

Julabo Case Study

JULABO Presto A30

Cooling and heating a 1.3 litre reactor
between +25 °C and +60 °C



Objective

This case study tests the heating and cooling power of JULABO Presto A30 with a 1.3 litre glass reactor. The A30 is connected to the reactor with two 1.0 m metal tubings. The A30 is programmed to cycle between +25 °C and +60 °C.

Test Conditions

JULABO unit	JULABO Presto A30
Cooling power	+20 °C 0.5 kW
	0 °C 0.4 kW
	-20 °C 0.2 kW
Heating capacity	2.7 kW
Band limit	no
Flow pressure	0.31 bar
Bath Fluid	JULABO Thermal HL45
Reactor	1.3 Litre glass reactor (Bruno Kummer) filled with 1 l water
Control	extern (ICC)

Environment

Room temperature	20 °C
Humidity	45 %
Voltage	230 V / 50 Hz



Test Results

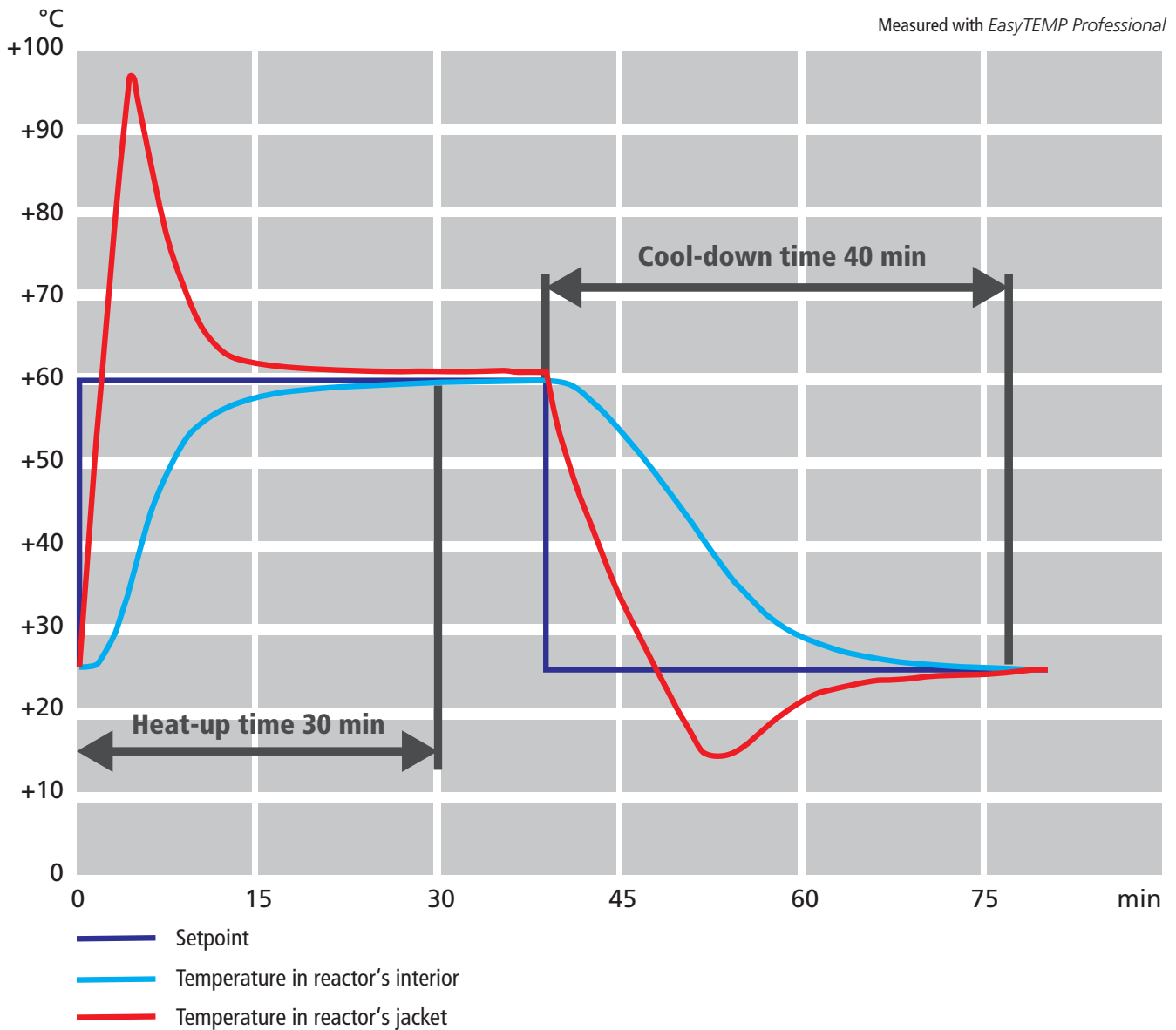
See chart on back page: The A30 heating process from +25 °C to +60 °C in 30 min. Hitting exactly +60 °C without overshoot. The cooling process from +60 °C to +25 °C in 40 min. Hitting exactly +25 °C without overshoot.

Tip

You can also use the robust Pt100 with Teflon coating.



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Setpoint
 Temperature in reactor's interior
 Temperature in reactor's jacket

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