



Technical Parameters

Temperature Shock Test Chamber (Three Boxes) – TSD Series



TSD series temperature shock test chamber can be used for environmental simulation, reliability test and stress screening test of electrical components and other products. The test chamber can provide a fixed test space, and the thermal shock test can be carried out within the allowable upper and lower temperature limits of the test piece.

TSD series temperature shock test chamber adopts the test piece to be fixed and achieve the temperature shock by damper switching, which avoids the influence of some special components or small parts during the moving process.

Model		401FL	402SL	403SW	404SW	405SW	410SW	501FL	502SL	503SW	504SW	505SW	510SW
Volume	L	80	150	252	336	504	1000	80	150	252	336	504	1000
Inner Depth	mm	400	500	600	700	800	1000	400	500	600	700	800	1000
Inner Width	mm	500	600	700	800	900	1000	500	600	700	800	900	1000
Inner Height	mm	400	500	600	650	700	1000	400	500	600	650	700	1000
Outer Depth	mm	1770	1720	2200	2400	2500	3400	2020	2020	2200	2400	2500	3400
Outer Width	mm	1410	1460	1850	1850	2050	2150	1500	1500	1850	1850	2050	2150
Outer Height	mm	2140	2240	1770	1820	1870	2270	2270	2270	1770	1820	1870	2270
Chamber Structure		Vertical			Horizontal			Vertical			Horizontal		
Temperature Performance Parameters													
Warm-up Range (High Temperature Chamber)	℃	60~200											
Pre-cooling Range (Low Temperature Chamber)	℃	-70~0											
Impact Temperature Range	℃	-40~150						-55~150					
Conversion Time	S	15											
Revocery Time	min	5											
Heating Time (High Temperature Chamber)	min	RT→200℃≤60min											
Cooling Time (Low Temperature Chamber)	min	25℃C→-50℃C≤60min						25℃C→-65℃C≤60min					
Load (Aluminum ingots)	kg	5	10	15	20	25	50	5	10	15	20	25	50
Temperature Fluctuations	℃	≤1											
Temperature Uniformity	℃	≤2											
Temperature Deviation	℃	±2											
Power Supply		AC380V 50Hz TN-S											
Power	kW	21	30	42	58	70	118	23	42	50	68	86	142
Noise	dB(A)	70	70	73	74	75	76	73	73	74	75	76	77
Cooling Method		Air-cooled			Water-cooled								
Total Weight	kg	1200	1700	2000	2200	2400	2500	1300	1800	2150	2300	2450	2600

Note:

1. Cooling rate: air-cooling is assessed in the range of 23±3 °C, water-cooling is assessed in the range of cooling water temperature of 5~28 °C
2. Linear heating rate: calculated as 5min average
3. Dimensions: excluding the controller, handle, hinge, test hole, fan motor and other removable protrusions, the depth may be slightly adjusted due to the different compressors
4. Parameters are subject to change upon request.