



ORGANIC MATERIALS PROTOTYPING AND TESTING LABORATORY

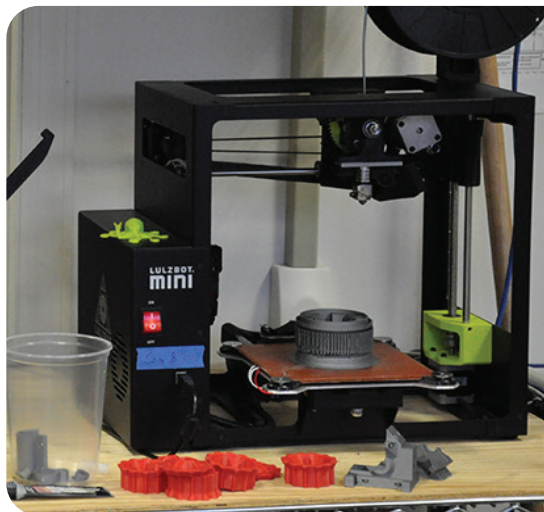
LABORATORY INFORMATION FACT SHEET

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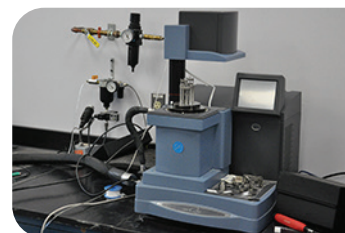


The Organic Material Technology and Prototyping Testing Lab is positioned to provide DEVCOM AC organizations with consultation, laboratory services and rapid prototyping solutions on base.

TECHNOLOGY/FACILITY DESCRIPTION:

Expertise is provided in the materials technology areas of design and fabrication, testing, adhesives and sealants. Our branch also seeks transition opportunities within the armaments community and other government agencies for research

conducted by DoD, academia and industry. Applying technical abilities with growing prototyping and manufacturing capabilities allows you to go from concept to production in one central location. Conceptual development and design, materials consultation and modeling and simulation prepare products for transition to fabrication. 3D printing, CNC machining, injection molding and filament winding are some of the equipment on site to do rapid prototyping to production. Experience particularly with military systems including insensitive munitions, weight reduction, armor and unmanned systems, allowing OMT&P to support DEVCOM AC's needs. Material selection, testing and characterization capabilities allow customers to select the most effective and efficient material with validated results. Accelerated aging, mechanical and environmental testing is available along with analysis, research and consultation of results. Our testing equipment includes Instron mechanical testers, environmental chambers, rubber testing equipment, non-destructive analyzers, DSC, TGA, FTIR, DMA, creep and relaxation testers. Failure analysis, material replacement and accelerated aging studies are also available to the DEVCOM AC community and OGAs. OMT&P has injection molding, compression molding and vacuum forming capabilities to fabricate many plastic components. Our facility will provide solutions early in the development phase of the armament and other applications for lower risk production and storage issues.



EQUIPMENT AND EXPERTISE AVAILABLE:

Test & Analysis Equipment

- Instron Mechanical Testing
- ASTM and ISO Testing
- Dynatup Impact Tester
- Accelerating Aging
- Environmental Testing
- Non-Destructive Analyzers
- DSC, TGA, FTIR, DMA
- Processing Testers
- Rubber Testing Equipment

- Creep & Stress Relaxation Testers

- Failure Analysis

Manufacturing Equipment

- 3D Printing
 - Thermoplastic, Thermoset, Wax and others
- Plastics
 - Injection molding, Transfer/Compression Molding, Vacuum Forming

- Composites

- Filament Winding/Braiding, Resin Transfer Molding, Wet Layup

- CNC Machining, laser cutting, ultrasonic Welding

- Coatings

- Materials support: design, prototype, procurement & contract support