



Ministat® 125

Ministat® 125 cooling a 1-liter glass jacketed reactor

Requirement

This Case Study demonstrates the stability of the process temperature control of the Ministat 125 when it is connected with a Chemglass 1-liter reactor.

Method

The Chemglass 1-liter reactor was connected to Ministat® 125 using 1-meter metal insulated hoses. The thermofluid used in the system was "M60.115/200.05". "Process" control was carried out via a Pt100 sensor located in the "process" mass. Stirrer speed was set to 150 rpm.

Setup details

- Temperature range: -25°C...+150°C
- Cooling power: 0.30 kW @ +20°C
- 0.21 kW @ 0°C
- 0.05 kW @ -20°C
- Heating power: 1.0 kW
- Hoses: 2*1 m metal insulated
- HTF: M60.115/200.05
- Reactor: 1-liter glass jacketed reactor
- Reactor content: 0.7 l M60.115/200.05
- Stirrer speed: 150 rpm
- Control: process
- Amb. temperature: +25°C

Results

Stability:

The graphics show the stability of +/- 0.01K at both 100°C and 20°C.



