

Corrosiveness to Copper of Liquefied Petroleum Gases

ASTM D1838 - EN/ISO 6251 - IP411 - BS6924 - NF M41 007



- ⊕ **Stainless steel bath**
- ⊕ **Overflow outlet & bath drain**
- ⊕ **Cooling fan to use at 37.8°C**
- ⊕ **Cooling coil for active cooling**
- ⊕ **Easy to operate**
- ⊕ **Position for four LPG test cylinders**

General

The TB30 bath is designed to cover the detection of the corrosiveness to copper of liquefied petroleum gases conforming to ASTM D1838, IP 411, and ISO 6251.

A test involves the immersion of a polished copper strip in approximately 100 mL of the sample. The sample is exposed at a temperature of 37.8°C (100°F) for one hour in a cylinder of suitable working pressure. At the end of this period, the copper strip is removed and rated as one of the four classifications of the ASTM copper corrosion standard.

The TB30 is specifically designed to hold a temperature stable at 37.8°C without the use of an external cooling circulator. At exceptional high ambient temperatures the built-in cooling coil can be used. The bath is deep enough to accommodate four corrosion test cylinders in an upright position.

The corrosion test cylinder is also manufactured by Tamson. It is supplied with a works certificate that the cylinder is pressure tested to withstand a minimum pressure of 6900 kPa (1000 psig) and leak free when tested at 3450 kPa.

Item	Unit	Description
Ordering code		00T0065
TB30 230V / 50 or 60Hz bath		
TB30 115V / 60Hz bath		00T0066
Power	[kW]	2.9
Range	°C °F	Ambient..80 Ambient..176
Reading		°C or °F
Setting ±	[°]	0.01
Stability ±	[°K]	0.02
Heating	[kW]	2 x 1.4
Bath volume	[L]	30
Bath opening	[mm]	163 x 192
Bath depth	[mm]	460
Length	[mm]	285
Width	[mm]	450 (490 incl. drain)
Height	[mm]	680
Materials	Used inside bath: stainless steel 304, brass bearing	
CE	Conforms to CE regulations	

Accuracy

The insulation of the bath and electronic design result in a stable working temperature of $\pm 0.02^\circ$. The set point can be set in steps of 0.01° in the range of 0°C up to 80°C (33.8 to 176°F). The readout on the display is displayed in 0.01°C . Temperature range of the TB30 is from ambient up to $+80^\circ\text{C}$ (176°F).

Temperature readout


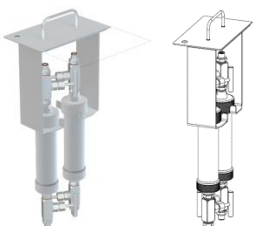
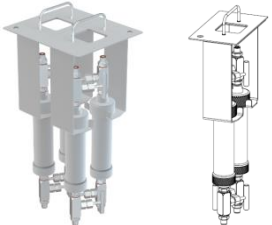
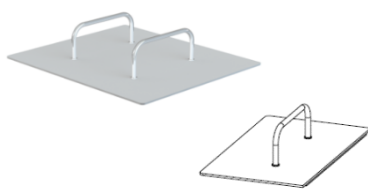



Standard available in $^\circ\text{C}$, on request in $^\circ\text{F}$.

Safety

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

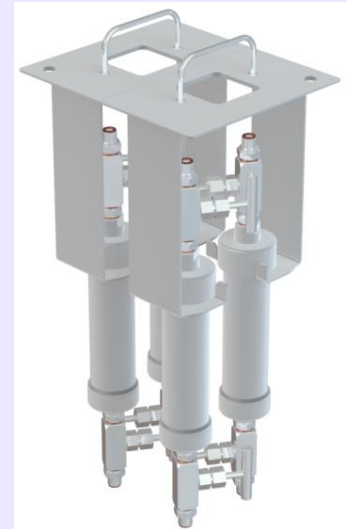
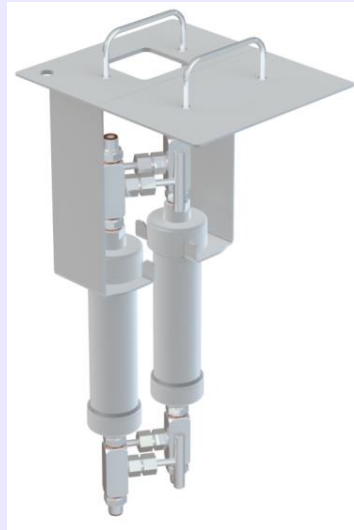
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Accessories




ASTM D1838 accessories		
P/N	Picture	Description
14T0115		Corrosion test cylinder including a works certificate: - withstand a hydrostatic test pressure of 6900 kPa - leakfree when tested at 3450 kPa with nitrogen (N ₂). Delivered complete with two needle valves, 1/4" BSP cylindrical inner thread. Do not use tapered thread, or other (low pressure) adapters, hoses or accessories which are not tested for use above 6900 kPa (69 Bar)
03T2321		Half lid and immersion holder (support) for corrosion test cylinder.
03T2322		Half lid and immersion holder. Contains opening in lid to view test cylinder when submerged. Two pieces of P/N 03T2322 needed per bath or a combination of: 1 x P/N 03T2322 + 1 x P/N 03T2321 1 x P/N 03T2322 + 1 x P/N 03T2320
03T2320		Half lid Can be combined with P/N 03T2322 or P/N 03T2321 1 x P/N 03T2320 + 1 x P/N 03T2321 1 x P/N 03T2320 + 1 x P/N 03T2322
		Combine ASTM D1838 and ASTM D130.
03T2324		Adapter lid for P/N 14T0101 and P/N 14T0100. Used in combination with other lid like P/N 03T2320 or P/N 03T2321.
14T0101		Lid and mounting hook. Three pieces needed in combination with P/N 03T2324.

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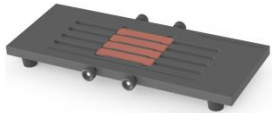






Combination of lids offers several possibilities for this D1838 setup. For example the combination enabling two or four positions for LPG test cylinders.

ASTM D1838 accessories		
P/N	Picture	Description
31T0003		ASTM copper strip corrosion test standard.
31T0007		Copper strip with a 3.2 mm hole (one piece).
31T0001		Sanding paper silicon carbide P220.

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P/N	Picture	Description
12T1070		Flexible inert hose: <ul style="list-style-type: none"> - Stainless steel connectors, - 1/4" BSP cylindrical inner thread. - Length 60 cm, - For use with gas, - Tested up to 10000 kPa (100 Bar) Do not use tapered thread, or combine with (low pressure) adapters, hoses or accessories which are not tested for use above 6900 kPa (69 Bar).
31T0000		Multistrip vise, holds up to four strips while polishing.
31T0005		Silicon carbide powder 105 µm (1 kg).
09T0011		Flat viewing test tube.
25T0911		ASTM 12C thermometer.
25T2154		Thermometer holder 425 x 10 mm.

ASTM D1838

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Spareparts

Spareparts for LPG cylinder		
P/N	Picture	Description
23T0079		Stainless steel nipple 1/4" x 1/4" BSP cylindrical thread. Do not use tapered thread , or combine with adapters, hoses or accessories which are not tested for use above 6900 kPa (69 Bar).
23T0200		Washer copper 13 x 17 x 1.5 mm.
23T0201		Washer copper 8 x 12 x 1 mm.
24T0388		O-Ring NBR 37 x 43 x 3 mm.
23T0009		High pressure (400 Bar) needle valve, 2 x BSP 1/4" cylindrical thread. Do not use tapered thread , or combine with adapters, hoses or accessories which are not tested for use above 6900 kPa (69 Bar).

