

# Unistat® 910w

Heating a 50-litre jacketed glass reactor from -50 °C to 20 °C

### Requirement

This case study demonstrates the response of Unistat 910w to heat the contents of an un-insulated 50-litre glass reactor from -50 °C to 20 °C.

### Method

The Unistat and reactor are connected using two 1.5-metre insulated metal hoses. The reactor is filled with 35 litre of "M90.055.03", a Huber supplied silicon based HTF.

### Results

The process temperature is ramped rapidly to set-point with a negligible overshoot and achieving stability within 40 minutes.

### Setup details

Unistat® 910w & Chemglass reactor

- Temperature range: -90...250 °C
- Cooling power: 5.2 kW @ 250...-20 °C  
4.7 kW @ -40 °C
- Heating power: 6.0 kW
- Hoses: 2x1.5 m; M30x1.5 (#6386)
- HTF: DW-Therm (#6479)
- Reactor: 50-litre un-insulated jacketed glass reactor (#6259)
- Reactor content: 35 litre M90.055.03
- Stirrer speed: 80 rpm
- Control: process

