A VAST ARSENAL OF TEST TECHNOLOGY

NTS provides ballistic experimentation and non-destructive testing services in support of munitions and protection systems from either of our state-of-the-art facilities in Belcamp, MD and Wichita, KS. We combine our expertise with the latest testing and measuring equipment to efficiently meet our customers’ performance schedule and cost requirements.

Both facilities are NVLAP and A2LA ISO/IEC 17025:2005 accredited, and are approved by the National Institute of Justice to perform personal body armor testing to NIJ Standard-0101.06 and NIJ Standard-0115.00 Stab Resistance of personal body armor. We are also approved by the U.S. Army Aberdeen Test Center to perform helmet and hard/soft armor testing. Our facilities feature 12 indoor firing ranges, a forced entry/ballistic range, a mechanical testing lab and outdoor ranges for small/large caliber munitions and blast testing. A fully equipped on-site machine shop is available to assist with the customization or fabrication of test fixtures and to support range operations.

FIREARM AND AMMUNITION TESTING

NTS is approved by the NIJ and State of Massachusetts for Firearm testing and by the California DOJ for Firearm and FSD testing. All testing is in accordance with numerous performance standards including NIJ-0112.03, TOP-3-2-045, and SAAMI specifications. An in-house case calibration system provides quick turnaround for ammunition testing.

Ammunition test services include:
- Pressure
- Velocity
- Proof testing
- Quality control
- Less-than-lethal
- Cook-off testing
- Projectile characterization
- Environmental conditioning
- Corrosive primer & sensitivity

Firearm test services include:
- Recoil measurement
- Accuracy & dispersion
- Shock transmittance
- Silencer testing
- Barrel erosion and endurance
- Firearm safety services
  » Lockboxes
  » Gun cabinets
  » Cable and trigger locks

PROJECTILES

NTS has the ability to fire a wide range of projectiles. Rounds are hand-loaded to ensure precision and accuracy.

Projectiles used include:
- .50-cal
- 20-mm
- Right Circular Cylinders
- 2-gr through 64-gr
- Light gas gun operations for fragmentation low velocity tests (<1,300 ft/sec)
- Ball and armor piercing projectiles
- Ball and armor piercing incendiary projectiles
- Fragment Simulator Projectiles
- .22-cal
- .30-cal

Our ranges are capable of testing air and ground vehicles
LARGE CALIBER AND BLAST TESTING
We operate medium and large caliber indoor and outdoor test ranges to support .50-cal, 14.5-mm, 20-mm, 25-mm, and 30-mm testing, and have a dedicated 30-mm indoor test range with drive-in capability for accommodating large samples.

Each range has an independent HVAC system with an advanced HEPA filtration system that exceeds EPA and OSHA standards for air quality. Ranges are also equipped with video cameras that transmit range activities to viewing screens in the firing room.

Capabilities include:
- IED & EFP testing
- Reactive armor
- Srena testing
- Bare charge and fragment testing
- Air and ground vehicle
- Transparent and heavy armor
- Component, sub-system, full-up
- VPAM, AEP-55, STANAG
- Structural blast
- Blast containment
- Blast pressure (PPE, doors, windows)
- Personal Protective Equipment
- Helmets, face-shields, vests
- RPG (static and dynamic)

PHYSICAL SECURITY AND FORCED ENTRY
NTS is certified by the U.S. Department of State to perform FEBR testing in accordance with SD-STD-01.01, Rev. G. Testing also IAW ASTM F1233-08, ASTM F1915, HPW-TP-0500.03, ASTM F588, ASTM F3038, and others.

Our testing is performed by experienced engineers on large modular frames customizable for any size product with modular fixtures for fast and efficient mounting of test articles.

Testing in accordance with various test methods and standards including:
- Department of State (DOS) SD-STD-01.01G (DOS-approved to perform this testing)
- ASTM (F1233, F1915, F3038, etc.)
- HPW-TP-0500.03
- Customized testing plans available upon request

Large modular fixture can accommodate full-scale building envelope and structural products including:
- Windows and window coverings
- Doors (regular hinged and rolling doors)
- Ballistic and physical attack testing conducted in the same facility to enhance testing accuracy and realism
- Safe-rooms & protective enclosures
- On-site machine shop for efficient design and fabrication to accommodate all product types

ABOUT NTS
Every hour of every day, NTS is fully invested in helping you build better, stronger, safer, more reliable products, and bring those products to market quickly and efficiently. Since conducting our first rounds of tests in 1961, NTS has become one of the largest commercial test laboratory networks in North America.

Our test, inspection and certification services cover environmental, dynamics, EMC, materials, ballistics and much more. NTS engineers have exceptional knowledge of all test and conformity requirements. Client partners in Aerospace, Defense, Telecom and Energy rely on NTS to make sure they’re putting their best products forward, and so can you.