

TV2500

ASTM D445 - ASTM D446 - IP 71 - ISO/EN 3104 - ASTM D1298



Stainless steel
Compact, small foot print
Levelling feet for spirit level
RS232 communication
Two decimals readout (0.01°C)
Standard cooling coil

| Item | Unit | TV2500 | |
|-------------------------------|----------|-------------------------------------|-----|
| P/N 230V/50~60Hz | | 19T1003 | |
| P/N 115V/60Hz | | 19T1004 | |
| Power | [kW] | 1.5 | 1.5 |
| Heat rate water | [°K/min] | 0.8 | |
| Heat rate oil | [°K/min] | 1.9 | |
| Heating | [kW] | 1.4 | 1.4 |
| Used materials inside bath | | Stainless steel, brass bearings | |
| Range | | Ambient..120°C Ambient..248°F | |
| Reading | | °C or °F | |
| Setting ± | [°] | 0.01 | |
| Stability ± | @50°C | 0.02°C Water | |
| | @100°C | 0.02°C Oil | |
| Bath volume | [L] | 25 | |
| Top lid | | Removable with four ø51 mm holes | |
| Opening bath | [mm] | 185*155 (effective use) | |
| Depth | [mm] | 300 | |
| Length | [mm] | 370 | |
| Width | [mm] | 204 | |
| Height | [mm] | 600 | |
| Weight | [kg] | 15 | |
| CE | | All models conform to CE regulation | |

General

The TV2500 is specially designed for tests that require precise temperature control like the determination of kinematic viscosity and sensor or thermometer calibration. The visibility through the bath is excellent.

The stainless steel construction ensures stable temperature control, which is further improved by a special stirring mechanism. The bath is fitted with adjustable feet for leveling. The cover of the bath has four round ø51 mm openings with lids, for suspending glass capillary viscometers in holders.

Span

The TV2500 operates from ambient .. +120°C (242°F). Lower temperatures can be achieved when using the built-in cooling coil in combination with tap water or a Tamson TLC10-3 cooling circulator. Built up of condensate may limit the practical use to about +5°C.

Software

Use the standard RS232 interface and free TamCom® software to set parameters, program a temperature curve or log the bath temperature.

Accuracy

The set point is adjustable in steps of 0.01°C. The overall system accuracy and homogeneity are better than ± 0.02°C, specified with water or oil during a measuring period of one hour.

Temperature readout

Available in °C or °F.

European Pharmacopoeia

Using Ubbelohde viscometer tubes, the bath conforms to the "Pharmaceutical 2.2.9, Capillary viscometer method".

TV2500

Accessories

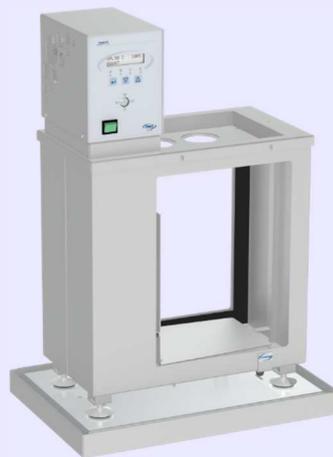
Safety

The bath conforms to CE regulations. It further is equipped with a mechanical adjustable and automatic over temperature safety thermostat to guarantee safe around the clock operation. When working above 50°C the safety window is advised to be used.

Safety Window

When using the TV2500 at higher temperatures it is advised to mount a safety window. The safety window protects the user from heat radiating from the inside window.

When using the safety window, the user sitting in front of the window is protected against heat and fluid, in the very rare case the window might break. All our windows are of very tough hardened glass. Use of a spill tray is also recommended to keep your lab clean and use the spill tray. Dripping fluid from glass capillary viscometer or accidental spill during refilling the bath fluid is collected. The tray is provided with a 3/8" BSP inner thread valve.



TV2500 is standard included with:

| P/N | Picture | Description |
|---------|---------|---|
| 23T2407 | | Cover with 4 openings: - 4 x ø51 mm opening - 2 x ø12.5mm opening for thermometer |
| | | 4 * lid for ø 51 mm opening |

Optional cover for TV2500:

| P/N | Picture | Description |
|---------|---------|---|
| 23T2408 | | Cover with 3 openings: - 3 x ø60 mm opening - 2 x ø12.5mm opening for thermometer |
| | | 3 * lid for ø60 mm opening |

TV2500

Accessories

| Accessories | | |
|-------------|---|---|
| P/N | Picture | Description |
| 02T0210 |  | Glass safety window For use at higher temperatures. Including mountings for safety window. |
| 02T0200 |  | Spill tray. Protects your lab against dripping and spilling during operation or when replacing bath fluid. The tray has a drainage with valve and 3/8" BSP connection. |
| 00T0909 |  | Illuminator "Z41" stand alone (85 ~ 230V/50-60Hz) |
| 00T0050 |  | Cooling circulator TLC10-3 - 230V/50Hz |
| 00T0051 | | Cooling circulator TLC10-3 - 230V/60Hz |
| 00T0052 | | Cooling circulator TLC10-3 - 115V/60Hz |
| 00T0565 |  | Cooling circulator TLC15-5 - 230V/50Hz |
| 00T0567 | | Cooling circulator TLC15-5 - 230V/60Hz |
| 00T0570 | | Cooling circulator TLC15-5 - 115V/60Hz |
| 10T6090 |  | Timer, 8 positions |
| 12T1075 |  | Tubing with connectors and clamps to be used between a TLC and a TV |

TV2500

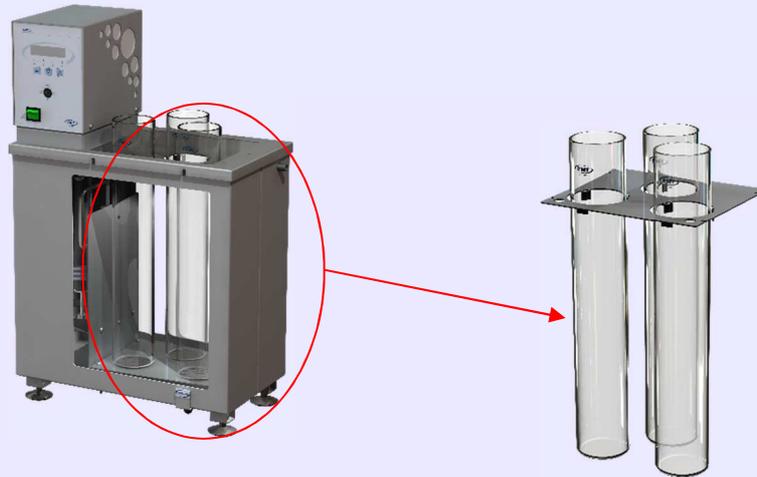
Accessories

| P/N | Picture | Description | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|----------|------------------|---------|----------------|----------|-----------------|----------------|----------|-----------------|----------------|----------|------------------|-------|----------|-----------------|-----------------|----------|------------------|
| Thermometers |  | Thermometer | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>ASTM no.</th> <th>Part no.</th> <th>Range°C</th> </tr> </thead> <tbody> <tr> <td>Similar to 44C</td> <td>25T0924B</td> <td>+18.5 ... +21.5</td> </tr> <tr> <td>Similar to 46C</td> <td>25T0939B</td> <td>+48.6 ... +51.4</td> </tr> <tr> <td>Similar to 47C</td> <td>25T0940B</td> <td>+ 58.6 ... +61.5</td> </tr> <tr> <td>S120C</td> <td>25T0990B</td> <td>+38.6 ... +41.4</td> </tr> <tr> <td>Similar to 121C</td> <td>25T0991B</td> <td>+98.6 ... +101.4</td> </tr> </tbody> </table> | ASTM no. | Part no. | Range°C | Similar to 44C | 25T0924B | +18.5 ... +21.5 | Similar to 46C | 25T0939B | +48.6 ... +51.4 | Similar to 47C | 25T0940B | + 58.6 ... +61.5 | S120C | 25T0990B | +38.6 ... +41.4 | Similar to 121C | 25T0991B | +98.6 ... +101.4 |
| | | ASTM no. | Part no. | Range°C | | | | | | | | | | | | | | | | |
| | | Similar to 44C | 25T0924B | +18.5 ... +21.5 | | | | | | | | | | | | | | | | |
| | | Similar to 46C | 25T0939B | +48.6 ... +51.4 | | | | | | | | | | | | | | | | |
| | | Similar to 47C | 25T0940B | + 58.6 ... +61.5 | | | | | | | | | | | | | | | | |
| S120C | 25T0990B | +38.6 ... +41.4 | | | | | | | | | | | | | | | | | | |
| Similar to 121C | 25T0991B | +98.6 ... +101.4 | | | | | | | | | | | | | | | | | | |
| Other ranges available on request | | | | | | | | | | | | | | | | | | | | |
| 00T0239 |  | Thermometer holder | | | | | | | | | | | | | | | | | | |
| E20 thermometer |  | Please see specification sheet "E20 thermometers" | | | | | | | | | | | | | | | | | | |
| 14T0303 |  | Adapter to insert an E20 thermometer in the opening of the cover | | | | | | | | | | | | | | | | | | |
| 07T0085 | | Level detector/float | | | | | | | | | | | | | | | | | | |
| Viscosity accessories |  | Please see specification sheet "Viscosity accessories", e.g. viscometers, viscometer holders, bath fluids, general purpose reference standards, etc | | | | | | | | | | | | | | | | | | |

TV2500

TV2500

D1298 Set-up for Density Measurement by hydrometer



| P/N | Picture | Description |
|-------------|---------|--|
| 03T2119 | | Cover with 3 openings: - 3 x $\varnothing 60.6$ mm opening - 2 x $\varnothing 12.5$ mm opening for thermometer |
| 09T0400 | | Density cylinder |
| 00T0239 | | Thermometer holder |
| 00T0565 | | Cooling circulator TLC15-5 230V/50Hz |
| 00T0567 | | Cooling circulator TLC15-5 230V/60Hz |
| 00T0570 | | Cooling circulator TLC15-5 115V/60Hz |
| Hydrometers | | Please see specification sheet "ASTM D1298" |