



Mouldpro presents the latest development in the Flosense range of intelligent manifolds.

At this year's K-Show 2022 from 19 - 26 October 2022 in Düsseldorf, the Danish manufacturer Mouldpro ApS will present the new Flosense IQ-MATIC Thermal Mould Management System.

Mould temperature control has probably the biggest influence on product quality, productivity, energy efficiency and production costs. Following two years of intense development the Flosense IQ-MATIC product line has been specifically developed to provide optimum control in all of these areas. The system is characterised by its compact design; simple connectivity; ease of operation and an adaptive control system that reacts automatically to the conditions.

Flosense IQ-Matic is an intelligent, servo controlled, automatic regulating system, that will set new standards in the moulding industry.

The system will offer the following key features for the moulders:

- Significant energy savings
- Electronic main flow & temperature control
- Motorized regulation valves (individual zones)
- Integrated TCU / Pump control
- Reduced cycle time
- Reduced setup time
- Cooling circuit air purge feature

Significant Energy Savings

An important subject in any Injection Moulding business the system will reduce energy consumption on mould cooling to the minimum.

The system works by automatically adjusting the flow to the mould cooling circuits to maintain the Delta T (temperature difference) across the mould within the set parameters. At the same time the control algorithm will communicate directly with the Mould Temperature Controller and automatically adjust the pump speed and reduce the temperature in order to maintain a stable process with the minimum mould temperature and the set Delta T.

Automatic Flow Control

The manifold is characterized by its ultra-compact design that means that it can be installed within the smallest footprint available on the market. The manifold comprises motorized regulation valves on every cooling circuit that are controlled automatically using an advanced algorithm that will balance the pressure and flow volume to maintain the Delta T across the mould and ensure perfect thermal parameters in each channel with a minimum energy consumption.

OPC-UA Connectivity

Bringing Industry 4.0 to mould cooling the system uses OPC-UA connectivity to integrate with a whole range of Mould Temperature Controllers or Servo Control Pumps on centralised chilled water systems. The system can then remotely adjust the flow rate in order to optimise the flow rate while minimising the amount of energy being used.

Through the remote mount display and the intuitive software the system is designed to be super flexible using plug'n'play technology to connect to multiple cooling manifolds and mould temperature controllers.

It is even possible to use VNC Control or OPC-UA to integrate the system with the moulding machine.

The Flosense Product Line Comprises :

- Compact Regulating Manifold(s)
- Remote Mount Screen
- IQ-MATIC Interface Module

Market Launch

The new Flosense IQ-MATIC Thermal Mould Management System will be displayed for the first time in Hall 10 / Stand C34 at the K-Show 2022 in Dusseldorf. The first models are scheduled to be available for ordering in the second half of 2023. We look forward to welcoming you all on the stand at the K-Show.

Contact Details

Address : Mouldpro ApS, Baltorpbakken 10, DK-2750 Ballerup, Denmark

Phone Sales : (+45) 70 20 31 31

Contact : Stefan Hansen, CEO

Email : sales@mouldpro.com