



Liquid Calibration Baths

The Techne liquid calibration bath (LCB) series offer compact, accurate and reliable liquid baths which can be used for external circulation or temperature calibration of thermal sensors.

- -35°C to 250°C
- Three different capacities available; 5, 7 or 12 litres
- Temperature stability; $\pm 0.005^\circ\text{C}$ depending on choice of control unit
- Fully insulated bath for excellent heat retention
- Analogue or digital temperature selection, depending on choice of control unit
- Includes cover, lid and bridging plate

When temperature calibration is required the compact liquid baths offers excellent stability over the entire temperature range. The LCBs can be also be used for external circulation to maintain temperatures of samples in viscometers, photometers, refractometers, fermenters and other reaction vessels.

All models of LCB offer exceptional thermal stability from -35°C to 250°C . The baths are fully insulated on all sides and base and are fitted with a cooling coil for connection to a cold water supply for use at temperatures around ambient. The minimum temperature achievable is -35°C when a Dip or Flow Cooler is added to the system.* For the full specifications of the thermoregulators see pages 24 and 25.

Each bath is supplied complete with lid, drain tap, carry handles, a cooling coil and hole with bung to position a certified sensor.

The TechneWorks software package is available for the TU-20 thermoregulators free of charge from www.techne.com (see page 11 for details).

Technical Specification

	5 litre	7 litre	12 litre
Working depth L x W x H (mm)	125	175	300
Dimensions L x W x H (mm)	351 x 260 x 183	351 x 260 x 233	351 x 260 x 358
Thermoregulator L x W x H (mm)	237 x 124 x 260	237 x 124 x 260	237 x 124 x 260
Bath opening (mm)	140 x 140	140 x 140	140 x 140

Ordering Information

Product Code	Description
FBCAL05D	LCB insulated liquid calibration bath with cooling coil, 5 litre capacity
FBCAL07D	LCB insulated liquid calibration bath with cooling coil, 7 litre capacity
FBCAL12D	LCB insulated liquid calibration bath with cooling coil, 12 litre capacity

*LCB baths fitted with a TU-20HT thermoregulator are not suitable for use with a Flow Cooler.

Liquid Calibration Bath	LCB-5/7/12	LCB-5/7/12
Thermoregulator	/TU-20D	/TU-20HT
Bath Capacity	5 / 7 / 12 litres	5 / 7 / 12 litres
Operating temperature range ¹	-35 to 200°C	ambient +10 to 250°C
Working temperature range ²	25 to 200°C	30 to 250°C
Stability at -35°C (short term*)	+/-0.015	N/A
Stability at 0°C (short term*)	+/-0.020	N/A
Stability at 50°C (short term*)	+/-0.005	+/-0.005
Stability at 100°C (short term*)	+/-0.015	+/-0.015
Stability at 200°C (short term*)	+/-0.024	+/-0.024
Stability at 250°C (short term*)	N/A	+/-0.040
Uniformity $^\circ\text{C}$ (full range**)	0.008	0.008
Accuracy $^\circ\text{C}$ (full range)	+/-0.5	+/-0.5

1) With an FC-500 flow cooler;

2) ambient of 20°C

*Short term stability is over a 15 minute period, for 1 hour double the values shown

**Two SPRT's 3" apart in the working area of bath



Choice of liquids

Some liquids can be hazardous when used in thermostatic baths. The user should ensure that due regard is paid to the flash-point and other characteristics of the chosen liquid. This table does not represent the recommendations of Techne but may be of assistance to the user in making an initial selection.



Liquid Bath Accessories

Cooling coil

Connects to the mains water supply; the water being circulated through the coil should be at least 5°C cooler than the set of the bath temperature. (Fits to any TE or TU unit).

Flat and gabled lids

Manufactured of stainless steel and available to fit all sizes of temperature controlled bath to help prevent evaporation losses. Gabled lids provide extra working headroom within the bath.

Adjustable trays

Supported by a ball chain and clip the stainless steel trays can be used to alter the depth of the bath.

Polypropylene spheres

A ball blanket is an effective way of reducing evaporation and loss of heat from a water bath. It acts as effectively as a lid, whilst providing instant access to the bath. The 25mm diameter spheres are supplied in packs of 250.



Ordering Information

Flat Lids	Description
FFLAT08	8 litre size
FFLAT12	12 litre size
FFLAT18	18 and 26 litre size
FFLAT48	48 litre size
Gabled Lids	
FGABLE08	8 litre size
FGABLE12	12 litre size
FGABLE18	18 and 26 litre size
FGABLE48	48 litre size
Adjustable Trays	
FADJ08	8 litre size
FADJ12	12 litre size
FADJ18	18 litre size
FADJ26	26 litre size
FADJ48	48 litre size
Accessories	
FTWORKS	TechneWorks CD-ROM
F840D	Polypropylene spheres, 250x25mm diameter



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.