

NTS Facility Spotlight: Indianapolis, Indiana

Specialists in Mechanical | Pneumatics



Liquid Thermal Cycle Test Stand



Air Systems



Fire Test Cell

About NTS Indianapolis

The NTS Indianapolis test facility has been in operation since the 1940's and in its current location since 1990, becoming a division of NTS in 2010.

The Indianapolis division provides an extensive array of mechanical and pneumatic services to clients in the aerospace and defense markets. Our engineering staff have more than twenty-five years of experience serving the needs of clients in the defense and aerospace sectors.

Capabilities

Fuel System

- ▶ 100 gpm; 100 psid; -65 to 200 °F

Oil Systems

- ▶ Max: 200 gpm; 400 psig; 0 to 375 °F

Air Systems

- ▶ 100 lb/min; 120 psig; -40 to 1,300 °F
- ▶ 375 lb/min; 1.5 psig; 70 to 180 °F
- ▶ 1,875 lb/min; 3 psig; 70 to 180 °F

Fire Test Cell

- ▶ Diesel fuel burner with heat flux and temperature calibration stations
- ▶ Meets AS1055, AC20-135 and ISO/DIS 2685

Climatic Test Chambers

- ▶ 10' x 10' x 12': -65 to 150 °F; Dry make up air or humidity; 90,000 Btu/Hr heat load at -55 °F
- ▶ 3' x 3' x 3'; -65 to 400 °F

VIBRATION TEST RIG

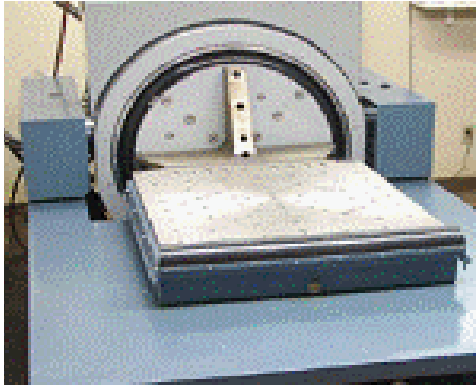
Force	8,000 lbs
Frequency	2,500 Hz
Axes	Three with slip table
Mode	Sine, Random, SOR, ROR, Classic Shock
Data	8 channels, 1,000 g max
Displacement	2 inches

PRESSURE CYCLE TEST RIG

Pressure	0 - 700 psig
Cycle Rate	1 cycle/min up to 2 cycle/second
Temperature	-65 to 400°F

PRESSURE AND LEAKAGE RIG

Pressure	Medium
0 - 10,000 psig	Water
0 - 90 psig	Shop Air
0 - 1,500 psig	Nitrogen



Electro-dynamic shaker & slip table.



Climatic Chamber



Pressure Cycle w/Tinney



Proof and Burst

Test Experience

- ▶ Research & Development
- ▶ Military Qualification
- ▶ Quality Control
- ▶ FAA Certification
- ▶ First Article

Test Types

Environmental

- ▶ Temperature
- ▶ Humidity
- ▶ Thermal Cycling
- ▶ Aging
- ▶ Fireproof
- ▶ Water Proofness
- ▶ Icing
- ▶ Fluid Susceptibility
- ▶ Hail

Structural

- ▶ Pressure Cycling
- ▶ Vibration
- ▶ Shock
- ▶ Proof Pressure
- ▶ Burst Pressure

Functional

- ▶ Thermal Performance
- ▶ Pressure Drop
- ▶ Decongealing/Cold Start
- ▶ Anti-icing
- ▶ Valve Function

Clientele

- ▶ Arrowhead Products
- ▶ GDLS
- ▶ Meggitt Control Systems
- ▶ Agusta Helicopter
- ▶ Sikorsky Helicopter
- ▶ General Electric
- ▶ L3 Communications
- ▶ Hawker / Beechcraft
- ▶ Boeing
- ▶ Pratt & Whitney
- ▶ Rocore
- ▶ Rolls-Royce
- ▶ Cessna
- ▶ Honda Jet
- ▶ TACOM
- ▶ Masoneilan

About NTS

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National Technical Systems
 5701 Fortune Circle South, Suite O
 Indianapolis, IN 46241

www.nts.com | 1.800.270.2516

sales@nts.com