

## **Equipment, Materials & Additive Manufacturing Capabilities**

*Industrial additive manufacturing. Expert support.  
Scalable production—without equipment investment.*

The Project DIAMOnD Digital Transformation Center (DTC) provides businesses with access to industrial-grade additive manufacturing equipment, post-processing technologies, and expert technical support.



### **The DTC is designed to help:**

- Validate new products and applications
- Reduce risk before investing in capital equipment
- Accelerate commercialization using additive manufacturing
- Access capabilities typically unavailable to small and medium-sized manufacturers

Originally created to support Project DIAMOnD grant participants, the DTC now operates as a professional, fee-for-service manufacturing resource, available to eligible businesses statewide and beyond.

### **How to Use the DTC**

1. Submit an inquiry through the Project DIAMOnD team
2. Upload part files (STEP or STL) through the DTC Portal
3. Receive a quote based on material, process, and complexity
4. Approve production and move into manufacturing
5. Parts are produced, post-processed, and delivered

All orders are managed through a secure digital workflow that protects intellectual property and production know-how.

## Additive Manufacturing Capabilities

### Polymer Additive Manufacturing

#### Stratasys H350 (SAF® Powder Bed Fusion)

- Ideal for production-grade polymer parts
- Excellent surface finish and repeatability
- Best suited for nested builds and functional end-use components

#### AON3D Hylo (High-Temperature FFF/MEX)

- Large-format, high-performance thermoplastics
- Supports PEEK, PEKK, PEI/ULTEM™, PPSU, and CF-filled materials
- Ideal for tooling, fixtures, and end-use parts

#### Prusa XL(FFF)

- Large-format polymer parts and multi-material printing
- Ideal for prototyping, fixtures, and functional components

#### Markforged Mark Two

- Optimized for Onyx (PA6 + chopped carbon fiber)
- Stiff, lightweight parts with excellent surface quality

### Metal Additive Manufacturing

#### Meltio M450 (Directed Energy Deposition – DED)

- Wire-fed metal additive manufacturing
- Suitable for near-net-shape parts, repairs, and feature additions
- Supports stainless steels and tool steels

### Post-Processing & Validation

- Automated de-powdering and surface finishing
- Vapor smoothing for polymer parts
- Reverse engineering and 3D scanning
- Metrology and measurement tools for inspection and validation

## Materials Supported

### Polymers

- PA12 (powder bed)
- ABS, ASA, PC, PC/ABS FR
- Nylon (PA6), PETG, PETG+CF
- PPSU, PSU, PVDF
- High-performance: PEEK, PEKK, PEI/ULTEM™ (+CF)
- TPU (90A)
- PLA, PP+CF

### Metals

- 17-4 PH Stainless Steel
- 316L Stainless Steel
- H11 Tool Steel

(Material availability may vary; consult the DTC team for current inventory.)

## Build Sizes & Technical Specifications

Build volumes, tolerances, and process parameters vary by machine and application.

For detailed build sizes, tolerances, and machine-specific specifications, please consult:

- Manufacturer specification sheets
- The Project DIAMOnD DTC Portal
- The DTC technical team during quoting and feasibility review

## Pricing Philosophy

DTC services are priced competitively to reduce barriers to adoption and accelerate digital transformation.

Pricing is based on:

- Material selection
- Process requirements
- Build time and post-processing
- Part complexity and volume

Quotes are provided prior to production approval.

## About Access & Pricing

Project DIAMOnD includes both grant-funded programs and fee-for-service offerings. While some companies may qualify for grant-supported equipment, training, or services, the Digital Transformation Center operates as a professional service offering available to all businesses. Pricing is transparent and aligned with our mission to reduce barriers to advanced manufacturing adoption.

## Who Can Access the DTC?

- Project DIAMOnD participating companies
- Manufacturers, engineering firms, and technology companies
- Businesses exploring additive manufacturing for commercial applications

## Contact & Next Steps

To request a quote or discuss your application: [contact@projectdiamond.org](mailto:contact@projectdiamond.org)

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