



Setup details

Unistat® 830 & Buchi Glas Uster reactor

- Temperature range: -85...200 °C
- Cooling power: 3.6 kW @ 100 °C
3.5 kW @ 0 °C
- Heating power: 3 kW
- Hoses: 2x1.5 m; M30x1.5 (#6386)
- HTF: DW-Therm (#6479)
- Reactor: 20-litre un-insulated jacketed metal pressure reactor
- Reactor contents: 15 litre M90.055.03 (#6259)
- Reactor stirrer speed: 400 rpm
- Control: process

Unistat® 830

Cooling a Buchi Glas Uster 20-litre metal reactor from 100 °C to 20 °C

Requirement

This case study looks at the performance of a Unistat 830 cooling a Buchi Glas Uster 20-litre metal jacketed reactor from 100 °C to 20 °C.

Method

The Unistat and reactor are connected using two 1.5-metre insulated metal hoses. The reactor is filled with 15 litre of "M90.055.03", a Huber supplied silicon based HTF.

Results

The process temperature cools smoothly and exactly to its new set-point of 20 °C after ramping through 80 K (100 °C to 20 °C).

