

CTS-THERMAL-SHOCK-TEST-CHAMBERS



the latest generation with innovative technique 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.

STANDARD-VERSION OF THE PRODUCT LINE "TSS":

- ▶ multicolour touchpanel / 32 Bit Controller
- ▶ RS 232 interface
- ▶ potential free contact for malfunction signal
- ▶ Error display in plain text
- ▶ single-hand operated door handle; lockable
- ▶ entry port ø 50 mm
- ▶ Observation window
- ▶ air dryer system to avoid freezing in long-time testing

YOUR BENEFITS:

- ▶ Complies with current CE and EMC regulation
- ▶ use of environmentally friendly materials and refrigerants
- ▶ service-friendly construction
- ▶ optimized parameters for highest testing precision
- ▶ minimum external measurements due to compact method of construction
- ▶ minimum noise level
- ▶ extrem high temperature change rates
- ▶ simple user-friendly operation and programming
- ▶ low power-consumption datas

TEST SPACE CAPACITY IN LITRES: 32 / 130 / 350

TEMPERATURE RANGE: hot chamber +50° C / +200° C
cold chamber -80° C / +100° C



CTS-THERMAL-SHOCK-TEST-CHAMBERS

TYPE		TSS -70/32	TSS -70/130	TSS -70/350
Test space	litres appr.	32	130	350
Test space dimensions	height mm, appr.	300	410	610
	width mm, appr.	360	480	850
	depth mm, appr.	300	660	680
Overall dimensions	height mm, appr.	1820 (2415*)	1820 (2525*)	2450 (3200*)
	width mm, appr.	820	940	1400 (1550**)
	depth mm, appr.	1375	2335	2200
Machine unit incl. switchboard cabinet	height mm, appr.	----	----	2100
	width mm, appr.	----	----	2300
	depth mm, appr.	----	----	950
TEMPERATURE TESTS				
Temperature range	Hot chamber °C	+50/+200	+50/+200	+50/+200
	Cold chamber °C	-80/+100	-80/+100	-80/+100
Adaption time with 2,5 kg IC's	TSS-70/32 min	< 15	----	----
Adaption time with 10 kg IC's	TSS-70/130 min	----	< 15	----
Adaption time with 15 kg IC's	TSS-70/350 min	----	----	< 15
Changing time	sec.	< 10	< 10	< 20
Test load, max.	TSS-70/32 kg	10	----	----
	TSS-70/130 kg	----	20	----
	TSS-70/350 kg	----	----	50
Temperature fluctuation	K	±1 temporally		
Nominal voltage		400 V +6% -10%, 3/N, 50 Hz		
Nominal power	kW, appr.	9,7	16,7	32,2
Refrigeration units		air cooled	water cooled	water cooled
Weight	Cabinet kg, appr.	650	950	1500
	Mach.unit kg, appr.	----	----	1000
Noise level	dB(A)	58	<60	<65

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

DESIGN:

Control: Microprocessor control and monitoring system
 Test space: Stainless steel grade 1.4301
 Refrigerants: Chloride free, hermetically sealed

OPTIONS:

- ▶ increased entry ports ø 125 mm (for 130 + 350 ltr.)
- ▶ add. baskets in different design
- ▶ Increased temperature range hot chamber + 250° C (for 130 ltr.)
- ▶ add. Pt 100 for test specimen measuring
- ▶ Temperature protection for test specimen
- ▶ CID software for programming and documentation
- ▶ water cooled condenser for TSS -70/32
- ▶ air cooled condenser for TSS -70/130 and TSS -70/350
- ▶ RS 232 interface changeable to USB
- ▶ ETHERNET- interface
- ▶ higher test load

Other chamber sizes and options on request.

We reserve the right to make alterations due to technical development.

CTS GmbH ▲ Lotzenäcker 21 ▲ 72379 Hechingen ▲ Germany

Tel.: 0 74 71/98 50-0 ▲ Fax: 0 74 71/98 50-23

E-Mail: vertrieb@cts-umweltsimulation.de ▲ www.cts-umweltsimulation.de