

ALLEGANY COLLEGE OF MARYLAND
INFORMATION FOR PROSPECTIVE BIDDERS
3D Metal Printer Project

This grant funded project supports the acquisition of both a metal and composite laser 3D printer to support regional manufacturing. These pieces of equipment are ideal for manufacturing highly complex, sophisticated DMLS components. bidders should direct questions about the specifications and scope of the project to Mrs. Rebecca Ruppert at rruppert@allegany.edu or at 301-784-5277.

Maryland funding has been provided to support this project, and ACM must act within the College and the State's procurement and grant guidelines to complete this project.

Equipment Item Requested (or equivalent): Vendors are requested to submit a bid for the items listed below. Vendors may provide a bid for each of these items individually or as a bid for all equipment and services as a whole. Each bid submitted should clearly reflect the intent of the bid when submitted:

1. Markforged X7 Demo System (Generation 2) with the Following Upgrades & Attachments:

- a. X7 Gen 2 Success Plan- 1 year
- b. 800 cc Onyx Spool
- c. 50cc Fiberglass CFF Spool
- d. 50cc Carbon Fiber FR-A Spool
- e. Installation of Equipment on site

The Markforged X7 CFR industrial carbon fiber 3D printer combines precision-built hardware, advanced sensors, and leading-edge software to deliver accurate parts repeatably. It features a reinforced, precision-machined gantry and a precision ground print bed that can be removed and replaced with 10 µm repeatability.

1. EOS M 100 3D Metal Printer with the Following Upgrades, Attachments & Consumables:

- a. Freight and delivery
- b. System installation
- c. Basic training operation and Data Preparation
- d. Follow-Up Training
- e. 6-month preventative maintenance visit
- f. R&D Parameter Editor for M100 Machine
- g. MAGICS Metal Package, Single license
- h. EOSPRINT PREMIUM Module, annual license
- i. EOSPRINT 2, per seat
- j. EOSTATE Laser machine license
- k. Building platform DirectBase Ti15 – 4x
- l. Building platform DirectBase S15- 5x
- m. Carbon fiber brush recoater M 100 (for use with recoater set 200001375)- 2x

- n. EOS Cobalt Chrome MP1- 30x
- o. EOS Stainless Steel 316L- 30x
- p. EOS Titanium Ti64, Grade 5, Plasma Atomized- 10x
- q. Replacement Filter H13
- r. Replacement Filter- 2x
- s. Wet separator Earthing Kit
- t. EOSTATE Laser, M 100 Hardware
- u. Material Change Set M 100, Includes:
 - i. Flow Box- 1x
 - ii. Powder Cartridge- 1x
 - iii. Overflow Large- 1x
 - iv. Overflow Small- 1x
 - v. Felt ring set for Z-axis
- v. Carbon fiber brush recoater set
 - i. Holder
 - ii. Brushes-3x
- w. MX360EX Wet Separator
- x. HSS Recoater Blade M100
- y. E-Learning Parameter Editor EOSPRINT 2

EOS M 100 is a system for Direct Metal Laser-Sintering (DMLS). It builds metal parts directly on the basis of three-dimensional CAD data, fully automatically, without any tools. The parts are built up layer by layer by melting a fine metal powder using a laser beam, thereby allowing even extremely complex geometries to be created. The ability to produce such parts very quickly enables flexible and economic manufacture of individual parts or batches as well as a shorter time to market.

Selection Process: Vendors submitting bids will be ranked according to criteria listed in this bid specification document. All written bids will be reviewed. Alternative proposals with similar, but not exact, specifications are welcome, but must be comparable in performance to the item specified.

Miscellaneous Information

1. All costs of bid preparation shall be borne by prospective vendors.
2. All submitted bids will become the property of Allegany College of Maryland and can be revealed to outside consultants and State and Federal agencies.
3. Addenda and supplementary information sheets will be supplied only to those prospective bidders who receive this bid specification and request additional information.

Bid Submission Information: Sealed bids in duplicate should be delivered to the following address:

ACM 3D Metal Printer Project
Sherry Buffenmyer, Director of Fiscal Affairs
Allegany College of Maryland
12401 Willowbrook Road Cumberland, MD 21502

All bids must be received by 3:00 p.m. on Tuesday, April 11th, 2023. All equipment shall be listed as to manufacturer and capacity. Award of the bid will be at a later date after an analysis of all proposals. Allegany College of Maryland reserves the right to reject any or all proposals and request other proposals. Allegany College of Maryland reserves the right to accept any proposal it feels is in the best interest of the College.