

ADDITIVE MANUFACTURING FACILITY

LABORATORY INFORMATION FACT SHEET

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The Additive Manufacturing Facility is DEVCOM AC's premier center for direct metal prototype manufacturing.

TECHNOLOGY/FACILITY DESCRIPTION:

The 30,000 sq. ft. facility features multiple metal powder consolidation technologies to address engineering requirements and provide rapid prototype turn-around. Additive Manufacturing equipment is used to prototype, develop and fabricate metal parts via a layer by layer powder bed laser sintering process. This technique enables freedom to

create geometries that subtractive manufacturing methods cannot. The process provides a wide range of design flexibility over traditional manufacturing methods, allowing for rapid prototyping, part weight reduction, complex part design, reduced time to product and overall manufacturing flexibility. The facility is staffed with highly trained personnel with extensive backgrounds in all aspects of powder prototype manufacturing. The integration of the expertise and fundamental understanding of powder characterization enables the competency to address performance requirements. Additionally, our Field Assisted Sintering Technology (FAST) equipment has the ability to fabricate bulk materials with a retained nanostructure for enhanced properties. Our Instrumented Hot Isostatic Pressing (iHIP) utilizes real-time monitoring of material densification to optimize temperature, pressure and soak times. Our Warm Isostatic Pressing (WIP) allows powder consolidation at extremely high pressures and low temperatures, which are important for structurally reactive materials.



EQUIPMENT AND EXPERTISE AVAILABLE:

- EOS M100 Direct Metal Laser Sintering
- ARCAM A2X Electron Beam Melting
- 125 Ton FCT Field Assisted Sintering Technology
- Instrumented & Standard Hot Isostatic Presses
- Warm & Cold Isostatic Presses
- Prototype fabrication of components in Alloy & Stainless Steel, Titanium, Inconel, Tantalum, Tungsten, Copper, Boron Carbide, Tungsten Carbide





