Julabo Case Study

JULABO PRESTO® A40

Cooling a 20 liters reactor from +100 °C to 0 °C

Objective

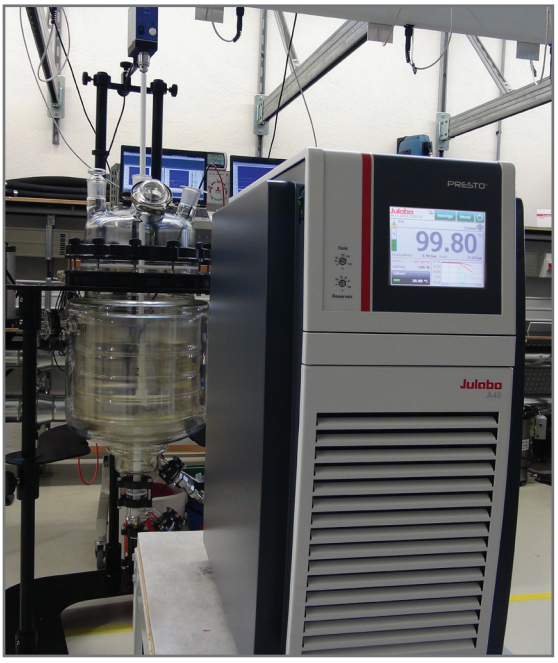
This case study tests the cooling power of JULABO PRESTO® A40 with a 20 liters vacuum insulated glass reactor. The A40 is connected to the reactor via two 2.0 m metal tubings. The A40 is programmed to cool down from +100 °C to 0 °C.

Test Conditions

JULABO unit	JULABO PRESTO® A40
Cooling power	+20 °C 1.2 kW
	0 °C 0.9 kW
	-20 °C 0.6 kW
Heating capacity	2.7 kW
Band limit	No
Flow pressure	0.40 bar
Bath fluid	JULABO Thermal HL40
Reactor	Triple walled 20 liters glass reactor (Asahi) filled with 18 liter JULABO Thermal HL40
Jacket volume	7.0 l
Control	External (ICC)

Environment

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



Test Results

See chart on back page: The A40 cooling process from +100 °C to 0 °C in 1 h 45 min without overshoot.

Tip

You can also use the robust Pt100 with PTFE coating.

More tips on back page >>

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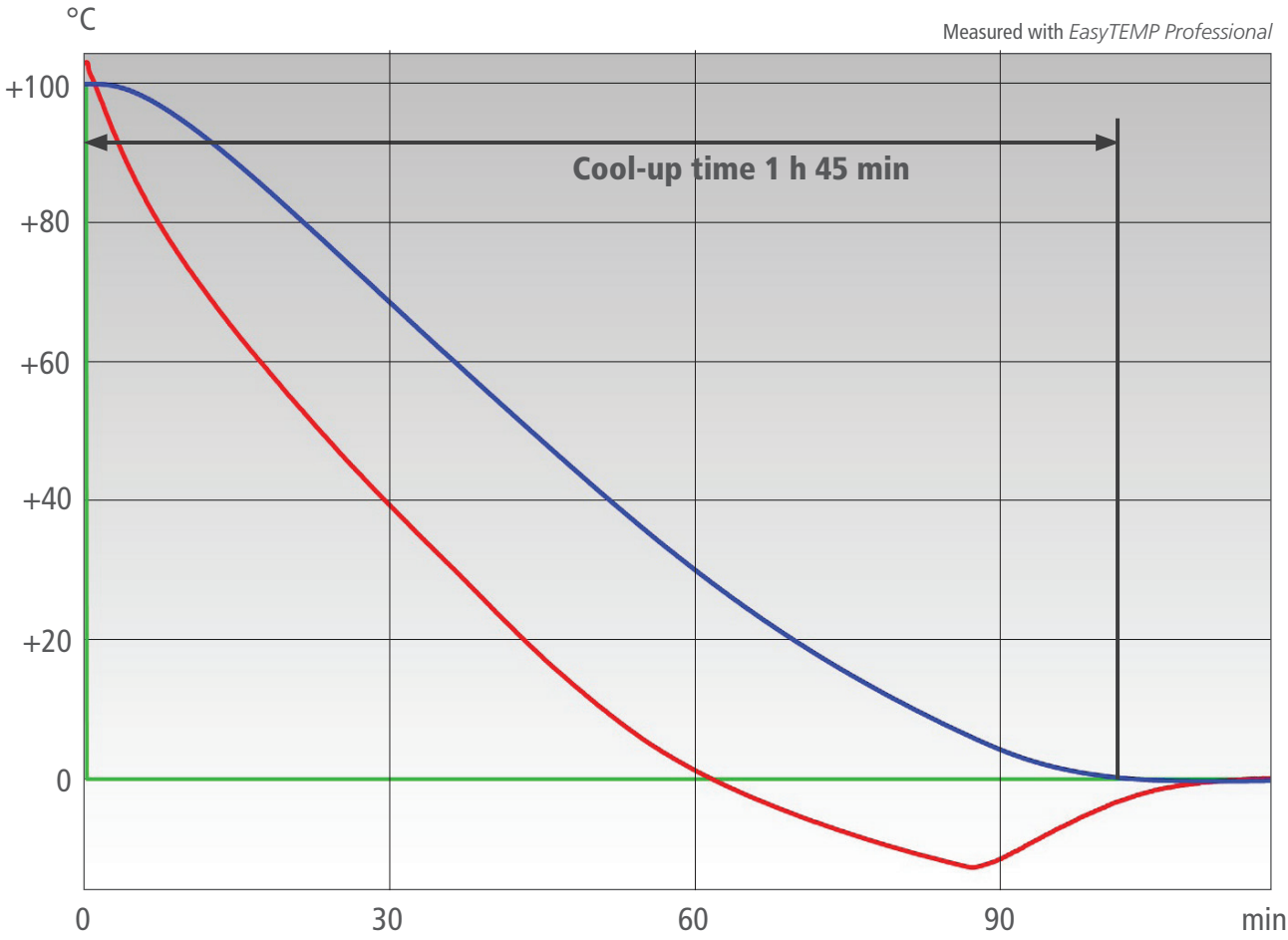
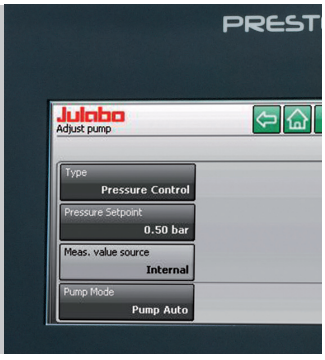
Julabo
THE TEMPERATURE CONTROL COMPANY



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

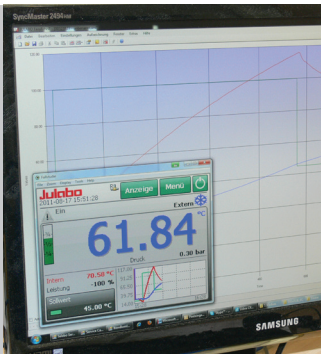
Tip

Make use of the option to regulate the pump pressure. You can define the desired pressure in the PRESTO® settings.



Tip

The Ethernet interface permits full access to all operational functions of the PRESTO®.



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