

## Ballistics

**Dayton T. Brown, Inc.** performs Forced Entry testing on architectural components, vehicular armor, and body armor. Other services include live fire test and evaluation (LFT & E) in our 100 meter x 24 foot wide indoor ballistic test facility, which is suitable for entire vehicles or large systems.

### Essential Support Services

Safeguarding, accountability, security and safety systems for small arms and ballistic test programs that are approved by the DoD and compliant with:

- DoD manual 5100.76
- DoD manual 4145.26
- DoD manual 5220.22m
- FAR Part 45—Government Property
- Meet Federal, State and local licensing requirements

### Testing Standards

Include, but are not limited to:

- ATPD 2352 Transparent Armor
- SD-STD-01.01 Forced Entry and Ballistic Resistance of Structural Systems
- NIJ Standard-0108.01, Ballistic Resistant Protective Materials
- NIJ Standard-0101.06, Ballistic Resistance of Body Armor
- MIL-STD-810
- MIL-STD-461
- STANAG
- NIJ
- EN
- ANSI/SAAMI

### Accreditations/Certifications/Approvals

- A2LA accredited to ISO/IEC 17025\*
- ISO 9001 Registered
- NVLAP accredited to ISO/IEC 17025\*
- NIJ/NLECTC approved for Standard 0307.01 Handcuff/Restraints Testing
- NVLAP accredited for personal body armor\*
- NIJ/NLECTC approved for testing to NIJ Standard-0101.06

### Facilities

- 100 Meter indoor range
  - 24 ft. wide
  - 1-2 ft. thick reinforced concrete
  - 75 ft./min. air velocity passing shooter
  - Portable internal bunkers for armor testing
- 15 meter indoor range
- Dimensional lab
- Environmental lab
- Optics lab
- EMI/EMC lab
- Metallurgical lab
- High speed video
- Failure analysis lab
- 300,000 sq.ft. facility
- 32 acre site
- 5 minutes from L.I. MacArthur/Islip Airport
- 45 minutes from New York City

### Engineering and Testing Services

- First article inspections
- Life cycle and durability testing
- Environmental simulation testing
- Dynamics and vibration testing
- Design and program engineering
- Structural static and fatigue testing
- Metallurgical engineering
- Failure analysis - V0, V50, BFS
- Prototyping
- Machine shop



*A World of Engineering and Testing Under One Roof™*

\* Please visit [www.dtbtest.com](http://www.dtbtest.com) for testing covered under our scopes of accreditation.

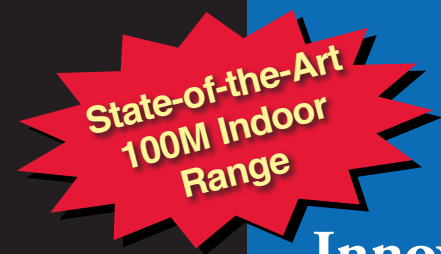
**DAYTON T. BROWN, INC.**  
ENGINEERING & TEST DIVISION



[www.dtbtest.com](http://www.dtbtest.com)

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# RANGE SERVICES



**Innovation.**  
**Integrity.**  
**Dependability.**

**Weapons, Ammunition, Armor, Systems**



*Dayton T. Brown, Inc. has provided the DoD, federal, state, local law enforcement and private industry communities with 60 years of unparalleled professional expertise in engineering and testing. Our engineering team has worked with these communities to help them answer some of their toughest questions. DTB is excited to bring that same tradition of innovation, integrity, dependability, knowledge and experience into the science of ballistics.*

### Range and Support Services

- Small and medium caliber weapon testing
- Complete armored vehicle evaluations
- Armor testing and development
- Product demos for tri-state law enforcement
- Unique engineering services
- Law enforcement training
- Ammunition testing and development
- Research and development projects
- Testing under environmental extremes
- On-site metallurgical & failure analysis laboratory

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Accredited Test Lab  
767.01, 767.02, 767.03

ISO 9001:2008  
Registered



NVLAP LAB CODE  
200422-0

1195 Church Street, Bohemia, NY 11716-5014 USA

Please direct all inquiries to: 1-800 test 456 • email [test@dtbtest.com](mailto:test@dtbtest.com)  
Visit our web site at: [www.dtbtest.com](http://www.dtbtest.com)

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# You can count on DTB for the right answers to all your engineering and testing requirements:



## Weapons, Ammunition & Component Testing Services

- In condition environmental testing
  - Sand, dust, mud, salt, ice
  - Temperature extremes & cycling
- Endurance testing
- Reliability testing
- Accuracy testing (100 meter requirement)
- Functional testing
- Proof testing
- Data acquisition
- Failure analysis
- NDT inspection
- Fit checks
- Wear evaluations
- Mechanical & metallurgical laboratories
- First article & dimensional inspections
- Engineering evaluations
- Product improvement evaluations



## Armor Testing Services

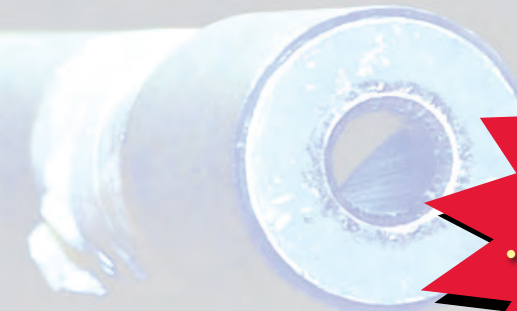
- All small caliber & select medium caliber testing up to 20 mm
- Testing against fragments like FSP & RCC up to 20 mm
- In-range armor temperature conditioning
  - No time delay or transfer of armor required
- Full optical inspection on-site for ATPD 2352
- Dimensional inspection
- NDT inspection
- Micro-focus Digital Radiography Computed Tomography (CT scan) inspection for Composites\*
- Large environmental chambers for lot testing
- Cutting edge accelerated life testing & post-test ballistic performance
- Component to full vehicle testing
- High speed video capability



\* This technique is capable of precisely locating defects within a 3-D volume of a composite component. It provides metrological capabilities for defect characterization and results in excellent delineation of fiber orientation and associated problems. This technique can detect both fiber and matrix defects in composites.

## Armored Vehicle Evaluations

- Vehicle mounted weapon performance
- Consistent indoor range environment
- Armor effectiveness
- Vehicle performance after environmental exposure
- Reliability evaluation
- Electromagnetic conformity and susceptibility
  - Defense against electronic attack
- Total vehicle performance and evaluation
- Design improvement recommendations
- Drive-in chambers
- Failure analysis & inspection capability
- Exploitation and vulnerability testing



**DTB is Now:**  
 • NVLAP Accredited for Personal Body Armor  
 • NIJ Approved for Testing to NIJ-STD-0101.06

## Product Demonstrations

- Weapons, armor, ammo, vehicles
- Private demos to invited customers
- Complete demo prep assistance
- Convenient for tri-state law enforcement
- High speed video availability
- Meeting room for up to 200 visitors

## Law Enforcement Training

- Firearms and tactical training
- Defense training and classrooms
- Vehicle tactics
- Variety of calibers and modes of fire
- Day/night shift availability
- Indoor controlled environment