

## 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
- 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
- FBI protocol testing - Ammunition testing in Ballistic Gelatin
- STANAG
- NIJ
- EN
- ANSI/SAAMI

### DTB Accreditations/Certifications/Approvals

- A2LA accredited to ISO/IEC 17025\*
- ISO 9001:2008 and AS9100C Registered
- NVLAP accredited to ISO/IEC 17025\*
- NVLAP accredited for personal body armor\*

### 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

### Product Life Cycle Support Services

*Serving Military and Commercial Markets Since 1950*

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



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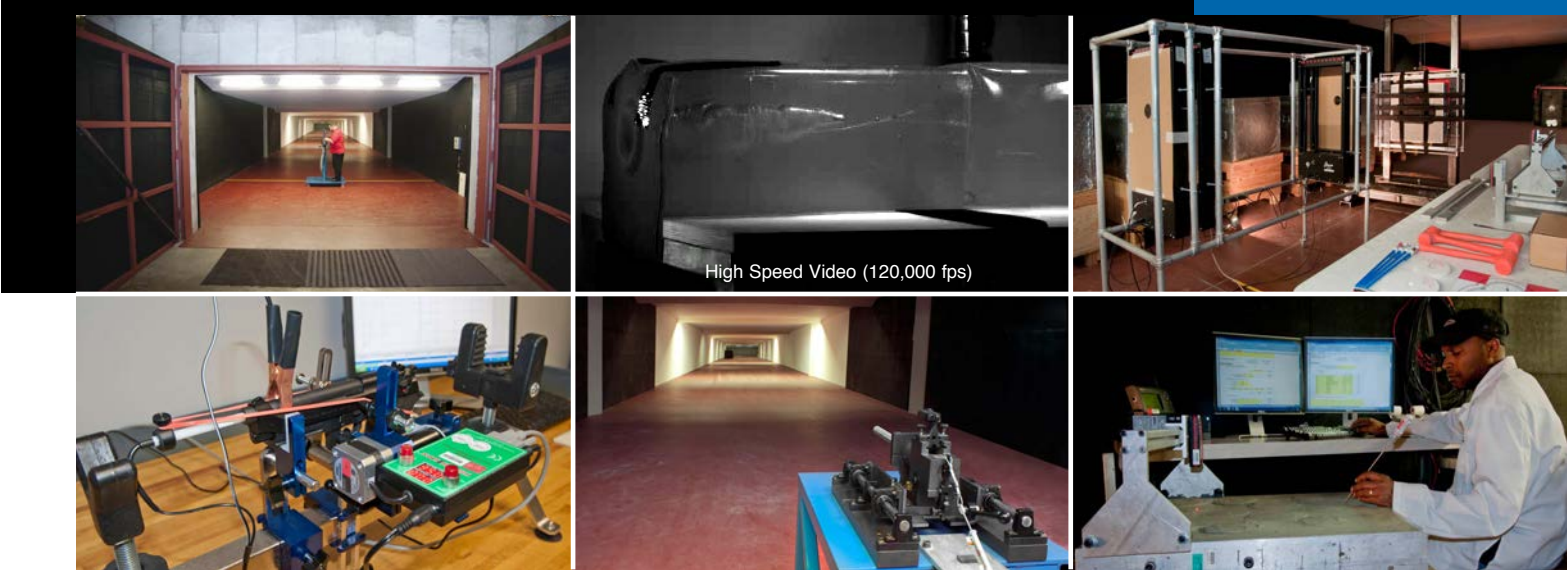
PHONE: (631) 589-6300  
FAX: (631) 589-3648

# RANGE SERVICES

**State-of-the-Art 100M Indoor Range**

**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 over 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
- Armor testing and development
- Unique engineering services
- Ammunition testing and development
- Testing under environmental extremes
- ANSI/SAAMI Z.299.4
- UL752
- FBI protocol testing
- Complete armored vehicle evaluations
- Product demos for tri-state law enforcement
- Law enforcement training
- Research and development projects
- On-site metallurgical & failure analysis laboratory

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\* Please visit www.dtb.com for testing covered under our scopes of accreditation.

Product Life Cycle Support Services  
Serving Military and Commercial Markets  
Since 1950

Accredited Test Lab  
767.01, 767.02, 767.03

ISO 9001:2008 and AS9100C  
Registered

NVLAP LAB CODE  
200422-0

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Please direct all inquiries to: 1-800-232-6300 • email sales@dtb.com  
Visit our web site at: www.dtb.com

\* Please visit www.dtb.com for testing covered under our scopes of accreditation.



# 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 metallurgical 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



## 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