



Setup details

Unistat® 930w & 100-litre Buchi Glas Uster «chemReactor» CR101

- Temperature range: -90...200 °C
- Cooling power: 20 kW @ 0...-40 °C
15 kW @ -60 °C
- Heating power: 24 kW
- Hoses: 2x1.5 m; M38x1.5 (#6656)
- HTF: DW-Therm (#6479)
- Reactor: 100-litre glass-lined (enameled) steel reactor
- Reactor content: 75 litre M90.055.03 (#6259)
- Stirrer speed: 80 rpm
- Control: process

Unistat® 930w

Heating ramp on a 100-litre GLSS jacketed reactor

Requirement

The case study demonstrates the heating curve of a Unistat 930w working with a 100-litre reactor between 20 °C and 100 °C.

Method

The Unistat and reactor are connected using two 1.5-metre insulated metal hoses. The reactor is filled with 75 litre of "M90.055.03", a Huber supplied silicon based HTF.

Results

The "internal" (jacket) temperature increases rapidly to approx. 167 °C in just 19 minutes and brings the process temperature to the setpoint with negligible over-/undershoot within 25 minutes.

