Portland-Metro 27500 SW Parkway Avenue Wilsonville, OR 97070

## REQUEST FOR PROPOSALS #2024-05 CNC MILLING MACHINE FOR HARD METALS ROUGHING RESPONSE TO CLARIFYING QUESTIONS I September 20, 2024

Note that these are questions submitted by interested firms to this solicitation. The below answers are for clarification purposes only and in no way alter or amend the solicitation as published.

- 1. **QUESTION:** Are the axes travels in below specification possibly transposed? The 1800mm in Z axis seems excessive and maybe out of place, perhaps 1800mm of travel should be the spec for the X (or even Y) axis?
  - Axis travels must be approximately 1250mm (X), 1250mm (Y), and 1800mm (Z)

**ANSWER:** In this regard we would like the bidder to proceed with recommending the machine envelope that is a standard offering closest to the ask in the RFP. Their solution will be evaluated against numerous other performance criteria identified in the RFP.

- 2. **QUESTION:** For the 3 cutting tests below, can you confirm the type/brand of cutting tools to be used, the material being machining, as well as the fixturing employed i.e. tombstone etc. Also, if tombstone, how high on the tombstone with the test part be mounted?
  - Machine acceptance will be split into three (3) primary tests outlined below that must be completed at Machine Manufacturers facility as well as at Oregon Tech's campus in Scappoose, Oregon (OMIC R&D).
  - OMIC R&D will supply the necessary materials, cutters, and holders to complete this test.

**ANSWER:** This cutter would be a Kennametal HU8X DIA 3" X 5" LOC. Our preference would be to have a tombstone setup on the bed. Workpiece is Ti6AL4V grade 5, to be mounted on the tombstone at the center of the X & Y axis travels. The workpiece would be approximately 12" X 12" X 4". We want to see the machine performance on all sides of the mounted workpiece, and therefore will be doing complete Periphery cuts.

NOTE: The specific details on final buyoff tests will occur after the RFP has been awarded. OMIC recognizes the need to be flexible on specific parameters for buyoff cuts, and will collaborate with the selected supplier in arriving at the final cutting conditions.

- 3. **QUESTION:** Lastly, for the positional tolerancing cuts noted below the two industry standard test cuts are circle, diamond, square AND/OR taper cone test. It appears you may have combined the two into one statement. Further a taper cone test cannot be conducted on a 4-axis machine which is what this RFP is asking for, please have a look and advise:
  - 3. Positional Tolerancing Cuts:
  - A. This will be the classical circle, diamond, cone test
  - B. Use Manufacturer standard circle, diamond, cone or similar buy-off artifact to inspect positional tolerancing.

**ANSWER:** We were aware of this functionality for testing. OMIC is flexible on seeking bids for a 4 or 5 Axis machine. Therefore, the appropriate Positional Tolerancing Cuts will be made depending on machine selected and its number of Axis.

End of Response to Clarifying Questions I