FRIGEL EASTERN EUROPE (FEE) PRESS RELEASE

FOR IMMEDIATE RELEASE:

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Frigel Introduces the Latest Developments in Cooling and Mold Temperature Control Solutions at PLASTPOL 2025 (Hall 5 stand B11)

Frigel Eastern Europe will participate in Plastpol 2025 International Trade Fair of Plastics Processing - Eastern Europe's largest trade fair for the plastics industry, organised by Targi Kielce, from May 20 to 23, presenting the latest process cooling solutions designed especially for the following plastics fields: **automotive, packaging, medical, chemical, pharmaceutical, household, etc.**

Frigel is The Global Solutions Provider for Plastics Processor businesses and is the only player with a global footprint concentrating **only** on cooling temperature control, with more than 10,000 customers worldwide and a focus on customer businesses. Our innovation and expertise are focused on customers' industrial processes. Founded in Florence, Italy, Frigel is a **pioneer** in the chiller manufacturing industry, known for its **innovative solutions and commitment to sustainability**. With a focus on quality and performance, Frigel is dedicated to providing advanced cooling technologies that meet the highest standards of environmental responsibility and safety.

Our innovative solutions are focused on:

- Maximizing productivity, thanks to important cycle time reductions
- Energy savings
- Water savings

"Engineering a More Efficient and Sustainable Industry" - Sustainability means meeting our own needs without compromising the ability of future generations to meet their needs. The design and development of the new 4DK Adiabatic Cooler family has been conducted having as goals the improvement of all key performance indicators (KPI) linked with the environment, less kW of electricity per ton of cooling and lower usage of water (up to 95% less).

Visit us and meet our technical people, as they will be able to show you the best solutions for your precise industrial process. Learn about our important innovations in cooling and temperature control systems:

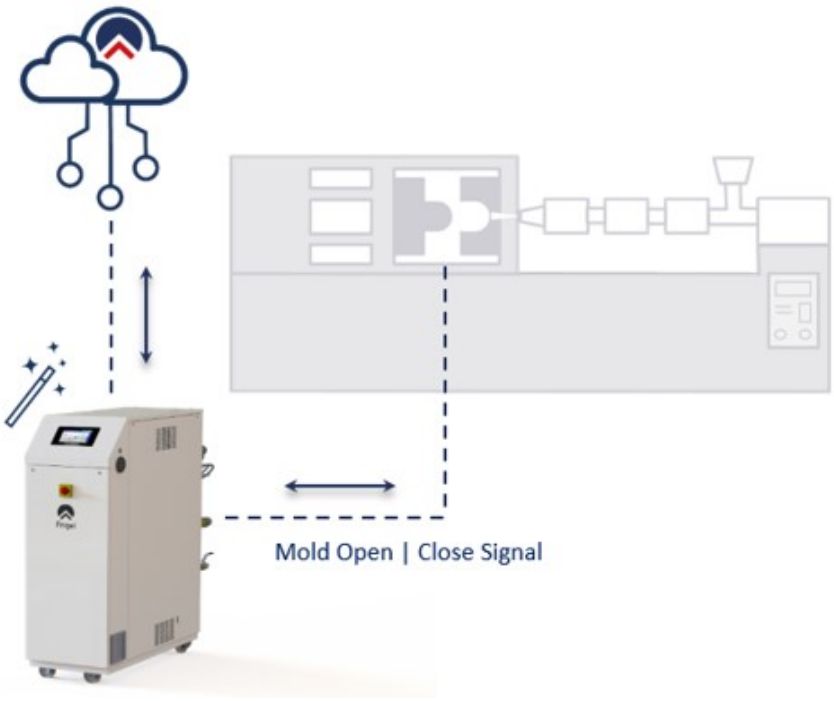
- **The new Dynamico "Mold Profit Booster" - Dynamic Mold Temperature Control Technology -** (delivers a lower €/kg improving injection machine efficiency across any application)
- **The new Microgel™ RSY Syncro** (provides an important increase of productivity up to 50%)
- **New 4DK Series Adiabatic Coolers** (patented, centralized, closed-circuit adiabatic cooling systems designed to replace old cooling tower technology)
- **The New 3PR 4.0 Control System** provides complete real-time control of the entire Frigel central cooling system (parameters, functions, alarms, etc.).
- **TBX and TDK – Thermogel Units** – water temperature controller unit till 90°C and 120°C (indirect and direct cooling)
- **MRS Chiller Unit** - Air cooled water chiller, centralized cooling system

Dynamico

The new machine-side unit **Optimizes the MOLD productivity resulting in increased profitability** - for injection molding machine application.
The concept behind Dynamico is based on the idea to **put the Mold at the center** of the operation of our unit; **The NEW "Dynamic Mold Temperature Control Technology" allows cycle time optimization by reducing the cooling time.**
DYNAMICO *family* is the ultimate solution for **dynamic mold temperature control MOLD PROFIT BOOSTER TECHNOLOGY** engineered to **Increase Customer Profitability** per kg by significantly **reducing cycle time** and material waste.

The **DYNAMICO** family consists into **4 series** to meet diverse thermal management needs (**with or without a chiller inside the TCU**) with **heating capacities from 6 to 48 kW**.

An intuitive HMI feature that guides the user in real-time through an adaptive process to optimize the working mode for mold cooling time optimization (automatic process).



Microgel™ Syncro

The new machine-side unit that revolutionizes the temperature control method for injection molding. Microgel Syncro technology allows for drastic reductions in cycle times (up to 40%), while maintaining the surface quality, dimensional characteristics and mechanical performance of the finished products. The reduction of the total cycle time is obtained thanks to the reduction of the cooling time only: this result, achieved through the digital synchronization with the molding process, has the great advantage of not requiring modifications to any of the mold design or molding parameters, making the system communicate with the press while remaining completely autonomous and easily implemented by operators.

Microgel™ RSY Syncro Series

The Microgel Syncro product line features more than 10 models, with cooling capacities from 4.5 to 16 tons and heating capacities from 12 to 24 kW.

The big difference compared to the traditional method consists of the fact that the Syncro control unit supplies cold water to the mold **only** during the cooling phase, drastically reducing its duration. The advantages for the customer are easily understood: increased productivity and profitability of the dedicated production cell, against an investment with an average payback time of less than 6 months.

NETGEL 3PR 4.0

Industry 4.0 Intelligent Central System Control Platform

The 3PR 4.0 product platform is a 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 entire 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.

ECODRY 4DK Series
Closed Loop Adiabatic Fluid Coolers with enclosed chambers and patented booster cooling technologies

Frigel expands its adiabatic product family line, introducing the Ecodry 4DK series, designed to allow for flexible configuration of modular adiabatic solutions for small to large plastic factories. 4DK takes advantage of some of the technological advances already introduced in the LDK range (new efficient PADs, new generation of EC fans, modular design, wide and deep configurations).

4DK is characterized by a high efficiency humidification system (COOLPAD™) and by a new generation of EC fans which, combined with a more effective dry cooler, obtain a new level of compactness in a powerful new adiabatic cooler product line.

The new Ecodry 4DK is designed to integrate easily into existing Ecodry 3DK systems, of which Frigel has an existing installation base of thousands of units, in addition to responding to the new needs of industries - energy efficiency, sustainability and saving of raw resources such as water.

ECODRY 4DK Series

Thermogel - TBX
Water temperature controller (90°C)

This line of temperature controllers has been designed to operate up to a maximum temperature of 90°C and for running also in vacuum mode. The compact design of the temperature controllers Microbox grants a reduced footprint. Each unit is equipped with two rear wheels for easy moving.
Indirect cooling with large surface finned coil provides for a high cooling capacity.

They are available in two models:
- **TBX with 6 kW** heating capacity
- **TBX with 8 kW** heating capacity

Thermogel - TDK
Water temperature controller (120°C)

The new line of temperature controllers has been de-signed in partnership with Matsui, that provides the main components, built and long tested in Japan. Temperature controllers are designed to control automatically and to keep diathermic fluids at the required temperatures in industrial processes.
TDK are suitable for small-medium size injection moulding machines with a large working temperature range, thanks to the **direct cooling** and the possibility to operate with pressurized water up to 120 °C.

They are available in two models:
- **TDK 55 with 6 kW** of heating
- **TDK 88 with 9 kW** of heating

and available in three configurations:
- **GG** = base with pressure gauge
- **FM** = with flow meter (digital flow reading) and pressure gauge
- **TP** = with pressure transducer

MRS Chiller unit

MRS industrial grade water chillers are available in cooling capacity range from 11 to 76 KW, with water working temperatures range from 5°C to 17°C and suitable for indoor or outdoor installation. The standard configuration is designed for an ambient temperature up to 45°C.

Fan type:
- AC: on-off asynchronous fans
- EC: brushless EC variable speed fans
- EH: high pressure EC fans, suitable for ducting indoor installation

Evaporator type:
- BP: brazed plate
- S&T: shell and tube

Water configuration type:
- M: with evaporator pump only
- P: with tank and process pump

ABOUT FRIGEL GROUP

The Frigel group has an international structure with offices located all over the world and consists of seven production sites, two of which in Europe (Florence and Padua), one in the United States (Chicago), two in Asia (Thailand and India), four commercial subsidiaries (Germany, Poland, Italy) and fifty-one distribution points (a worldwide network of agents and distributors). Our goal is to "Design a more efficient and sustainable industry". For decades we have been designing, manufacturing and installing efficient and technologically advanced solutions for the cooling of industrial processes. The Frigel range has been designed to cover a wide range of solutions, from machine-side to large centralized systems.

Frigel products and solutions are designed to meet the cooling and temperature control requirements of industries such as plastics and rubber, food and beverage, power generation and transmission, data centers, chemicals and pharmaceuticals, metals and others. Frigel has gained in-depth knowledge of the thermodynamic requirements of industrial processes, enabling it to design "tailored to the application" equipment and systems to meet the specific needs of each process.

Four key factors guide the design of optimal solutions for each customer – productivity, efficiency, sustainability and reliability.

OUR PURPOSE: engineering a more efficient and sustainable industry

OUR VISION: Be a global innovator of high performance, sustainable and quality engineered solutions for process cooling and temperature control technologies

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