



### Setup details

Unistat® 830 & HWS reactor

Temperature range: -85...200 °C  
 Cooling power: 3.6 kW @ 0 °C  
 2.2 kW @ -60 °C  
 3.6 @ 0 °C  
 3.5 @ -20...-40 °C  
 2.2 @ -60 °C  
 0.7 @ -80 °C  
 Heating power: 3 kW  
 Hoses: 2x1.5 m; M30x1.5 (#6386)  
 HTF: DW-Therm (#6479)  
 Reactor: 5-litre jacketed glass reactor  
 Reactor contents: 3.75 litre M90.055.03 (#6259)  
 Reactor stirrer speed: 200 rpm  
 Control: process

## Unistat® 830

**Consistent and reproducible results with a 5-litre reactor**

### Requirement

The graphic illustrates two identical segments which are designed to test the capability of the machine to produce consistent result.

### Method

The Unistat and reactor are connected using two 1.5-metre insulated metal hoses. The reactor is filled with 3.75 litre of "M90.055.03", a Huber supplied silicon based HTF.

### Results

The heating and cooling curves are identical demonstrating the consistency of control. For heating processes the machine needs 28 minutes to reach 60 °C from 20 °C. The cooling process takes 25 minutes to cool back to 20 °C.

