



FOR A LONG LIFE INDUSTRY

## Gefond at Euroguss 2026: temperature control and smart management software for the foundry of the future

Nuremberg, January 13–15, 2026 – Euroguss

Hall / Stand: 4A – 414

Gefond will be present at **Euroguss 2026**, from **January 13 to 15** in Nuremberg, to present the latest developments in its **die casting** solutions, with a focus on **energy efficiency, process digitalization, and predictive maintenance**.

In line with its vision of *Gefond for a long life industry*, the company is bringing to the fair an integrated ecosystem of **products and software** designed to make foundries more **controlled, sustainable, and connected**, accompanying operators and machine manufacturers on a path of concrete evolution.

*“Today’s foundries need tools that not only enable them to produce, but also to understand what is happening in their plants and to take care of them over time,”* says **Tiziana Tronci, CEO of Gefond**. *“Our goal is to combine technology, data, and experience to build more reliable, efficient, and durable processes.”*

- **The Perpetuo digital ecosystem: an ecosystem for smart production management**

The Perpetuo digital ecosystem was created to bring foundries and industrial production in the manufacturing sector into a new era: every machine communicates, every piece of data has value, and every decision is guided by predictive intelligence.

**Perpetuo** predicts failures and reduces machine downtime thanks to real-time predictive maintenance;

**Die.Tective** monitors and analyzes mold operating parameters, extending their useful life;

**Foundry.Focus** supervises and optimizes all foundry production processes.

Together, these tools make the factory more efficient, sustainable, and connected, transforming data into knowledge and knowledge into value.

All three solutions can be easily integrated with any other management, production, or maintenance software available on the market.

The Perpetuo ecosystem enables foundries to **transform production data into guided decisions**, improving plant reliability, production continuity, sustainability, and competitiveness.



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*“Data only has value if it becomes knowledge and supports decisions,” adds Tronci. “Perpetuo was created for this purpose: to help companies move from reactive management to informed and predictive management.”*

- **HPDC by Gefond: the new generation of temperature control**

At **Euroguss 2026**, Gefond presents the **latest developments in the HPDC range**, starting with the **Greencasting** temperature control unit, now even more efficient, smart, and integrated.

### **The Greencasting Temperature Controller: efficiency and innovation in mold temperature management**

Proper mold temperature control is essential to ensure quality and efficiency in production processes. In practice, this means cooling the mold only where, when, and as much as necessary, thus avoiding waste and optimizing performance.

#### Distinctive features of Greencasting

- High cooling capacity, allowing even the most demanding situations to be managed.
- Precise regulation of multiple mold zones, adapting to different operating requirements, allowing cooling to be precisely metered only where it is needed.
- Extremely low energy consumption compared to traditional temperature controllers, with savings of up to 85%.

Thanks to its **patented system**, Greencasting allows you to:

- differentiate cooling power and flow rate for up to **30 circuits** managed by a single machine;
- cool the mold **only where, when, and how much is needed**, improving the quality of the casting;
- drastically reduce energy consumption, with savings of up to **85%** compared to traditional solutions;
- increase the useful life of the mold, minimizing thermal shock.

Greencasting control units are designed to work in **synergy with minimal lubrication technologies (MicroSpray)**, where the thermal management of the mold is entrusted exclusively to temperature control.

“Temperature control is no longer just a support to the process, but a real lever for quality, productivity, and sustainability,” emphasizes Tronci.

*“With Greencasting, we have reimaged this role in a modern, digital key.”*

Among the main new features presented by Greencasting at the fair:



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- **ThermoChef**, the new software that simplifies control unit programming, automatically generating thermal recipes based on a few process parameters and reducing setup times and operational complexity;
- **the new HPDC manifold**, redesigned to improve ergonomics, safety, and ease of maintenance, thanks to a new architecture that separates the hydraulic and pneumatic parts and simplifies operations on the die-casting island.

#### • **Greenjet 50: advanced jet cooling for modern die casting**

The **Greenjet** systems complete the offering presented at Euroguss 2026, with **Greenjet 50**, the new generation of HPDC Jetcooling solutions by Gefond for targeted cooling of microchannels.

Greenjet 50 is designed to ensure **greater thermal stability, casting quality, and operational flexibility**, even in the most demanding production conditions, with a particular focus on energy efficiency and integration into the die casting cell.

Part of the Gefond ecosystem, Greenjet 50 is designed for integration with **Perpetuo**, extending predictive monitoring and maintenance logic to jet cooling.

#### **Towards a more sustainable and connected foundry**

With its presence at **Euroguss 2026**, Gefond confirms its commitment to supporting the transformation of the die-casting industry through solutions that integrate **technology, software, and services**, accompanying foundries and machine manufacturers towards more advanced, efficient, and future-oriented production models.

*“For us, sustainability means making plants, molds, and skills last longer,”* concludes Tronci. *“This is true industrial innovation.”*

## **FEATURED PRODUCTS**

### **1. Perpetuo**

From reactive maintenance to predictive maintenance

**Category:** Predictive maintenance software

**Application:** Foundries and manufacturing industry

**Perpetuo** is the artificial intelligence software developed by Gefond to transform maintenance from a reactive activity to a **data-driven predictive process**. By analyzing machine behavior in real time, Perpetuo allows you to identify anomalies, anticipate failures, and plan interventions more effectively, reducing unscheduled downtime and improving plant reliability. Easy to integrate with machines and peripherals of any brand, Perpetuo supports both **equipment owners** in their daily production management and **machine manufacturers** in their evolution towards advanced service and support models.

### **2. Foundry.Focus**

Production under control



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**Category:** Process supervision and optimization

**Application:** Foundry

**Foundry.Focus** is the Gefond software platform designed to offer a clear, immediate, and shared view of the entire production process in the foundry. By collecting and consolidating data from machines, Foundry.Focus allows you to monitor production performance, efficiency indices, and production trends, supporting quick and informed decisions.

Thanks to an intuitive interface and advanced graphical representation, it makes data accessible to all levels of the organization, promoting more informed management focused on continuous improvement.

### 3. Die.Tective

The solution for mold monitoring

**Category:** Intelligent mold monitoring

**Application:** Foundries and mold manufacturers

**Die.Tective** is Gefond's solution for monitoring molds throughout their entire life cycle. Through an autonomous and easily transferable device, Die.Tective allows you to collect key information on the use and operating conditions of the mold, making data visible that until now remained unstructured.

For foundries, this means greater control and awareness.

For mold manufacturers, Die.Tective is a strategic tool for developing advanced maintenance services and **servitization models**.

### 4. Greencasting

Thermoregulation as a process lever

**Category:** Mold thermoregulation

**Application:** Die casting

Greencasting is the HPDC solution by Gefond that redefines mold thermoregulation, transforming it into an active process control tool.

Designed to cool the mold only where and when necessary, Greencasting allows for a more uniform and stable temperature, improving casting quality, production repeatability, and energy efficiency.

Designed to work in synergy with minimal lubrication technologies, Greencasting helps reduce thermal shocks and increase mold life, fitting into a vision of more sustainable production.

### 5. Greenjet 50

Advanced jet cooling for modern die casting

**Category:** Jetcooling system

**Application:** Targeted cooling of microchannels

Greenjet 50 represents the new generation of HPDC Jetcooling systems by Gefond, designed to meet the needs of increasingly complex and high-performance die casting.



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Precise management of thermal flows improves casting quality and process stability, even under the most demanding production conditions. Its compact design and focus on energy efficiency make Greenjet 50 a flexible solution that can be easily integrated into the die casting cell.

Greenjet 50 is designed for integration with Perpetuo, extending predictive monitoring and maintenance logic to jetcooling.

#### Note to editors

Gefond s.r.l. is an Italian company that has been operating in the light alloy die casting sector for over 30 years. It represents and develops advanced technological solutions for foundries, with a range that includes temperature control systems (**HPDC by Gefond**), predictive maintenance software (Perpetuo), lubrication technologies, furnaces, plants, and services.

Gefond's vision for a long-life industry guides the development of solutions focused on **digitalization, sustainability, and production efficiency**.

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