

NTS FACILITY SPOTLIGHT

ORLANDO, FLORIDA

ABOUT NTS ORLANDO

Established in 1986 as Qualtest and acquired by NTS in 2015, NTS Orlando offers an extensive array of test services delivered by an experienced and resourceful team dedicated to serving the testing needs of Aerospace, Defense, and a variety of Commercial customers.

Quality is recognized by many as a crucial aspect of conducting any successful test program and is a deeply held value at NTS Orlando. Customers can be assured of this commitment to quality by NTS Orlando's A2LA and NVLAP ISO/IEC 17025 laboratory competence accreditations.

DYNAMIC TESTING

NTS Orlando offers acceleration testing, mechanical shock testing (free-fall and shaker), transportation simulation, drop testing, and vibration testing. In addition, NTS Orlando maintains a U.S. Navy certified lightweight hammer shock machine capable of accommodating the associated MIL-S-901D testing requirements. NTS Orlando is also accredited by the International Safe Transit Association (ISTA) as a Certified Testing Laboratory for package testing procedures 1A, 1B, 1C, 1D, 2A and 2B.

ENVIRONMENTAL (CLIMATIC) TESTING

NTS Orlando offers a wide array of environmental simulation tests including but not limited to temperature, humidity, altitude, rapid decompression, thermal vacuum, explosive atmosphere, solar heating effects, thermal shock, blowing sand, blowing dust, blowing rain, and salt fog. We also have the ability to operate controls such as buttons, switches and joysticks in harsh environmental conditions hostile to human presence, and can offer more detailed manipulation via a Motoman SV3 Robot.

EMI TESTING

NTS Orlando maintains five shielded enclosures as well as a broad variety of test equipment to help achieve your Electromagnetic Interference (EMI) and Electromagnetic Compatibility (EMC) test objectives. Personnel are very experienced in the performance of tests related to defense (MIL-STD-461) and aerospace (RTCA/DO 160) standards as well as a variety of similar specifications. Our facility is accredited by NVLAP to the ISO/IEC 17025 Standard for Laboratory Accreditation.

HYDRAULIC TESTING

NTS Orlando performs many different hydraulics tests such as endurance, impulse, burst and proof pressure, cracking and reseal pressure, high and low temperature (fluid and/or environment), leakage, and cold start testing.

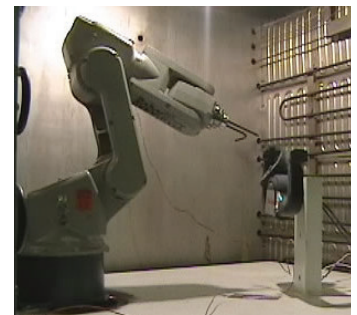
Pressures of 7,500 psig, temperatures from minus 55 Degree C to 135 Degree C, and flows of 200 GPM can be achieved. Phosphate Ester (Skydrol) and Hydrocarbon (Red Oil) test stands are available. Common specifications we test to include SAE ARP 4378, SAE ARP4946, SAE ARP1383.



EMI Testing



Dynamic Testing



Motoman SV3 Robot



www.nts.com
800.270.2516
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HIGHLIGHTS AND PRIMARY TEST SPECIFICATIONS

EMI/EMC

- Radiated Susceptibility/Immunity Electric Fields to 40 GHz and 200 Volts/Meter
- Radiated Susceptibility/Immunity Magnetic Fields 20 Hz - 100kHz
- Radiated Emissions Electric Field 10kHz - 18 GHz
- Radiated Emissions Magnetic Field 20 Hz - 100 kHz
- Conducted Susceptibility 30 Hz through 400 MHz
- Conducted Emissions 30 Hz through 400 MHz
- Transient Pulse Generation up to 2,000 Volts
- Electro Static Discharge (ESD) up to 30,000 Volts
- Input Power Compliance

Dynamics and Environmental (Climatic)

- Acceleration, 27-inch radius centrifuge, max 400 rpm, 30 slip-ring electrical connections
- MIL-S-901D Lightweight Shock Machine, U.S. Navy (CDNSWC) certified
- Electro-dynamic vibration to 23,000 lbf, up to 3.0 inch displacement
- Mechanical Shock, freefall and shaker - classical and SRS
- Altitude - including thermal vacuum, rapid and explosive decompression
- Combined Environments, Environmental Stress Screening (ESS)
- Thermal Shock
- Spray, Drip, and Rain (wind to 40 mph, 4-inches/hour typical rate)
- Salt Fog - 30 ft³ and 73 ft³ salt fog chambers
- Blowing Sand and Blowing Dust
- Temperature and Humidity - 10 x 12 x 8-foot walk-in chamber and smaller
- Explosive Atmosphere - 3 ft. DIA x 4 ft. chamber, to 71°C and 50,000 ft. altitude
- Immersion - vessels up to 48 x 60 x 60-inches
- Solar (heating effects)
- Icing

Hydraulic

- Burst and proof pressure to 60,000 psi
- Cracking and reseal pressure to 8,000 psi
- Leakage to 8,000 psi
- Endurance to 6,000 psi Hydrocarbon (red oil) and 7,500 psi Phosphate Ester (Skydrol)
- Impulse to 6,000 psi Hydrocarbon (red oil) and 7,500 psi Phosphate Ester (Skydrol)
- Cold Start to 3,000 psi at 5 gpm
- Combined Environments (pressure and flow with temperature, vibration)
- Vibration pressures to 4,000 psi at 8 gpm Hydrocarbon (red oil), or 3,000 at 12 gpm Phosphate Ester (Skydrol)
- Temperature to 4,000 psi at 8 gpm Hydrocarbon (red oil), or 5,500 psi at 20 gpm Phosphate Ester (Skydrol)
- Hydrostatic capability - Hydrocarbon (red oil)/water to 60,000 psig or Phosphate Ester (Skydrol)/water to 75,000 psig
- High speed data acquisition and control using Labview software and National Instruments hardware - record at 1,000 hertz, control at 2 hertz

ABOUT NTS

As one of the largest commercial test laboratory networks in North America, NTS offers test, inspection and certification services for environmental, dynamics, EMC, wireless, product safety, materials, ballistics and much more. Our client partners rely on NTS to bring quality products to market quickly and efficiently, and so can you.



Hydraulic and pneumatic testing



Climatic testing



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