Lab Companion®

Three-zone Thermal Shock Test Chamber
Technical specification

【Introduction】

This kind of test chamber consists of 3 zones: heat zone, cold zone and ambient zone. Three temperature zones can be simulated in the same chamber. This makes optimum stress conditions possible without having to move the test specimen.

【Performances】

Thermal Shock Test Chambers		TS3-50	TS3-80	TS3-150
Test space volumes	L	50	80	150
Test space dimensions, H x W x D, approx.	mm	460x350x300	500x400x400	600x500x500
Exterior housing dimensions, H x W x D, approx.	mm	1420x1810x1380	1460x1860x1480	1560x1960x1580
Pre-tempering hot chamber	°C	+50 to +200	+50 to +200	+50 to +200
Pre-tempering cold chamber	°C	–70 to 0	–70 to 0	–70 to 0
Ambient chamber	°C	-65 to +150	-65 to +150	-65 to +150
Temperature deviation in time	°C	± 2	± 2	± 2
Temperature homogeneity in space	°C	≤2	≤2	≤2
Temperature stability	°C	±0.5	±0.5	±0.5
Maximum load grid shelf	kg/layer	30	30	30
Heating time of pre-tempering hot chamber	min	≤40	≤40	≤40
Cooling time of pre-tempering cold chamber	min	≤90	≤90	≤90
Changeover time	sec	< 10s	< 10s	< 10s
Temperature recovery time	min	≤5min	≤5min	≤5min

【Features】

❇One chamber for everything

Using the damper shock method, 3 temperature zones (cold, hot, ambient) can be simulated in the same chamber. This makes optimum stress conditions possible without having to move the test specimen

❇Load test equipment easily

The basic version has an access port on the left with a 50 mm diameter for the placement of cables and connections. Movements of the loaded cables are avoided by the stationary test space.

❇Well distributed, efficiently tested

The test specimens can be distributed on up to seven insert grids, making an increased test throughput of up to 150 kg possible.