

# CRT2V

## Thermal shock test chamber

- Different volumes
- Possibility to have more test compartment.
- High temperature range
- Turnkey options



Very useful for performing Tests about the damage of the structure of a sample because of sudden changes of temperature. If these Thermal Shock or Impact Tests are made in a cyclical way, they can cause dilatations, deformations or even a breaking of the structure of the sample, electric mistakes in its connection or many affections in its physical and chemical properties.

These tests are very advisable in electric or electronic watertight devices, illuminations, bimetals, rubber- metal, all of them in the fields of Aeronautics, Automotive, Railway and Building Materials.

The technologic base of the Thermal Shock is based on communicate a cold compartment with a heat one by means of a moving platform. The movement of this platform is done by means of a pneumatic action, which moves the sample tray from one compartment to the other in a few seconds.

The range of temperature of each compartment may reach 200 °C for the heat compartment and -40°C the cold one (it can be -70°C upon request).

**DYCOMETAL EQUIPOS DE C.C., S.L.**

C/ De la Ciència, 35-37

08840 - Viladecans (Barcelona) - SPAIN

T: (34) 936 526 610 F: (34) 936 407 607

[www.dycometal.com](http://www.dycometal.com)

## FEATURES:

### Construction

- Tray Sample made of AISI 304 stainless steel tube, basket shaped with front door. The ceiling and the floor of the basket fulfill the function of thermal separator between compartments.
- Interior in AISI 304 stainless steel. Exterior steel painted according to RAL-9010. Door painted according to RAL-9010.
- Windows of observation in tempered multicristal.
- Lighting with internal projection, one for each compartment, located in the windows of observation.
- 4 castor wheels, multi-directional type and/or adjustable in height anti-vibration support, to make the mobility easier (depending on models in option).
- All the control and regulation systems are together in the Control Panel, in ergonomic position.
- Temperature control and management of cycle times by independent regulators with management of cycles and autonomous timers.

### Standards

- NFC 20-605
- NFC 20-705
- CEI 68.2.14
- MIL-STD 883B, method 1010.2 test C
- MIL-STD 202E, method 107D

### Options

- Configurable by events logical output.
- Blind door or with an small window of observation with indoor light.
- Micro-switch of stop of fans when opening the door.
- Acoustic Alarm of end of process.
- Cryogenic valve of Nitrogen input or special gas input (fast cooling).
- Communications Port RS-232 for PC connection with Programming Software and Acquisition of Data in Windows environment.
- Lateral pneumatic cylinder (when the height in the Laboratory is not enough).
- Ports on the ceiling of the Chamber roof of House for electrical wiring or mobile temperature probes.
- To avoid the effect of condensation on the samples in a cycle of freezing and global warming, it is possible the installation of dry air injection units.

## TECHNICAL SPECIFICATIONS:

Model	Liters	Temperature Range		External dimensions (mm)			Test Platform (mm)
		Superior compart.	Inferior compart.	High	Width	Depth	
CRT2V-40/16	16	+200°C	-40°C	1800	1000	1100	250x250x250
CRT2V-40/64	64	+200°C	-40°C	2030	1100	1250	400x400x400
CRT2V-40/166	166	+200°C	-40°C	2400	1310	1540	550x550x550
CRT2V-70/16	16	+200°C	-70°C	1850	1050	1200	250x250x250
CRT2V-70/64	64	+200°C	-70°C	2000	1180	1330	400x400x400
CRT2V-70/166	166	+200°C	-70°C	2330	1311	1513	550x550x550
CRT2VT-230	230	+150°C	Ambient to +5°C	1800	1000	1100	500x500x500

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