## INDIANATECH 1600 E Washington Blvd Fort Wayne, Indiana 46803

## BID FOR TWO (2) 3D Metal Desktop Printers Reference Number: 230773DP

RFQ Due Date:	April 14, 2023
Approximate Equipment Delivery Date:	June 5, 2023
Start of Installation (on or before)	June 15, 2023
Completion Date (on or before)	June 30, 2023

Base Bid Includes: - Two (2) 3D Metal Desktop Printers

- All accessories (if applicable) as listed in specifications.
- Freight delivered to Indiana Tech, Fort Wayne, Indiana

#### THE BIDDER AGREES TO:

- 1. Hold the bid open for 30 calendar days after bid opening date.
- 2. Bidders <u>cannot</u> appear on the Federal Excluded Parties List and are declared eligible for awarding of the bid.
- 3. The successful bidder agrees to provide two (2) 3D Metal Desktop Printers to Indiana Tech in new condition within 60 days of receiving notice of awarding of the bid.
- 4. The successful bidder will deliver (or arrange shipment), unpack, setup and calibrate equipment for Indiana Tech.
- 5. Successful bidder must also perform basic operating training to faculty and staff on the use of the equipment.
- 6. The successful bidder will be required to complete Federal Lobbying Restriction Forms
- Bid opening will be March 30, 2023.
- Public bid notification can be found at indianatech.edu/purchasing
- Bid form and any other supporting documents are to be submitted to <u>purchasing@indianatech.edu</u>.

Direct questions or concerns pertaining to the bidding of this equipment to Mark Hunsberger Director of Procurement, at Indiana Tech or by calling (260) 422-5561 ext. 3451.

## <u>Scope</u>

### A. Summary

This equipment focuses on training fundamental additive manufacturing in different 3D printing approaches. Students will be exposed to CAD and CAM methodologies to produce successful 3D prints and fabricate 3D mechanical objects using various 3D printing technologies. We should be able to offer training for an alternative technology for 3D printing of metal parts, more

economical than the laser sintering metal powder. This alternative technology is the Metal Fused Filament Fabrication which consists in the deposition of very thin layers of metallic powder embedded in a special resin. Once the printing is complete a subsequent heat treatment is necessary to sinter the material.

This 3D industrial metal printer will enable training for 3D printing of production-grade metal parts and in the procedure for additive manufacturing. Two units are required, because 3D printing is a slow process, and we need to have enough resources to manage the course load appropriately, by increasing seats' capacity. Multiple units will allow more students to acquire hands-on experience (in a rotating schedule), which is of essence in this type of training.

#### B. Provide equipment that meets or exceeds the following specifications

**3D Printer Specifications:** 

- 1. Layer resolution: 50 μm 125 μm (after sinter)
- 2. Process: Metal fused filament fabrication.
- 3. Build volume: 300 x 220 x 180 mm (minimum)
- 4. Part size: 250 x 183 x 150 mm, 10kg (minimum)
- 5. Touchscreen 12 cm (minimum)
- 6. Slicer software included.
- 7. Security: Two-factor authentication (minimum)
- 8. Size: 600 x 500 x 1200 mm, 80 kg (maximum)
- 9. Materials: Ceramic release material with SAE 630 stainless steel, AISI A2/D2 tool steel, ASTM 630 Inconel or cooper.

Please note: Contractors are hereby notified that they are encouraged, to the greatest extent practicable, to purchase American-made equipment and products with funding provided under this award.

#### C. Coordinate the installation and commissioning

- 1. Setup of equipment to ensure it is properly calibrated and functioning correctly.
- 2. Provide training to faculty and staff of Indiana Tech.

#### Payments:

• Payment will be made within thirty (30) days after receipt of invoice - after equipment delivery, installation, and commissioning.

#### **Bid Approval:**

• Bidders are to HOLD the bid price and Lead Time for 60 days from the bid date.

#### **Tax Exemptions:**

• The undersigned Bidder has informed themselves of the tax-exempt status of the Owner, and therefore, has not included these taxes in his Lump Sum Base Bid price.

## **Questions during Bidding:**

• Direct any question to <u>purchasing@indianatech.edu</u> and they will be forwarded to the appropriate person at Indiana Tech.

# **INDIANATECH**

## **BID FORM**

## BID FOR TWO (2) 3D Metal Desktop Printers Reference Number: 230773DP

То:	Indiana Tech – Fort Wayne, IN	
From:	Bidders Name:	
	Address:	
	City, State & Zip Code:	
	Phone Number:	Date:
	Signature:	

For: (2) 3D Metal Desktop Printers

Item	Amount (Numerals)	Amount (Written)
3D Metal Desktop Printers	\$	dollars
Shipping / Handling	\$	dollars
Set up and Training	\$	dollars
Other	\$	dollars
Total Lump Sum Bid Price:	\$	dollars

Item	Weeks
Delivery Lead Time from date of Indiana Tech issuing PO	

- 1. Bidders are to HOLD the bid price and lead time for 60 days from the bid date.
- 2. The undersigned Bidder has informed themselves of the tax-exempt status of the Owner, and therefore, has not included these taxes in his Lump Sum Bid Price.
- 3. Submit bid form and any other supporting documents to purchasing@indianatech.edu