

Today, the automotive industry accelerates electronic multi-functions. According to this trend, safety standards such as ISO26262 and IEC61508 require high environmental stress that is generated by thermal shock chambers for higher reliability of vehicle equipments.

A large capacity model capable of loading larger specimens in higher quantities has been added to our lineup of TSA series Thermal Shock Chambers (L type = light specs). Our TSA-603EL-W Large Capacity Thermal Shock Chamber has a test area capacity of 600 liters, nearly twice that of the largest standard thermal shock chamber line up TSA-303EL-W.

This makes it possible to provide thermal shock testing of relatively large products that could not be previously tested due to their size and large components used for automobiles (e.g. in-vehicle Li-ion battery packs, ECUs, PCUs, and in-vehicle inverters).

Enables testing large specimens

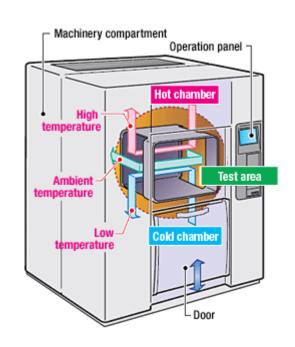
In the automotive, home appliance, and IT equipment industries, modular parts of multiple parts combined in advance are assembled. These modular parts are becoming larger in capacity as integration increases. This model is effective for thermal shock testing of such large specimens.

User-friendly instrumentation

This chamber adopts the same instrumentation as our standard thermal shock chambers, so there is no need to learn new operations. for ESPEC users.

Same structure as standard chambers

The air blow, suction, and flow are the same as on our standard thermal shock testing chamber.

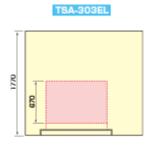


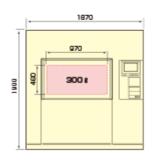
Air flow (TSA series)

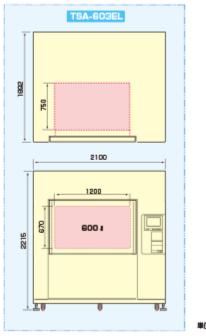
Larger test area capacity

The following is a comparison of the test area size between TSA-503 and standard models lineup.

	Test area dimensions ($W \times H \times D m$)	Capacity (&)
TSA-43EL-A	240 × 460 × 370	40
TSA-73EL-A	410 × 460 × 370	70
TSA-103EL-A	650 × 460 × 370	110
TSA-303EL-W	970 × 460 × 670	300
TSA-603EL-W	1200 × 670 × 750	600







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Main specifications

Model		TSA-603EL-W	
Power supply		200V AC 3φ 3W 50/60Hz	
Method		Two-zone and three-zone using damper switching	
Performance*1 High tel chambe	Test area	High-temp. exposure range	+65°C to +150°C
		Low-temp. exposure range	-50°C to 0°C
		Temperature fluctuation width	±0.5°C
	High temperature chamber	Max pre-heat setting temperature	+200°C
		Temperature heat-up time	Within 30 minutes from ambient temperature to +200°C
	Low temperature chamber	Min pre-cool setting temperature	-70°C
		Temperature pull-down time	Within 90 minutes from ambient temperature to -70°C
Test area load capacity		50 kg (equally distributed load)	
Shelf load capacity		20 kg (equally distributed load)	
Test area dimensions		W1200mm×H670mm× D750mm	
Outside dimensions		W2100mm×H2215mm× D1750mm (excluding protrusions)	
Weight		Approx. 1700 kg	

^{*1} Values at an ambient temperature of +23°C

^{*} The model is for operational purposes and may be changed after order. Thank you for your understanding.

^{*} Thermal shock chamber with much larger capacity is also available.

Large Capacity

Liquid to Liquid

Thermal Shock

Chamber

Recommended products for customers viewing this product

Air to Air Thermal

Shock Chamber

Conductor Resistance Evaluation System (AMR)



Air to Air Thermal Shock Chamber with Humidity



Highly Accelerated Air to Air Thermal Shock Chamber (HAATS)



High-rate Thermal Cycle Chamber



Thermal Shock

Chamber 300°C

Specification

Large Capacity Thermal Shock Chamber







