Battelle CBRNE Defense

ENERGETIC AND HAZARDOUS MATERIAL TEST AND EVALUATION SERVICES



DELIVERING EXCELLENCE IN ENERGETIC TEST AND EVALUATION

Battelle's High Energy Research Laboratory Area (HERLA) provides extensive energetic and hazardous material test and evaluation services to address your most challenging problems. Battelle's team of dedicated professionals, together with unique and versatile laboratory facilities, provide a complete platform for conducting all facets of energetic/ hazardous research.

The HERLA is well suited for the evaluation of explosive, propellant, pyrotechnic, high-voltage, reactive-gas, and other energetic related research. An energy release equivalent to 50 pounds of TNT can be accommodated within the HERLA's largest blast chamber. High-speed data acquisition, imaging, and flash radiography are available along with numerous other specialized instrumentation and sensors. Battelle's HERLA offers a complete capability for energetic test and evaluation.

IF YOUR CHALLENGES INCLUDE:

- Time-critical testing of soldier survivability systems
- Characterization of new materials in a dynamic environment
- Rapid prototyping of solutions to emerging needs
- Critical data capture from energetic and hazardous events

WE HAVE SOLUTIONS.

STAFF AND FACILITIES FOR ALL FACETS OF ENERGETIC TEST AND EVALUATION

- Largest privately owned blast chamber in the United States
- Ready access to Battelle's full breadth of scientific staff
- Network of outdoor testing facilities for large- scale efforts
- 50+ years experience performing explosive test and evaluation work

Benefits

- Specialized facilities and capabilities allow one-of-a-kind tests
- Experts deliver dynamic, energetic, and hazardous test and evaluation
- Highly experienced scientific team means top quality and performance excellence
- Certified EFP armor Tier 1 test facility speeds deployment of protective systems for the warfighter





DOD RESULTS INCLUDE:

- Approved as Joint IED Defeat Test Board (JTB) Tier 1 testing faciliity for EFP armor evaluation
- Unique full cycle testing from material characterization to modeling to verification tests
- One-stop design, development, analysis, and prototyping of specialty munitions, weapons, and armor
- Unique and highly flexible test capability to obtain and assess discriminating and novel data

EXAMPLES OF ADDITIONAL BENEFITS:

- Ability to synthesize, characterize, and test homemade explosives (HME)
- Portable instrumentation suite to support both on-site and off-site test activities
- Experienced in pulse power, explosive machining, and arena tests

ADDITIONAL CAPABILITIES:

- Instrumented testing and evaluation services for explosives, propellants, pyrotechnics, high pressures, high voltages, and flammable gases
- Three blast containment chambers
- Two-stage light gas gun facility
- Two gun ranges
- Remote disassembly/exploitation equipment
- Explosive cast load facility
- Small item explosive press load capability
- Energetic chemical formulation laboratory
- High-speed instrumentation and data acquisition
- Limited production of energetic devices
- Secure storage, telecommunications, and conference facilities
- Receiving, storing, and utilization of energetic items safely and securely

High-fidelity model of a linear shaped charge



Remote disassemble and exploitation of munitions



Specialized testing of smokes, obscurants, aerosols and CBRNE threats



Every day, the people of Battelle apply science and technology to solving what matters most. At major technology centers and national laboratories around the world, Battelle conducts research and development, designs and manufactures products, and delivers critical services for government and commercial customers. Headquartered in Columbus, Ohio since its founding in 1929, Battelle serves the national security, health and life sciences, and energy and environmental industries. For more information, visit www.battelle.org.



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