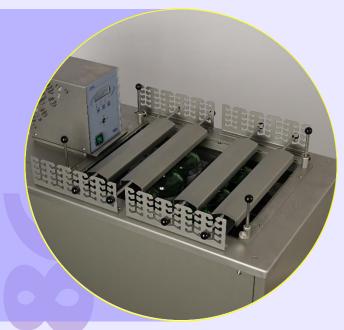
amson Instruments Specification

TLB50 Sample Preparation Bath

TLB50 for ASTM D86 sample preparation



Φ	Completely stainless steel
\(\Phi\)	Drain to empty bath
ф	Overflow protection
$\dot{\Phi}$	Large bath
$\dot{\Phi}$	Very quiet
$\dot{\oplus}$	Smart rack to position flasks
$\dot{\Phi}$	Up to 12 x 1 L bottles
$\dot{\Phi}$	Optional alarm

General

The TLB50 is a sample preparation bath with an operating range of -5°C up to +80°C. The benchtop bath with integrated cooling can replace the combination of a water bath with an external cooling circulator. This not only saves bench space but also cost because of its high cooling efficiency. The primary use of the TLB50 is sample preparation. Before most samples are analysed they must be conditioned to a specified temperature as described in a test method.

Sample Preparation prior to ASTM D86 Distillation test

The TLB50 D86 bath is able to accommodate D86 atmospheric distillation samples for storage or conditioning below 10°C (50°F), as required for group 1 and group 2 samples.

A common issue is gasoline samples are run immediately after Reid Vapor pressure tests while the sample is still at 0-1°C (32-34°F) and not at the specified temperature of 12-18°C (55-65°F).

Item	Unit	TLB50			
Range		-5+80°C			
Range		14+176°F			
P/N 230V/50Hz		00T0082			
P/N 115V/60Hz		00T0081			
P/N 230V/60Hz		00T0083			
Reading	°C or °F	menu selectable			
Interface		RS232			
Setting	[°C/F]	0.01			
Stability* ±	[°C]	0.02			
Uniformity* ±	[°C]	0.02			
Heating 230V	[kW]	2.8 (2 1400W heaters)			
Heating 115V	[kW]	1.4 (1 heater)			
Bath volume	[L]	50			
Opening bath	[mm]	400 x 314			
Depth	[mm]	280			
Length	[mm]	430			
Width	[mm]	710			
Height	[mm]	720			
Weight	[kg]	65			
Power	[kW]	Nominal 0.8 Maximum 3			
Ambient condition	[°C]	18 23			
CE		All models conform to CE regulation			
* Measured @20°C in water.					

The problem occurs when the test results reflect abnormally high recoveries, for example 99.8% on winter blends of gasolines. The abnormally high results are often caused by charging at the wrong sample temperature (0-1°C or 32-34°F) and collecting at a receiver chamber temperature of 12-18°C (55-65°F). Proper sample conditioning prevents these errors and faulty test results.

Primary benefits of utilizing the TLB50 for ASTM D86 sample preparation

- Group 1 and group 2 compliance
- Faster time to temperature than a refrigerator
- Improved temperature stability
- Replicate sampling
- Intrinsically safe
- Confidence in temperature consistency
- Much less expensive than C1D2 compliant explosion-proof refrigerators

Temperature readout

Standard available in °C, on request in °F.





Tamson Instruments Specification

TLB50 Sample Preparation Bath

TLB50 for ASTM D86 sample preparation

Accuracy

The insulation of the bath and electronic design result in an very stable working temperature of ± 0.02°C. The set point can be set in steps of 0.01° in the range of 5°C up to +80°C (-14..176°F). Display readout is in two decimals (0.00°C). The TLB50 is equipped with an integrated compressor.

Cooling medium

The used cooling system is ozone friendly and doesn't contain any CFK/HCFK gas.

Safety

The bath conforms to CE regulation. It is further equipped with a mechanical resettable safety thermostat.

TLB50 D86 Sample Preparation Bath (P/N 00T0082, 00T0081 and 00T0083) consists of:					
P/N	Picture	Quantity	Description		
00T0072	Hard and		TLB50 230V/50Hz		
00T0071		1	TLB50 115V/60Hz		
00Т0073			TLB50 230V/60Hz		
03T0071		1	Single levelling platform - Adjustable - One platform - Without lid P/N 03T0080		
03Т0080		1	Top lid with handle for single levelling platform (P/N 03T0071).		
03T1049		2	Rack to hold bottles or glassware P/N 03T1049 comes with: - Three long spacers - Four small spacers		
03T1040		4	Rail to hold bottle bracket(s) preventing bottles from floating. Four pieces are needed for P/N 03T0071.		
03T1041	Our Free O	4	Bottle holder		

Optional accessory for TLB50 D86 sample preparation bath					
P/N	Picture	Suggested quantity	Description		
11T0040		1	Optional alarm to operate within temperature band. Three temperatures are pre set for operation: - Set point temperature, - Minimum allowed bath temperature, - Maximum allowed bath temperature.		
			Please contact us for all options		