



GRUNDFOS Direct Sensors™ in SINGLE Temperature Control Systems

The situation

Sensors for water based “Temperature Control Systems”.

“Single is a manufacturer of heat-balancing technology, including surveillance controls and manifolds. Single needs to measure, display and control the flow and temperature in their different temperature control systems.”

Single Temperiertechnik GmbH (Single, ed.) is one of Grundfos largest CR customers world wide. As a secured Grundfos client in Germany for pumps, it was natural for the IEM sales team in Germany to introduce Single to Grundfos Sensor A/S to hear, whether Single could have an interest in the Grundfos Direct Sensors™.

Single have been looking for years for a cost-effective way to measure the flow and temperature in the temperature control systems. The intention was to find a sensor solution without moving parts, which can be used in the different applications at Single.

The purpose of measuring the temperature is to keep a

Topic:

Temperature Control

Location:

Worldwide

Company:

SINGLE Temperiertechnik GmbH

constant return temperature from the processes, and set the flow depending on the task being performed.

The Grundfos solution

The presentation at Single was actually focused on another sensor to be used in conjunction with CRE pumps. It was there that the Electrical Engineer at Single became enthusiastic about the concept of the flow sensor having no moving parts. The price from Grundfos was very competitive compared to similar solutions, and having the integrated temperature measurement came as a bonus. This was a must-have and very soon, the first order for flow sensors were sent to Grundfos. 3 months after the visit, Single had found a solution of how to integrate the flow sensors into the temperature control systems and made small alterations to the controls to be able to receive the signal from the Grundfos Direct Sensors™.

In the middle of March 2006 the first units were shipped from Single, and are now operational at various machine tool manufacturers.

The outcome

The advantages of the Grundfos Direct Sensors™ could be used in several ways at Single. The combination of flow and temperature in one unit enabled Single to integrate the sensor also in crowded systems. The sensor principle without moving parts assured reliability and robustness in harsh environments and the competitive price makes it possible to integrate sensors also in low cost temperature control systems.

Since March 2006, Single has been a customer for not only pumps but also for the Grundfos Direct Sensors™. The sensors have been integrated in different other applications at Single during the last couple of years.