Really Cold Baths

- Self-contained refrigeration—no LN_2 or chiller required
- Temperatures as low as –100 °C in real metrology baths
- Best stability and uniformity available at –60 °C and below
- Large working areas for increased throughput

Do you need a bath that chills below –40 °C to temperatures as low as –60 °C or even –100 °C? Would you like a bath that reaches those temperatures without using any external coolants? Hart has a variety of baths that meet these temperature requirements and give you the best stability in the industry.

These baths are completely self-contained. They require no auxiliary cooling fluids or devices to achieve their set-point temperatures. Using Hart's unique "heat-port" design, stability at –100 °C is ±0.008 °C. No other company makes a bath that can match a Hart bath's performance, and Hart baths are backed by our guarantee that if they don't perform exactly the way we say they will, we'll take them back. No arguments. No ifs, ands, or buts.

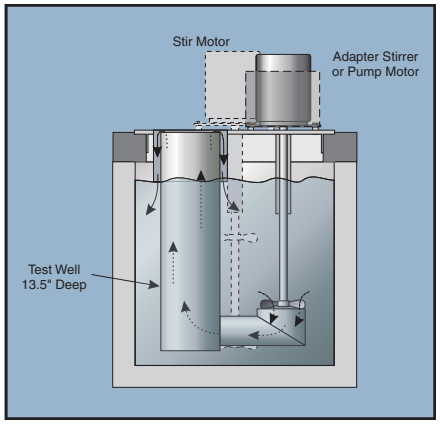
Automate each of these baths with an interface package and Hart's 9930 Interface-*it* software. If you want to completely automate the entire calibration process, see the description of Hart's MET/TEMP II software package on page 83.

Forget commodity-like utility baths! They're not designed for high performance calibration needs. And be careful of companies that advertise performance specifications they don't meet. It's easy to write down numbers; it's more difficult to meet them with an instrument.

Remember, if our baths don't perform the way we say they will, just send them back. Our equipment won't disappoint you.

Ordering Information

7060	Standard Bath, –60 °C to 110 °C
7080	Standard Bath, –80 °C to 110 °C
7100	Standard Bath, –100 °C to 110 °C
2001-7060	Automation Package for 7060
2001-7080	Automation Package for 7080
2001-7100	Automation Package for 7100
2001-IEEE	Add for IEEE-488 (requires Automation Package)
2010	Access Cover, 127 x 254 mm (5 x 10 in), Lexan
2007	Access Cover, 127 x 254 mm (5 x 10 in), Stainless Steel
2011	Access Cover, 184 x 324 mm (7.25 x 12.75 in), Lexan
2009	Access Cover, 184 x 324 mm (7.25 x 12.75 in), Stainless Steel
2016-7060	Fluid Level Adapter, 7060
2016-7080	Fluid Level Adapter, 7080
2019-7100	Fluid Level Adapter, 7100
2069	8X Magnifier Scope, with mounts
2030	Fast-Start Cooler



The 2016 fluid level adapter circulates fluid to the top of the bath access to give as much immersion as possible for LIG thermometers.

Really Cold Baths

FLUKE®
Hart Scientific®

Specifications	7060	7080	7100
Range	–60 °C to 110 °C	–80 °C to 110 °C	–100 °C to 110 °C
Stability	±0.0025 °C at –60 °C (methanol) ±0.002 °C at 0 °C (methanol) ±0.0015 °C at 25 °C (water) ±0.003 °C at 100 °C (oil 5012)	±0.0025 °C at –80 °C (methanol) ±0.0015 °C at 0 °C (methanol) ±0.0015 °C at 25 °C (water) ±0.003 °C at 100 °C (oil 5012)	±0.008 °C at –100 °C (methanol)
Uniformity	±0.005 °C at –60 °C (methanol) ±0.005 °C at 0 °C (methanol) ±0.003 °C at 25 °C (water) ±0.005 °C at 100 °C (oil 5012)	±0.007 °C at –80 °C (methanol) ±0.005 °C at 0 °C (methanol) ±0.003 °C at 25 °C (water) ±0.005 °C at 100 °C (oil 5012)	±0.005 °C at –100 °C (methanol)
Temperature Setting	Digital display with push-button data entry		
Set-Point Resolution	0.01 °C; high-resolution mode, 0.00007 °C		
Display Resolution	0.01 °C		
Digital Setting Accuracy	±1 °C		
Digital Setting Repeatability	±0.01 °C		
Heaters	500 and 1000 Watts		350 and 700 Watts
Access Opening	127 x 254 mm (5 x 10 in)		98 mm diameter (3.8 in)
Depth	305 mm (12 in)		406 mm (16 in)
Wetted Parts	304 stainless steel		
Power	230 VAC (±10 %), 50 or 60 Hz, 13 A, single phase, specify frequency		230 VAC (±10 %), 50 or 60 Hz, 12 A, specify frequency
Volume	27 liters (7.2 gallons)		18 liters (4.8 gallons)
Weight	159 kg (350 lb.)		182 kg (400 lb.)
Size (HxWxD)	1168 x 775 x 483 mm (46 x 30.5 x 19 in)		1270 x 813 x 483 mm (50 x 32 x 19 in)
Automation Package	Interface-*it* software and an RS-232 computer interface are available for setting the bath temperature via an external computer. For IEEE-488, add 2001-IEEE to the automation package.		