

**REQUEST FOR Proposal #2020-066  
4-Axis Turning Machine  
RESPONSE ADDENDUM #3  
6/8/2020**

**CLARIFICATION**

In the course of evaluating proposal submissions for the 4 axis live tooling lathe, we have decided to reduce the minimum requirements of several of our machine specifications to open up the RFP to responses more competitively meeting our budget requirements. All of the proposals meeting our requirements exceeded our budget.

- **Respondents that have already submitted proposals need only submit an updated machine quote for an option that meets the new requirements. Respondents must address any portion of the RFP that is subject to change in their submission of a new machine quote. Multiple quotes are once again encouraged if the respondent has several options that are eligible.**
- **If a respondent has already submitted a proposal meeting the updated specifications, no further action is necessary for the proposal to be considered.**
- **Respondents that have not already made any submission may choose to do so and must address the entirety of the RFP requirements.**

The updated submission timeline includes the following dates:

1. Deadline for Proposal Submission: **6/15/20**
2. Award Announcement: **6/22/20**
3. Estimated Purchase Order Date: **6/29/20**

Below please find the machine specifications from section 1.1.4 in the original RFP with the updated portions highlighted. Precision requirements updated below supersede requirements in **Addendum 2**.

- **Machine Work Envelope and General Configuration**
  - Minimum of 20" swing over bed
  - At least 14" Maximum turning diameter
  - Minimum of 9" X Axis Travel
  - Minimum of 3.93" (100mm) Y Axis Travel
  - Minimum of 27" Z Axis Travel, 45" Maximum
  - All axes with absolute encoders
  - Minimum of 12 position turret
- **Spindle Configuration**
  - Minimum of 3,000 rpm
  - Minimum of 20 HP
  - Minimum of 3" main spindle through-bore
  - List available sub-spindle and/or tailstock configurations and options
- **Precision and Guideway Parameters**
  - Box ways or roller guideways
  - Minimum of .0008" linear positioning accuracy for each axis
  - Minimum of .0004" linear positioning repeatability for each axis

- **Tool and Part Probing**
  - List available part probing options
  - List available contact tool setting probe options
  
- **Control Configuration**
  - Siemens Sinumerik Control is preferred, other options will be considered
  - List options for additional M codes
  - Full simultaneous 4-axis machining supported
  
- **Tooling Voucher**
  - Machine package includes \$20,000 tooling voucher to cover the cost of equipping the machine
  
- **Chip & Swarf Removal, Guideway Covers, Coolant**
  - Fully enclosed work envelope
  - List available options for chip conveyors with recommendations
  - List options for additional protection from machining of graphite and other fine carbon or composite materials
  - Flood coolant and high pressure coolant (**minimum 300 psi**)
  - Includes oil skimmer
  
- **Machine Delivery & Setup Requirements**
  - Delivery and rigging needs to include placing machine on floor in the Advanced Manufacturing Center's specified location in the total cost with the machine ready for utility hookup to be performed by the University
  - Machine control must be configurable for ITAR/export controlled operation (offline, secured local networking, etc.)

Chosen respondent must perform a part run-off on-site at the factory before shipping and at the AMC upon arrival and setup (ISO 10791-7:2020 or equivalent)

  - AMC facility requires 208VAC or 480VAC machine power input.