



Capabilities

Aircraft Engine

- Surface Coolers
- ACOC
- FCOC
- ECS Pre-coolers

Airframe/Rotary

- Oil Coolers
- Evaporators
- Condensers
- OBOGS/OBIGS HX's
- ECS Subsystems

Avionics

- Cold Plates/Chassis
- Air/Air Coolers

Military Vehicle

- ECS
- Oil Coolers

Manufacturing

- Fin Forming
- Aluminum and Inconel Vacuum Brazing
- Welding



Engineering

- Thermal Analysis (in-house developed)
- Design Engineering (Unigraphics)
- Structural Analysis (Ansys)
- Test Engineering

Qualification

- Vibration
 - Shock
 - Acceleration
 - Thermal Endurance
 - Decongealing
 - Humidity
 - Salt Fog
 - Sand and Dust
 - Water/Rain
 - Fluid Susceptibility
 - Fungus
 - Lightning
- MIL-810, MIL-461, MIL-704, DO-160





Environment	General Capabilities	Reference Standard
Temperature Range	-65°F to +350°F	
Fluids	Dry Filtered Compressed Air or Nitrogen MIL-PRF-23699 MIL-PRF-7808 MIL-PRF-83282 Jet Fuels – JP-8, JP-A	
Shock	Up to 20g input at 11 milliseconds	RTCA/DO-160G Section 7.0 MIL-STD-810G Part Two Section 516.6
Vibration	Full-spectrum of vibration testing as per RTCI/DO –160G and MIL-STD-810G with limited testing assembly weight capabilities of 200 lb maximum	RTCA/DO-160G Section 8.0 MIL-STD-810G Part Two Section 514.6
Thermal Performance and Thermal Mapping	With air-flow limitation of 250 lb/min maximum and the air temperature limitation of 800°F maximum for the low flow and 200°F for the high flow	
Pressure Cycling	Temperature range 80°F to 250°F Cycling frequency 1.0 Hz maximum	
Thermal Cycling	Temperature range 80°F to 350°F Cycling frequency 0.5 Hz maximum	MIL-STD-810G Part Two Sections: 501.5, 502.5, 503.5
De-Congeaing	-65°F to +350°F	
Cold Pressure Drop	-65°F to +350°F	
Pressure Drop Mapping	With air-flow limitation of 250 lb/min maximum and the air temperature limitation of 800°F maximum for the low flow and 200°F for the high flow. Fuel flow limitation of 800 lb/min.	
Burst Pressure	0 – 2000 psig pressure @ 80°F to 250°F	

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