New FRIGEL technology revolutionising thermoregulation method in injection moulding



Microgel SYNCRO Temperature Control Unit is the new FRIGEL technology created to revolutionise the thermoregulation method in technical injection moulding. It uses this synchronisation to find the best compromise between part quality and cycle time.

This innovative Temperature Control Unit is digitally synchronised with the mould, circulating cold water at high flow rates only at cooling phases, drastically reducing costs and cutting cycle times.

The Microgel SYNCRO technology allows for a significant reduction in cycle time by guaranteeing the optimisation of production and product quality.

The new thermoregulation principle is based on the concept of synchronisation of the SYNCRO Microgel with the plastic material transformation machine during the various moulding phases.

Innovative functional features:

- Digital synchronisation with the press to find the best compromise between part quality and cycle time
- Variable flow control according to the cycle phases to reduce the cooling time of the moulded component
- Possibility to memorise the thermoregulation configurations for each mould (recipes)
- Real-time analysis of specific energy consumption (kWh/kg)
- Possibility of remote connection via Netgel MiND for supervision (status and alarms) and parameter setting

Main Advantages:

- Increased production up to 50% with drastic reduction to cooling time
- Better product quality in terms of dimensions, structural characteristics, and aesthetic finish due to a better filling of the mould
- Affordable investment, lower operating costs and high return on investment
- Easy to configure and use with simple work recipes stored for each mould
- No modifications required to the mould
- Intelligent use of energy consumption; reduced injection pressure, lower consumption of hot runners and lower closing force
- Decrease of scrap and energy use

Summit Process Cooling, part of the Summit Systems Group, are the exclusive suppliers of Frigel products for UK and Irish markets. For more information on how the Microgel SYNCRO can reduce your cycle times and increase production, visit the Summit Process Cooling website, or call our team of experts on 01827 213 401.