

PRESS RELEASE

FOR IMMEDIATE RELEASE:

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Frigel introduces the Latest Developments in Cooling and Mold Temperature Control Solutions at MECSPE Bologna.

Process Focused, Technology Powered, Frigel continues to innovate solutions to increase profitability for global plastic processors looking to improve productivity, quality and sustainability KPIs.

SCANDICCI (FI) ITALY – January 05, 2023

Frigel brings to the MECSPE 2023 show the main highlights of its portfolio of products tailored to the main Plastic market segments, such as Automotive, Packaging, Medical and all other sectors dedicated to the injection molding of Technical Parts. New machine-side solutions have been designed to ensure the maximum profitability and quickest ROI for the processor, leveraging productivity, product quality and process repeatability improvements.

These solutions are the result of 30 years of experience and successful stories of process optimization, with a global organization bringing not just process cooling expertise, but a vast know-how in plastic processing and technology dynamics.

Driven by the fundamental purpose of “Engineering a more efficient and sustainable industry”, Frigel is also bringing to the MECSPE 2023 show some of its recent highlights in centralized system solutions. The recent advancements in its patented Adiabatic cooling solutions reconfirm Frigel’s position as product leader in this very important technology for water and energy savings in process cooling.

MACHINE SIDE SOLUTIONS

MICROGEL SYNCRO

Process synchronized mold temperature control technology with onboard chiller (Patent Pending).

Frigel introduces the Microgel SYNCRO, a new technology that revolutionizes the temperature control method of injection molding technical parts.

The Microgel Syncro technology allows for a significant reduction in cycle time (up to 40%), guaranteeing very high product quality. Digitally synchronized with the molding process, Microgel Syncro provides cold water only during the cooling phase, reducing drastically the cooling time, while keeping the mold cavities hot during the injection phase. Independent, autonomous machine-side solution, simply synchronized with the molding process via single signal, Syncro technology is easy to implement and use, providing ROIs in less than 6 months.

The Microgel SYNCRO product line features more than 10 models, with cooling capacities from 16 kW to 56 kW and heating capacities from 12 kW to 24 kW.

MICROGEL RSY



MICROGEL RS Series

High performance Single and Dual Zone TCUs with Booster Pumps and Integrated Portable Chillers.

Frigel releases the full range of *Microgel RS for Injection Molding*. These unique single zone (RSM) and dual zone (RSD) machine-side temperature control units are designed for molding throughputs ranging from 10 to 240 kg/hr (20 to 530 lb/hr). The new Microgel RS range includes important advancements in temperature accuracy over the entire control range (-5 to 90° C), functionalities, pumping performance and overall energy efficiency, all key factors in high performance mold cooling applications.

The RS range features additional configurations specifically designed for Packaging (RSP) and Extrusion (RSB). Options such as flow-meters, VFDs, return/remote temperature sensors are enabling full process control capability. Its new user interface offers a flawless experience and full connectivity and interoperability via the Frigel MiND™ platform.

MICROGEL RSD



TURBOGEL RB Series

High performance Single and Dual Zone TCUs with Booster Pumps.

The popular Frigel high performance booster TCU line is presented with upgraded digital control to allow full connectivity with MiND™ and other Industry 4.0 architectures. Designed with same goals and plastic process focus in mind, the Turbogel RB product range offers a wide spectrum of technical choices for productivity and process improvement for centralized cooling plants where control at the point of use is fundamental.

Various equipment configurations are available including VFDs, increased heating capacities and SSR control, higher temperature ranges and customized pump selections based on mold-specific application data.

TURBOGEL RBD



THERMOGEL TDK Series

High precision Single Zone pressurized water TCUs.

Frigel introduces advancements in its growingly popular direct injection pressurized water TCUs up to 120°C for applications in Automotive, Medical and any other Technical Molding sectors where accuracy, repeatability and process control are fundamental for the profitability of the IMM cell.

The TDK units are fully adaptable to any molding condition and are equipped with reliable features and redundant safeties to operate over the entire temperature range. Flow meter options and connectivity to MiND™ or other *Industry 4.0* architectures are enabling complete process monitoring and data recording.

THERMOGEL TDK



NETGEL 3PR 4.0

Industry 4.0 Intelligent Central System Control Platform.

The 3PR 4.0 product platform is a dedicated Frigel solution that provides complete control of Frigel central cooling systems. 3PR 4.0 control meets the needs of processors to supervise and manage the whole cooling system from a single control point. All the connected central system components are controlled via a unique control panel that has been designed specifically for Frigel systems. 3PR 4.0 is available in two versions, Lite and Premium, depending on the size of the system and the equipment to control.

Full native connectivity to MiND™ and its new HMI (*Human Machine Interface*) offer a flawless user experience and compatibility with Industry 4.0 architectures, providing easy visualization and process diagrams of the connected equipment, dashboards for main parameters, performance graphs and alarm management and history.

NETGEL 3PR 4.0 Premium



MiND™

Industry 4.0 central system and machine side Web Interface and Monitoring Platform.

Frigel releases the MiND™ 2.0 platform, the evolution of its Industry 4.0 concept. MiND™ 2.0 is an innovative digital solution to meet the ever increasing needs of modern companies to reach *Industry 4.0* and *IIOT (Industrial Internet of Things)* standards.

MiND™ 2.0 is now able to provide customers a perfect supervision and maintenance tool for all Frigel equipment and accessories, both central and machine-side, allowing for monitoring and management of all working parameters and events and registering performance and energy consumption of every single cooling system component through a multifunctional user interface, both locally and remotely, through a user-friendly webpage.

MiND™



ABOUT THE FRIGEL GROUP

Frigel is much more than a manufacturer of cooling and temperature control systems. We are technical consultants with the ability to identify the best solutions, in terms of performance, efficiency, environmental impact and to calculate the return on investment for each individual application.

We offer solutions calibrated to the needs of each customer by studying innovative solutions, carefully designed and fully supported, to obtain the best results which are verifiable in terms of productivity, efficiency, quality and precision.

Seven production sites worldwide: Europe (Florence and Padua), America (USA), Asia (Thailand and India). Four commercial branches (Germany, Poland, Italy) and 51 distribution service points (a worldwide network of agents and distributors).

With more than 40 years of experience in industrial refrigeration, filled with innovative solutions and breakthrough technologies, Frigel has built a broad know how in different industry sectors and a solid position in the refrigeration market.

In Frigel, we are experts in refrigeration, but in our technical choices, there is always the premise of combining the improvement in performance with an indispensable reduction of the environmental impact. Sustainability is today a crucial principle of our ability to imagine and innovate. This is in Frigel's DNA.



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