BROAD RANGE NUCLEAR TEST AND SERVICES

The NTS Huntsville, AL location is a primary supplier of safety-related engineering and test services to nuclear utilities and power plant equipment manufacturers throughout the world. We are a leader in equipment qualification, safety relief valve recertification services, the leading source of on-site/off-site snubber inspection, testing and repair services, and the exclusive supplier of Yokogawa recorders and controllers.

Our reputation as a nuclear qualification testing laboratory is unparalleled. We have been in business for more than 50 years and have qualified more equipment than any company in the industry.

NTS technical staff provides a broad expertise base available to this program. In addition, the Huntsville facility provides all the necessary seismic and accident test facilities in-house for any program.

FACILITY HIGHLIGHTS

- 92 acre facility with 160,000 sq. ft. of laboratory space
- 35+ year history supporting the nuclear industry
- 10 CFR 50 appendix B program, NQA-1, ISO 9001, A2LA certification
- More than 50 chambers, up to 30’x18’x18’
- Radioacitve material license

FACILITY HIGHLIGHTS CONTINUED

- On-site engineering, fabrication and calibration
- Wide range of electrical power loads plus fault/surge conditions
- Active participation in IEEE and ASME qualification standards development

VALVE TESTING SERVICES

- Safety Relief Valve Testing
  » ASME code verification
  » Set pressure, seat leakage and operability
  » Steam/water/air
  » Radioacitve Material License for contaminated equipment
  » “Hot” Machine Shop
- Valve Qualification
  » QME 1
  » Hot and cold cycle testing
- Valve Qualification (Continued)
  » Flow interruption testing
  » Steam/hot Water
  » Modal testing
- Custom Fluid Components Testing
  » Heat exchangers
  » Pumps
  » Strainers/debris
  » Jet impingement

Exclusive supplier of Yokogawa recorders and controllers
NTS Huntsville is a leader in the testing of safety relief valves

The NTS bi-axial seismic simulator can achieve testing up to 160,000 force pounds

www.nts.com | 800.270.2516
EQUIPMENT QUALIFICATION AND THIRD PARTY QUALIFICATION

- Equipment Qualification Testing
  » Functional testing
  » Thermal aging
  » Cycle aging
  » Seismic event simulation
  » Accident (LOCA) simulation
  » EMI
- Equipment Qualification Services
  » Failure analysis
  » Thermal and radiation analysis
  » Qualification plan development
- Third Party Qualification/Commercial Grade Dedication
  » Dedicated parts inventory

SNUBBER

- Snubber Testing Service
  » Snubber removal
  » Snubber re-installation
  » Visual inspection
  » On-site and in-house functional testing
  » On-site and in-house repair
  » Radioactive Material License for contaminated equipment

SESISMIC TESTING SPECIFICATIONS

- Simulator ID: C, Mode of Operation: Biaxial, Force Rating (lbs.): 160,000, Table Dimensions (ft.): 19x18, Max. (ft.): 18x18, Max (lbs.): 50,000, Max Displacement (Double Amplitude): 5", Max Velocity (IPS): 35, Max Acceleration: 6g ZPA, Max Frequency (Hz): 100
- Simulator ID: D, Mode of Operation: Triaxial, Force Rating (lbs.): 36,000, Table Dimensions (ft.): 9x9, Max. (ft.): 8x10, Max (lbs.): 10,000, Max Displacement (Double Amplitude): 10", Max Velocity (IPS): 35, Max Acceleration: 4.5g ZPA, Max Frequency (Hz): 100
- Simulator ID: F, Mode of Operation: Single Axis, Force Rating (lbs.): 28,000, Table Dimensions (ft.): 4x4, Max. (ft.): 4x4, Max (lbs.): 2,000, Max Displacement (Double Amplitude): 11", Max Velocity (IPS): 35, Max Acceleration: 10g at 1,000 lbs. and 6g at 2,000 lbs sine beat, Max Frequency (Hz): 100
- Simulator ID: G, Mode of Operation: Biaxial, Force Rating (lbs.): 160,000, Table Dimensions (ft.): 19x18, Max. (ft.): 18x18, Max (lbs.): 50,000, Max Displacement (Double Amplitude): 5", Max Velocity (IPS): 35, Max Acceleration: 6g ZPA, Max Frequency (Hz): 100

FLOW TESTING SPECIFICATIONS

- System: Water Blowdown, Pressure: 2,200 psig, Flow Rate: 15,000 gpm, Reservoir/Volume: 3,300 gallons, Remarks: 600°F temperature capabilities
- System: Steam Blowdown, Pressure: 1,400 psig, Flow Rate: 2 million lbs./hr., Reservoir: 1,340 ft³, Remarks: Saturated steam
- System: Super Heated Steam, Pressure: 125 psig, Flow Rate: 1,000 lbs./hr., Reservoir/Volume: 80 ft³, Remarks: Temperatures up to 10,000°F

ABOUT NTS

Since opening our doors in 1961, NTS has become one of the largest commercial test laboratory networks in North America. Our test, inspection and certification services span environmental, dynamics, EMC, product safety, and much more.

NTS engineers have exceptional knowledge in all test and conformity requirements in both domestic and international arenas. Our client partners in Aerospace, Defense, Telecom and Energy rely on NTS to deliver quality products to market quickly and efficiently, and so can you.