

PRESTO A85t

Cool-down a 50 liters reactor from +20 °C to lowest possible temperature

Objective

This case study tests the lowest possible temperature of the PRESTO A85t with a 50 liters glass reactor. The PRESTO A85t is connected to the reactor via 2 m metal tubings. The PRESTO A85t cools down from +20 °C to the lowest possible temperature.

Environment

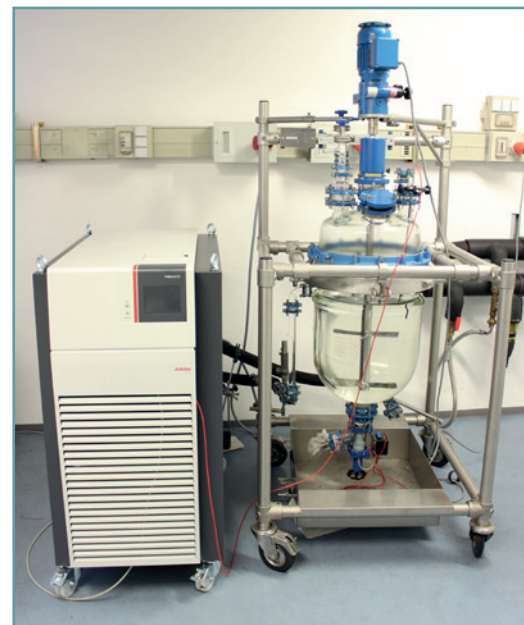
Room temperature +20 °C
 Humidity 45 %
 Voltage 400 V / 50 Hz

Test Conditions

JULABO unit	PRESTO A85t
Cooling power	+20 °C 2.5 kW 0 °C 2.4 kW -20 °C 2.4 kW
Heating capacity	15 kW
Band limit	without
Flow pressure	0.5 bar
Bath fluid	Thermal HL80
Reactor	50 l glass reactor (Büchiglas) filled with 50 l Thermal HL80
Jacket volume	11 l
Control	External (ICC)

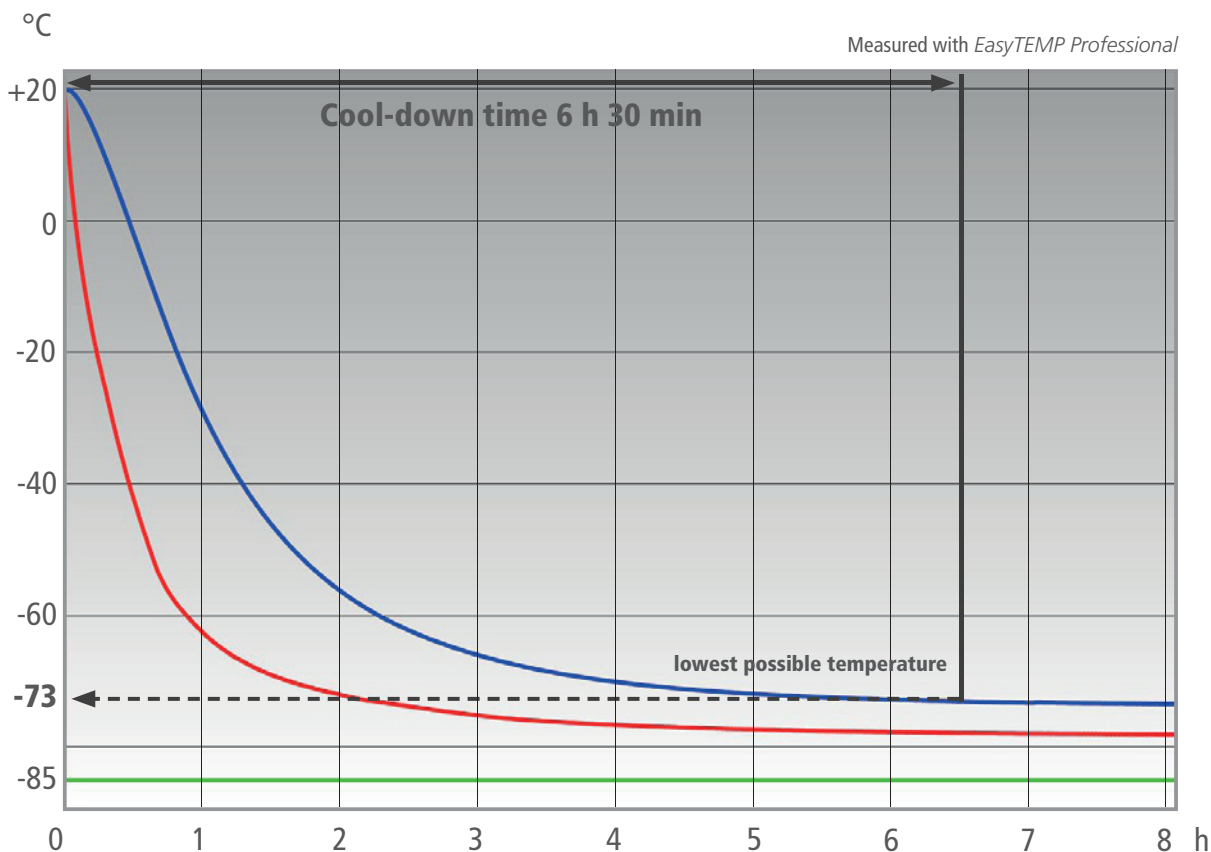
Control Parameters

Xp 0.2 K
 Tn 720 s
 Tv 100 s
 Xpu 24 K



Test Results

The PRESTO™ A85t cooled the reactor from +20 °C down to the lowest possible temperature in 6 h 30 min. Within these test conditions the lowest possible temperature is -73 °C.

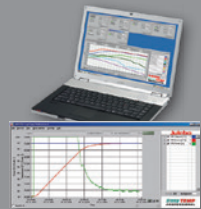


- Setpoint
- Temperature in reactor's interior
- Temperature in reactor's jacket

Tip

Use the free of charge *EasyTEMP* software to control the units with the PC and to show the temperature curves graphically.

EasyTEMP



Tip

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

