

PRESTO™ A40

Cool-down a 6 liters reactor from +20 °C to lowest possible temperature

Objective

This case study tests the lowest possible temperature of the PRESTO™ A40 with a 6 liters glass reactor. The PRESTO™ A40 is connected to the reactor via 2 m metal tubings. The PRESTO™ A40 cools down from +20 °C to the lowest possible temperature.

Environment

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

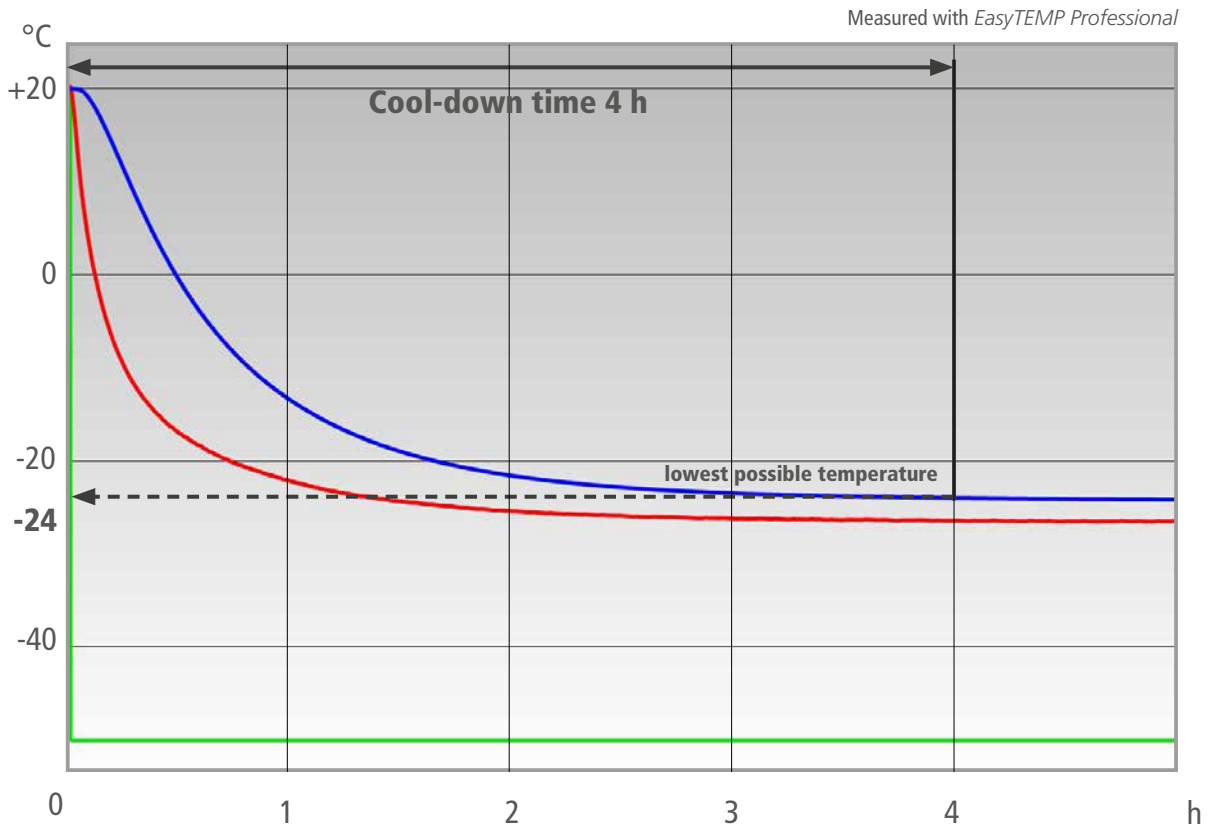
Test Conditions

JULABO unit	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	without
Flow pressure	0.5 bar
Bath fluid	Thermal HL60
Reactor	6 l glass reactor (QVF) filled with 5 l Thermal HL60
Jacket volume	4.5 l
Control	External (ICC)



Test Results

The PRESTO™ A40 cooled the reactor from +20 °C down to the lowest possible temperature in 4 h. Within these test conditions the lowest possible temperature is -24 °C.



Setpoint

— Temperature in reactor's interior

— Temperature in reactor's jacket

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Tip

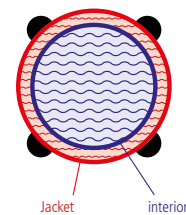
Use our tube adapters and your tubing will no longer kink.



Tip

Protect your reactor. The function "band limit" (see above) permits setting the max. temperature difference between jacket and internal vessel.

Profile of reactor



Jacket Interior