Technical Specifications
FDM Printer, Filament, and Accessories
DLA Weapon Support Columbus Engineering & Technical Support Directorate
DLA Product Test Center Division, VT

Objective:

This is a description of the DLA Product Test Center Division, VT, requirements for the procurement of 2 Fused deposition modeling thermoplastic 3D printers (FDM 3D printers) and filament and accessories to operate the systems (detailed below). It is the intent here to clearly define all required performance characteristics. In generating this statement, our objective is to end up with 2 3D printers which expand our overall fixture capability by producing prototype and end use fixtures. Because we want to maximize the ease of use some of the required features listed below will be specific. Our general objective is to minimize any impact to the DLA Product Test Center Division, VT, operations and our customers because of this procurement, especially with regards to test cycle time. This system will decrease time required to generate needed fixtures to support many areas of testing.

General Requirements:

1. Two (2) 3D printers with the following characteristics:
    a. 5 extrusion heads
        i. Capable of printing layer heights of 0.05-0.30mm
    b. Build volume of 360×360×360 mm (14.17''×14.17''×14.17'')
    c. Max nozzle temperature of 290 °C or greater
    d. Max build plate temperature of 120 °C or greater
    e. Automatic print bed calibration
    f. Supports printing with PLA, PETG, Flex, PVA, PC, PP, CPE, PVB ABS, ASA, HIPS, PA
    g. Operates when plugged into a standard American outlet.
    h. Has an LCD control screen
    i. Does not require cloud-based software to operate.
    j. Contains a fully enclosed print volume.
2. Two (2) Filament Dry cabinet
    a. Operates when plugged into a standard American outlet.
    b. Has an internal capacity of at least 15" × 15" × 22"
    c. Can maintain a relative humidity below 2%
3. Forty (40) replacement nozzles compatible with the extrusion heads installed on the 3D printers above (See General Requirement 1)
    a. Twenty (20) 0.4mm diameter nozzles
    b. Ten (10) 0.25mm diameter nozzles
    c. Ten (10) 0.8mm diameter nozzles
4. All spare parts and tools that are needed to conduct regular maintenance and repair of the system.

5. Must supply the following filaments compatible with the 3D printer above (see General Requirement 1)
    a. 20 1Kg spools of Tough PLA
    b. 20 1Kg spools of PETG
    c. 10 500g spools of BVOH Soluble
    d. 5 500g spools of TPU Flexible

Warranty:

Contractor shall provide a minimum of a one-year warranty on all components from the date of installation at the DLA Product Test Center, Electronics and Mechanical Labs, VTP/VTA/VTM, Bldg. 11-7 and 9-2, Columbus, OH. The warranty will include all costs for repair or replacement as required.

Other Requirements:

1. Delivery: 8-10 weeks from date of the award.
2. Contractor shall give notification to Jeremiah Jones [redacted] when the system will be delivered.
3. All shipping costs are to be included in the contracted price.
4. The set shall be delivered to

    Defense Supply Center Columbus (DSCC)
    300 North James Road, Bldg. 17-3
    Mark For: DLA Product Test Center, Electrical Lab, VTP/VTA, Bldg. 11-7
    Attn: Jeremiah Jones [redacted]
    Columbus, OH 43213-1152

5. Payment of invoices will be accomplished by payment through the Defense Finance and Accounting Service. Invoices will be submitted to the Wide Area Workflow system in accordance with DFARS 252.232-7003 Electronic Submission of Payment Requests and Receiving Reports and DFARS 252.232-7006 Wide Area Workflow Payment Instructions within 10 workdays after delivery. Invoices shall be submitted through Wide Area Workflow (WAWF), See DFARS Clause 252.232-7006 Wide Area Workflow Payment Instructions for detailed instructions on how to submit invoices.
6. DODAAC: SL0700.