

PRESTO W50

Cooling a 50 liters reactor from +150 °C to +20 °C

Objective

This case study tests the cooling power of PRESTO W50 with a 50 liters glass reactor. The PRESTO W50 is connected to the reactor via two 2 m metal tubings. The PRESTO W50 is programmed to cool down from +150 °C to +20 °C.

Environment

Room temperature +20 °C
 Humidity 45 %
 Voltage 400 V / 50 Hz

Test Conditions

JULABO unit	PRESTO W50
Cooling power	+20 °C 7.5 kW
	0 °C 6.5 kW
	-20 °C 3.0 kW
Heating capacity	6 kW
Band limit	without
Flow pressure	0.5 bar
Bath fluid	Thermal HL60
Reactor	50 l glass reactor (QVF) filled with 35 l Thermal HL60
Jacket volume	26.5 l
Control	External (ICC)

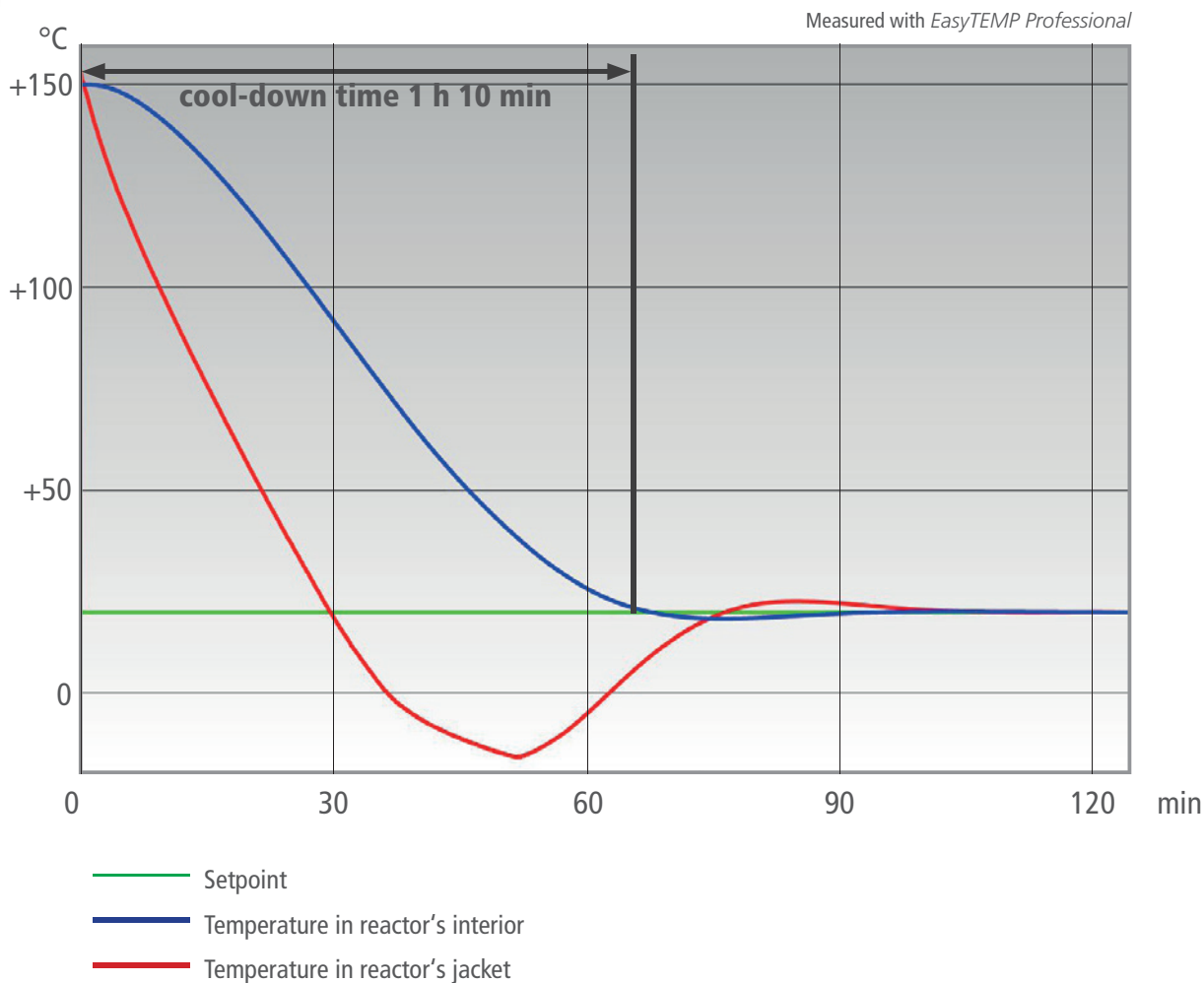
Control Parameters

Xp 0.2 K
 Tn 695 s
 Tv 85 s
 Xpu 15 K



Test Results

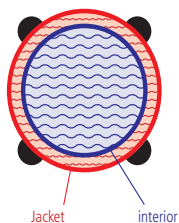
The PRESTO W50 cooling process from +150 °C to +20 °C in 1 h 10 min without overshoot.



Tip

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

Profile of reactor



Tip

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

