and maintenance intervals extended to align with overall plant maintenance schedules.

The twin-shaft mixer/granulator is capable of handling sticky products and those solidifying due to chemical reactions. It is designed to transfer high torque and power efficiently. The mixer/granulator is built for long, uninterrupted production cycles, proving its reliability in harsh process situations. For when it is going to be tough out there.

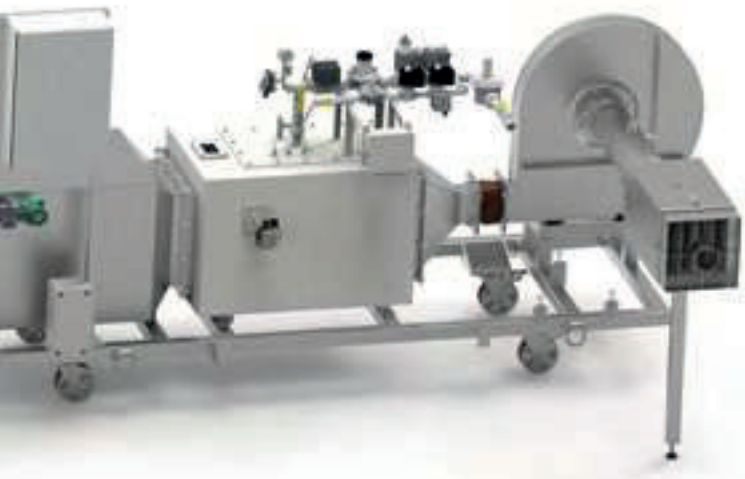
"Sticky products and high torque demanding processes are common conditions for this unit."



Pilot plants & R&D centre

Testing serves as a crucial step in ensuring that a product can be processed as intended, effectively mitigating risks associated with the process. It's equally instrumental in validating whether a machine or newly developed component performs according to its design specifications. That's where our dedicated test facilities and R&D centre play a pivotal role.

At Ingetecsa, we boast a diverse array of bench-scale units and small industrial models meticulously designed for the validation and testing of products and processes. Our mobile test units are adaptable and available for on-site rental, facilitating in-situ testing tailored to our clients' specific needs.



"Testing is the most important step to de-risk a process."

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