



Setup details

Unistat® 510w & DDPS reactor

- Temperature range: -50...250 °C
- Cooling power: 5.3 kW @ 250...0 °C
2.8 kW @ -20 °C
0.9 kW @ -40 °C
- Heating power: 6.0 kW
- Hoses: 2x1.5 m; M38x1.5 (#6656)
- HTF: DW-Therm (#6479)
- Reactor: 25-litre vacuum insulated jacketed glass reactor
- Reactor content: 18.75 litre M90.055.03 (#6259)
- Stirrer speed: 80 rpm
- Control: internal

Unistat® 510w

Heating a 25-litre DDPS reactor

Requirement

The graphic shows the performance of a Unistat 510w working with a 25-litre glass reactor connected together with M38x1.5 hoses.

Method

The DDPS 25-litre reactor and Unistat 425w were connected together with insulated "M38x1.5" hoses. The HTF circuit (reactor, Unistat and hoses) was filled with DW-Therm and the reactor was filled with 18.75 litre of "M90.055.03", a silicon based Huber supplied HTF.

Results

The "internal" (jacket) temperature increases at a rate > 11 K per minute and reaches the set-point of 180 °C from -50 °C without any overshoot or undershoot within 21 minutes.

