



# TS SERIES

## Thermal Shock Chambers



The Weiss Envirotronics Thermal Shock Series offers a complete line for all your testing applications. Available in Horizontal, Vertical and Liquid models, the TS Series offers product testing for most industries. TS Series meets many of the stringent MIL-STD 883 test standards; contact your local sales office for a complete list.

### Features:

- Two and Three Zone with multiple capacity available
- Guaranteed part temperature recovery/soak monitoring. Protects your product.
- Many standard safety features
- Traveling ports for faster testing

## Design & Performance

| Configuration                     |                     | Vertical                  |  | Horizontal                 |  |                            |  | Liquid                     |  |                      |  |
|-----------------------------------|---------------------|---------------------------|--|----------------------------|--|----------------------------|--|----------------------------|--|----------------------|--|
| MODEL                             |                     | TSV11                     |  | TSH9                       |  | TSH27                      |  | TSH45                      |  | TSL5                 |  |
| Basket Volume                     | Cubic Feet / Liters | 11 / 312                  |  | 9 / 255                    |  | 27 / 765                   |  | 45 / 1274                  |  | 0.6 / 17             |  |
| Basket Size                       | Width               | 30" (762mm)               |  | 25" (635mm)                |  | 36" (914mm)                |  | 60" (1524mm)               |  | 13.25" (337mm)       |  |
|                                   | Depth               | 25" (635mm)               |  | 25" (635mm)                |  | 36" (914mm)                |  | 36" (914mm)                |  | 12" (305mm)          |  |
|                                   | Height              | 25" (635mm)               |  | 25" (635mm)                |  | 36" (914mm)                |  | 36" (914mm)                |  | 6" (152mm)           |  |
| Chamber Exterior Dimensions       | Width               | 89" (2260mm) <sup>2</sup> |  | 140" (3556mm) <sup>4</sup> |  | 171" (4343mm) <sup>4</sup> |  | 234" (5944mm) <sup>4</sup> |  | 76" (1930mm)         |  |
|                                   | Depth               | 89" (2260mm) <sup>2</sup> |  | 79" (2006mm)               |  | 86" (2184mm)               |  | 90" (2286mm)               |  | 64" (1626mm)         |  |
|                                   | Height              | 90" (2286mm) <sup>3</sup> |  | 102" (2591mm)              |  | 114" (2896mm)              |  | 108" (2743mm)              |  | 87" (2210mm)         |  |
| Temperature Range                 | Minimum             | -73°C (-99°F)             |  |                            |  | -73°C (-99°F)              |  |                            |  | -65°C (-85°F)        |  |
|                                   | Maximum             | +200°C (+392°F)           |  |                            |  | +200°C (+392°F)            |  |                            |  | +160°C (+320°F)      |  |
| Temperature Recovery <sup>1</sup> |                     | 41 lbs 168 lbs            |  | 41 lbs 168 lbs             |  | 150 lbs 350 lbs            |  | 125 lbs 325 lbs            |  | 5.5 lbs <sup>5</sup> |  |

Performances are based on laboratory conditions at +24°C, 60 Hz, with cooling water inlet temperature and flow rate according to requirements. Performances at 50 Hz may vary. Please consult with your local Sales Representative if your conditions vary.

<sup>1</sup>Weights are for Aluminum (other materials will vary), and test conforms to MIL-SPEC 883J 1010.8 test condition B for Air-Thermal-Shock

<sup>2</sup>TSV11 has a separate machine pack, 78"W x 88"D x 42"H (1727 x 2235 x 1067 mm)

<sup>3</sup>TSV11 travelling port extends 44" above top of chamber when basket is in top (Hot Zone) chamber

<sup>4</sup>TSH travelling port extends out from right side. Extension: TSH9: 40", TSH27: 48", TSH45: 67".

<sup>5</sup>Liquid Thermal Shock recovery < 5 min. per MIL-SPEC-883J 1011.9 Test Conditions B

Dimensions are chamber only, control console to be mounted separately.

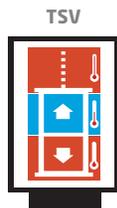
MIL-SPEC 883J Standards are critical for many customers. Weiss Envirotronics' Thermal Shock chambers are designed to conform to MIL-SPEC 883J 1010.8 Test Conditions A, B, C, D, and F for air thermal shock, depending upon the customer's product; and to conform to 1011.9 Test Condition C for liquid thermal shock. These chambers can meet many of the most stringent MIL-SPEC standards. Chamber dimensions and layout can vary according to customer floor plan needs; please consult with your local Sales Representative for customizing the chamber for your facility.

**Custom sizes available**

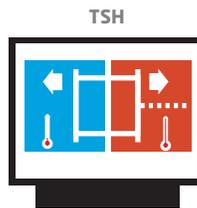
### TS Series Zone Options



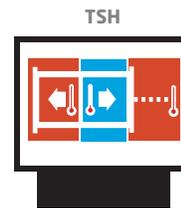
**TWO ZONE, SINGLE CAPACITY (-2)**  
(One hot zone & one cold zone)  
The products under test travel via a vertical lift system, alternating between the hot and cold zones.



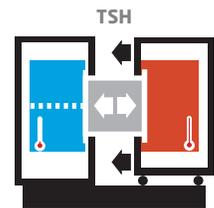
**TWO ZONE, DOUBLE CAPACITY (-2D)**  
(Two hot zones & one cold zone)  
In the two zone, double capacity system, the cold zone is always in use, which contributes to the efficiency of the system.



**TWO ZONE, SINGLE CAPACITY (-2)**  
(One hot zone & one cold zone)  
The products under test travel via a carrier basket, alternating between the hot and cold zones.



**TWO ZONE, DOUBLE CAPACITY (-2D)**  
(Two hot zones & one cold zone)  
In the two zone, double capacity system, the cold zone is always in use, which contributes to the efficiency of the system.



**THREE ZONE, SINGLE CAPACITY (-3)**  
(one cold zone, one ambient zone & one hot zone)  
In the horizontal three zone, the products travel via a carrier basket between the cold and ambient zones, and the hot zone travels to envelop the carrier basket.