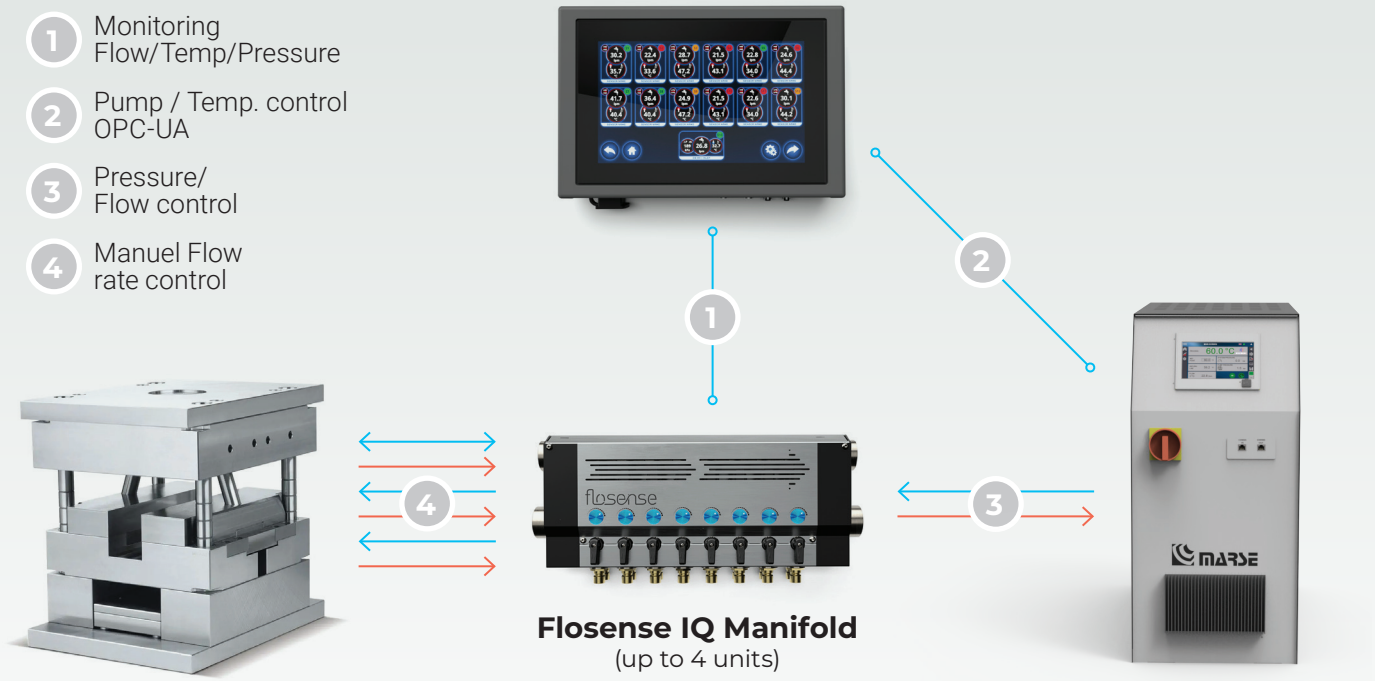
IQ CONCEPT

1. Monitoring Flow/Temp/Pressure
2. Pump / Temp. control OPC-UA
3. Pressure/ Flow control
4. Manuel Flow rate control



Mould

Flosense IQ Manifold
(up to 4 units)

IQ Temperature Control
(up to 4 units)

flow temperature pressure

FLOSENSE IQ
The Flosense IQ software continuously adjusts the speed of the pump in the temperature control units (TCU) to be aligned with the demand to reach optimal thermal properties. The ideal benchmark is the Delta-T (Temp out – Temp in) and if the Delta-T is too high or low, then the flow rate will be changed (pump speed) to optimize the heat transfer rate.

ENERGY REDUCTION
Trials show that energy consumption can be reduced by up to **85%** by using IQ controls in connection with TCU's with variable speed pump instead of using standard TCU's without pump control.

HOW IT WORKS
Flosense IQ monitor **(1)** the temperature and flow rates in each single circuit (up to 48) of the manifolds and calculates the demand for cooling water. This information is transferred to the temperature control unit **(2)**, which adjust the pump speed to the required demand **(3)**.

FINE REGULATION
Individual fine regulating valves **(4)** on the manifold allow the operator to adjust the individual flowrate on each circuit. This is typically required if Delta-T or flow rate vary significantly between circuits on same distribution manifold. The result is a perfectly balanced thermal process with minimum use of energy.

Mouldpro ApS | Baltorpbakken 10 | DK-2750 Ballerup | Tel. +45 7020 3151 | sales@mouldpro.com | **www.mouldpro.com**