



FOR A LONG LIFE INDUSTRY

Gefond at Euroguss 2022
Hall 9 stand 329

8 - 10 June 2022, Euroguss 2022, Nuremberg Germany

Gefond for a long life industry Sustainability and digitization for the modern foundry

Gefond is presenting its sustainable and digital solutions at Euroguss 2022: the HPDC by Gefond temperature control units and the Perpetuo predictive maintenance software.

Perpetuo will also be present on the stands of **Wollin, Agrati AEE, Tecnopres**. These manufacturers will be previewing at Euroguss 2022 their machines connected to Perpetuo predictive maintenance software, a project by Gefond for a long life industry.

Gefond's challenge is to stay ahead of the changing time. Gefond, through its innovative technical solutions, supports the trends of the manufacturing industry as it prepares to meet the challenges of the sector. Gefond's vision for a long life industry focuses on the values of sustainability, for a more environmentally friendly production process, and digitisation, to take care of plants from a predictive perspective.

Perpetuo is the artificial intelligence software for predictive maintenance, intuitive and easy to use, created in the foundry for the foundry, able to dialogue with any machine and peripheral of the diecasting cell of any brand and type, anywhere in the world.

THE NUMBERS OF PREDICTIVE MAINTENANCE

- 35% DOWNTIME REDUCTION**
- + 15% EXTENSION OF MACHINERY LIFE**
- + 16% INCREASE IN PRODUCTION**
- + 10% ENERGY SAVINGS**

Leveraging Artificial Intelligence models, Perpetuo transforms the data collected into useful information for predictive maintenance of mechanical, electrical, hydraulic and pneumatic parts subject to wear or failure.

Perpetuo is addressed to both machine owners and manufacturers (OEM).

OEMs need to transform their business models from selling machinery exclusively to providing services. With Perpetuo they can optimise customer service and get a better understanding of how their machines work.



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With Perpetuo, machine owners can take care of their machinery, optimise the production process, reduce costs and energy consumption.

The application of Perpetuo on the systems of some manufacturers has led to concrete results. After two years of evaluation and beta-testing on the trimming presses of three major Italian foundries, Perpetuo has reduced hydraulic circuit cooling system failures by 75% and valve and pump failures due to overheating by 50%.

With the monitoring of the diecasting machines, satisfactory results were achieved in particular the reduction of 25% of downtime due to hydraulic fluid degradation and 40% of downtime due to accumulator problems.

In order to identify the real problems to be solved and achieve concrete results, the Perpetuo system offers a series of technical kits, conceived and designed on the real problems that can be encountered in die-casting cells.

Perpetuo can also be used to monitor the plant's auxiliary systems, thus avoiding not only production cell shutdowns, but also the entire department downtime.

Perpetuo is a strategic tool that can support companies not only in their daily maintenance management, but also in their strategic development vision.

"The collaboration between Wollin and Gefond is a historical one. It began in 1998 when Gefond became the exclusive representative for Italy of Wollin spraying machines and over the time became one of the leading distributors for number of systems sold. The next step forward in this collaboration is the integration of Perpetuo software on the new line of ESM spraying machines. We support the development of Perpetuo also in-house at Wollin because it offers our customers predictive maintenance and even more reliability and efficiency," says **Bjorn Wollin, CEO Wollin**

"Agrati AEE's technical choices have always been oriented towards process control that guarantees stable and quality-assured production. We have therefore found ourselves with increasingly complex machines that generate a lot of useful data for the customer, hence the logical thought was, why not use this large amount of data to give added value to our customers? Working with Gefond to install Perpetuo on our products is the right answer for us. Giving value to data and making them vectors for improvement" says **Giorgio Colombo CEO Agrati AEE**

"After 2 years of evaluation and beta-testing on the trimming presses of three major Italian foundries, the innovative project to integrate the Perpetuo Predictive Maintenance software developed by Gefond is finally a reality. The results, as verified during testing, are remarkable and exceed expectations. Failures in the cooling system of the hydraulic circuit have been reduced by 75% and valve and pump failures due to overheating by 50%. In addition to the



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sensors already installed on our trimming presses, we have decided to go even further, with new sensors that will not only help us with predictive maintenance but will also allow us to gain insight into the behavior of our machines over time. Perpetuo will not only serve our customers but will also help us in continuous improvement and component optimization.” **Paolo Claus, Technical Director Tecnopres**

HPDC by Gefond, the new frontier of thermoregulation, offers innovative sustainable and integrated 4.0 solutions for the die-casting, low pressure and gravity industry .

HPDC by Gefond manufactures cooling systems and multi-circuit water cooling and temperature control systems for industrial applications. Starting from Greenbox technology, HPDC by Gefond develops a complete line of machines for light alloy foundries.

The operational benefits are cycle time reduction, increased casting quality, lower environmental impact, and predictive maintenance. All this translates into savings and increased productivity.

Starting from Greenbox technology, HPDC by Gefond develops a complete line of machines dedicated to light alloy foundries that represent Gefond's main values.

Sustainability, thanks to the patented energy saving technology that saves up to 85% of electricity compared to traditional temperature control units; digitisation, thanks to the integration with Perpetuo predictive maintenance software .

The complete range of control units includes: GreenCasting and Greencasting mini, Greenjet and Greenjet 100 for jetcooling technology, Greenshell for low pressure and gravity.

HPDC by Gefond, with its line of temperature control units, looks towards the future of the manufacturing industry by representing **the ideal technology to be combine with water-free lubrication and the production of structural casting parts.**

"We are always looking for new technologies, we trusted Gefond and tried the HPDC by Gefond temperature control unit with Greenbox patent. We have reduced energy consumption, reduced waste and increased productivity with an operating cost of a third of what it used to be."
Costampress



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Note to editors:

1994

Since its foundation, Gefond has represented leading suppliers in the diecasting industry and distributes technologically advanced systems for light alloy foundries.

In particular, it represents the following brands in Italy: temperature control units (HPDC by Gefond), spraying machines (WOLLIN and AED), dosing furnaces (FOUNDRY4), crucible furnaces (MMP), crucibles (Morgan), melting furnaces (KROWN), latest-generation laser markers (LASERAX), adiabatic coolers to replace evaporative towers (FRIGEL).

2018

Development of the predictive maintenance software Perpetuo begins.

2020 Gefond acquires the patent and know-how from Greenbox and starts its own production to be closer to customer needs.

Gefond's challenge is to stay ahead of the changing time by trying to anticipate it, to support trends in the manufacturing industry with innovative technical solutions, focusing on digitalisation and sustainability; to expand the service; to push on training to increase productivity. Gefond's strategic vision is embodied in five divisions: Gefond Products, Gefond Software, Gefond Technology, Gefond Academy, Gefond Service.

www.gefond.it

www.perpetuo.gefond.it

www.hpdc.it

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