

# CTS-Thermal-Shock-Test Chambers

The latest generation with innovative technique and future-oriented design. Extreme temperature changes up to 100 K/min. CTS Thermal-Shock-Test-Chambers comply with current national and international standards (DIN, BS, MIL). Long term testing up to 3000 cycles without defrosting.



## Basic Equipment:

- ▶ capacitive Multi-Touch-Display in the front
- ▶ defined keys for elementary functions of the installation such as start/stop, fixed-value/automatic operation, interruption, light, etc.
- ▶ USB-Connection to save measuring data on USB Stick
- ▶ Ethernet – Interface/RS 232 – Interface
- ▶ Door with window, incl. LED-light
- ▶ 2 digital Out, to switch test specimen ON/OFF
- ▶ shelf, stainless steel
- ▶ entry port, size depending on chamber type
- ▶ single-hand operated door handle, lockable
- ▶ temperature cycling in cold chamber (32, 66, 130 Litre)
- ▶ eco-mode to save energy costs
- ▶ air dryer system to avoid freezing in long-time testing
- ▶ movable PT100 for measuring on test specimen

## Your benefits:

- ▶ low consumption data
- ▶ minimum noise level
- ▶ user-friendly operation and programming
- ▶ uniform operation due to identical Multi-Touch-Display for all chamber sizes
- ▶ temperature measuring with Pt 100 in air inlet and air outlet
- ▶ Service-friendly construction
- ▶ international standards are fulfilled (CE-Conformity)
- ▶ compact design with small installation area

**Test space capacity in Litres:** 32 / 66 / 130 / 350  
**Temperature range:** Hot chamber +50° C / +220° C  
Cold chamber -80° C / +100° C

# CTS-Thermal-Shock-Test Chambers

Type			TSS-70/32	TSS-70/66	TSS-70/130	TSS-70/350
Test space	litres		32	66	130	350
Test space dimensions	height	mm, appr.	300	300	410	610
	width	mm, appr.	360	420	480	850
	depth	mm, appr.	300	525	660	680
Overall dimensions	height	mm, appr.	1820 (2415*)	1820 (2415*)	1820 (2525*)	2450 (3200*)
	width	mm, appr.	820	880	940	2160 (2300**)
	depth	mm, appr.	1325	1550	2335	2200
<b>Temperature tests</b>						
Temperature range	hot chamber	°C	+50/+220	+50/+220	+50/+220	+50/+220
	cold chamber	°C	-80/+100	-80/+100	-80/+100	-80/+100
Adaption time of IC's < 15 min		kg	2,5	2,5	12	25
Changing time		sec.	<10	<10	<10	<10
Test load, max.		kg	10	22	50	110
Temperature fluctuation, temporally		K	±1	±1	±1	±1
Nominal voltage			400 V +6 /-10% 3/N, 50 Hz	400 V +6 /-10% 3/N, 50 Hz	400 V +6 /-10% 3/N, 50 Hz	400 V +6 /-10% 3/N, 50 Hz
Nominal power		kW, appr.	9	9	19	38
Refrigeration units			air cooled	air cooled	water cooled	water cooled
Weight Cabinet		kg, appr.	650	750	1000	2500
Noise level		dB(A)	58	58	60	68
entry ports ø		mm	50	80	125	125

All values are in average which have been obtained at a temperature of +25°C, without test specimen, without thermal load and without options.  
(\* = height with spindle \*\* = width with spindle drive)

**Control:** Multi-Touch-Display with integrated programm controller

**Test space:** Stainless steel grade 1.4301

## Options:

- ▶ add. shelves and protection for the basket
- ▶ increased temperature range in hot chamber to +250°C (for 130 ltr.)
- ▶ temperature protection for test specimen
- ▶ add. Pt 100 for temperature measuring on test specimen
- ▶ CID software for programming and documentation
- ▶ Water cooled refrigeration unit for TSS -70/32 and TSS -70/66
- ▶ Air cooled refrigeration unit for TSS -70/130 and TSS -70/350
- ▶ add. USB-Interface
- ▶ add. entry ports
- ▶ Higher test load
- ▶ Separate machine unit, incl. control unit (350 ltr.)

Other chamber sizes and options on request. We reserve the right to make modifications due to technical development.

