Case Study

JULABO ED-39 and FT402

Determining the lowest working temperature when using an FT402 immersion cooler with an ED-39 heating bath circulator

The Objective

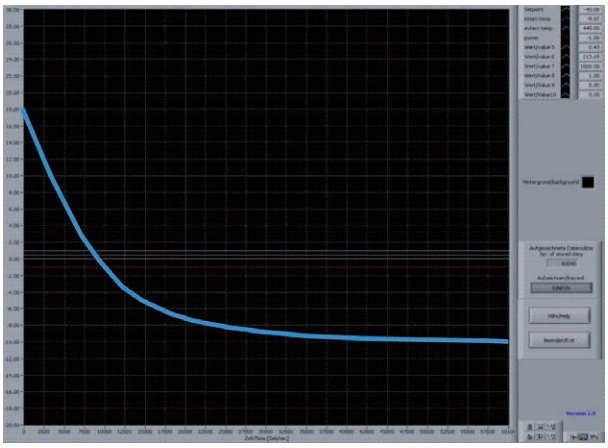
The test is carried out to determine the lowest temperature that could be achieved when using an FT402 for cooling an ED-39

Setup

For the test an ED-39 heating bath circulator (filling volume: 39 liters) is filled with Thermal G bath fluid. The FT402 immersion cooler is used as cooling device; the probe is immersed at the left side of the bridge. The temperature inside the bath is registered with an LC6 laboratory controller connected to a laptop.

Test Conditions

Instruments	ED-39 heating bath circulator FT402 immersion cooler
Mains voltage	230 Volts/ 50 Hz
Ambient temperature	20°C (room temperature)
Bath fluid	Thermal G

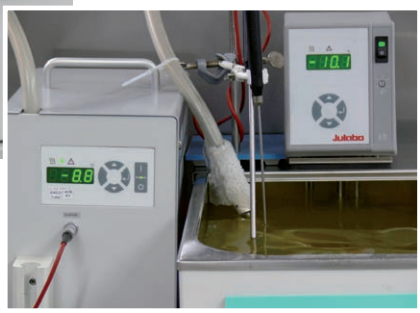


Cool-down curve

Result

Under the test conditions above, a value of -9.9 °C is achieved as lowest temperature.

39 liters bath with immersion probe for cooling the bath



Setup with heating bath circulator and immersion cooler

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