

Source Industrial Supply

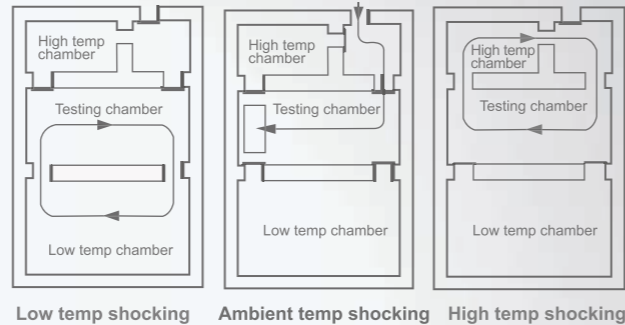
Phone: +1-505-550-6501 and +1-505-565-5102 Fax: +1-505-814-5778

Email: info@sourceindustrialsupply.com, Web: http://www.sourceindustrialsupply.com

## Three Zone Thermal Shock Chamber BTS

### Features

- Energy saving: Less pre-cooling time and pre-heating compared to previous type, power consumption is reduced Maximum 32%.
- Improvements in reliability: minimize variations in the temp attainment time that affect test results.
- Automatic defrosting function can ensure 24hr (10 circles) continuous operation. And hand-operated defrosting is also available during long term test.
- Safety design to global requirements: All our thermal shocks use the latest technologies to care user & sample safety.
- Superior craftsmanship in detail, all pipelines is protected with Nitrogen during welding, and further protected by surface coating.



Low temp shocking    Ambient temp shocking    High temp shocking



## Three Zone Thermal Shock Chamber BTS

## Thermal Cycling Series

### ◆ Model Name

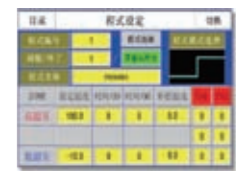
**B T S** - XXX - 3X

B=BACL design    xxx=Capacity (Liters)  
T=Thermal    3=Three zone type  
S=Shock    A=Lowest temp shock range (-40 C)

### ◆ Working Principle

There are total three sub-chambers inside. Sample is placed in testing chamber, more extreme temperature than test temperature can be set in high-temperature chamber & low-temperature chamber. During low temperature shocking, cold chamber valve open, and low-temperature chamber working together with testing chamber. When converted into high-temperature shocking, cold chamber door closed, hot chamber valve is opened, and testing chamber working together with high-temperature chamber.

Conversion of mechanical action (transferring from high temperature to low temperature or low temperature to high temperature) can be completed in less than 3 second, and the temperature can be quickly stabilized. During the whole test, specimen is no need to be moved, and without any human intervention.



Program setting



Operating screen



Defrost setting

### ◆ Specification & technical data

Model	BTS-50-3	BTS-80-3	BTS-100-3	BTS-150-3	BTS-250-3
Capacity (L)	50	80	100	150	250
Interior dimensions H×W×D (mm)	350×400×350	400×500×400	500×500×400	500×600×500	600×700×600
Temp. range	-80C ~+200 C ,		-70~+200 C ,	-55~+120 C ,	
Ramp range	-65C ~+150 C ,		-55~+150 C ,	-40~+150 C ,	
Thermal shock mode	Three zone type:Samples are remained stationary, use pneumatic Control System to switch the air flow between two chambers or among three chambers				
Driving device	Pneumatic air cylinder				
Recovery time	≤ 5min				
Temperature constancy	±0.5 C				
Heat up time (hot chamber)	Room temp ~+200 C≤ 30min				
Pull down time (cold chamber)	0~-60C ≤ 60min				
Material	Interior	SUS 304 Stainless Steel Plate			
	Exterior	SUS304 Stainless Steel Plate with brushed /coated finishing or steel with spray- coating			
	Insulation	PU+ Glass Fiber Wool			
Cooling system	Tecumseh Hermetic/ GEA Bock Semi-Hermetic compressor, water or air cooled				
Refrigerant	HFC R404A · R23				
Heating system	Finned Stainless steel tube heating system/Iron-chrome wire heater				
Safety protection	Leakage protection, Overload NFB, Overload protection for compressor & blower, overheating & dry heat protection for humidification system, Over Current Protection, Phase-sequence Protection, over-temperature protection				
Standard features	Cable port ∅ 50×1pc, silicone stopper×1pc, sample holder×2pc				
Power(KW)	Depend on different low temp & capacity size				
Meet standards	GB2423.22-89Na, GJB150.5-86, MIL-STD-810-503.2				

Note : 1.We reserve the right to change specifications without prior notice

2.Performance is measured in the ambient temperature of + 25 C at available space.

3.Customized sizes and configurations available