



Pressure loss is caused by hoses, fittings and valves and will affect the productivity.

Difference between inlet pressure and return pressure is measured as Delta P.

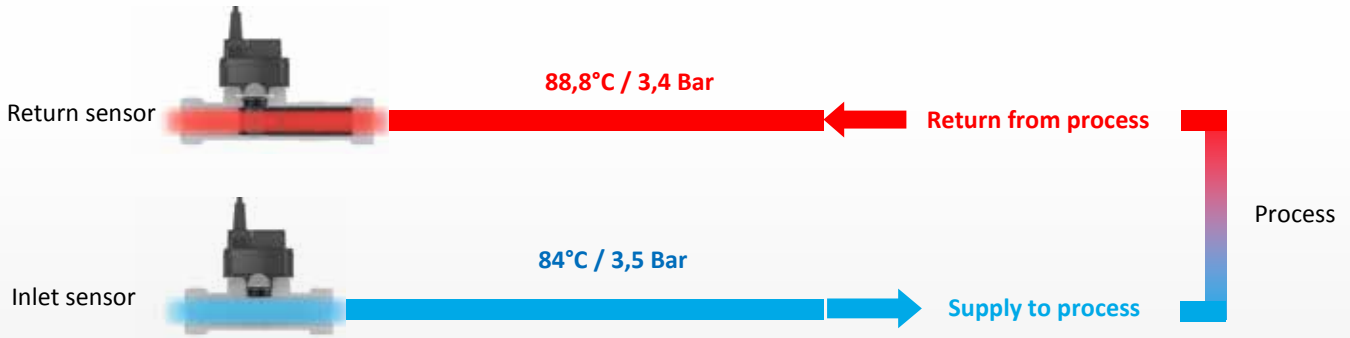
Variation in Delta P could indicate pump failure, blocked waterway, leaks etc.



As the cooling water passes through the mould it transfers heat from the steel into the cooling water. The more turbulent the flow the more efficient this process of cooling.

Difference between inlet temperature and return temperature is measured as Delta T.

Sudden variation in Delta T may be caused by a faulty heater/cooler, blocked channel, scale build up etc.



Flosense, provides visibility of key cooling circuit metrics, improves efficiency, enhances productivity and profitability.

Flosense, provides features and interfaces to monitor, analyse and verify data, essential for your productivity and quality.



Energy Transfer Indicator

Heat is transferred from the mould through the water channels, Flosense calculates the heat transfer as energy units BTU or kWh. This feature illustrates the efficiency of the process.



Alarm Output

With programmable alarm limits on flow, temperature and pressure any variation in the values being monitored will trigger an on-screen alarm. An external alarm output signal can be connected to auxiliary equipment which could be a visual or audible beacon, the mould heater or the injection moulding machine.



Turbulent Flow Indicator

Often regarded as a key indicator in the efficiency of a mould cooling circuit, Flosense is fitted with a turbulent flow indicator. The unit will indicate laminar, transitional and turbulent flow as well as monitoring the Reynolds number, based on flow diameter and percentage glycol in the system.

Even in a 'hose burst' situation the unit will identify a sudden loss of pressure and the unit can either be connected to an alarm or could be used to automatically shut down the mould heater.

Improving the flow from laminar to turbulent can increase the heat transfer efficiency by up to 500%.



DATA RECORDING

Data is recorded and stored in the internal memory enough to display data for the previous 30 days.

Flow, Temperature and Pressure are logged and may be viewed in the graphing screen.



The last 30 days of data is recorded and stored on the internal memory.



Data Export

It is also possible to download the data to a laptop using the integrated USB port for further analysis.

The data is stored as text file and can be analysed using excel or other analysing software.