

Klamath Falls: 3201 Campus Drive Klamath Falls, OR 97601 Portland-Metro: 27500 SW Parkway Avenue Wilsonville, OR 97070

REQUEST FOR PROPOSALS #2024-05 CNC MILLING MACHINE FOR HARD METALS ROUGHING ADDENDUM NUMBER ONE September 20, 2024

On September 17, 2024, the Oregon Institute of Technology ("Oregon Tech"), published Request for Proposals #2024-05 CNC Milling Machine for Hard Metals Roughing ("RFP").

Oregon Tech has found that it is in its interest to amend the RFP through the issuance of this Addendum Number One. Except as expressly amended below, all other terms and conditions of the original RFP shall remain unchanged.

1. The first section of the **SCOPE OF WORK** is modified as follows (addition in <u>double</u> <u>underline</u>; deletion in <u>strikethrough</u>):

SCOPE OF WORK

Proposer must denote that their proposed machine either meets or does not meet the below requirements in the proposal:

- Machine preference is for a Horizontal types 4 axis machining center. Vertical configurations will be considered if axis rigidity is comparable to horizontal variations.
- Spindle RPM no less than 6,000 RPM and no higher than 12,000 RPM
- Spindle HP must be between 30 to 50 HP+ (22 to 37 kW+)
- Spindle torque must be between 550 to 650 ft-lbs. (745 to 881 Nm). Torque curve and machine buy-off must demonstrate approximately 30 HP and 550 ft-lb (or greater) of Torque at around 200 RPM
- Machine Axis Drive Ratings must be able to push approximately 2500kg (5500lbs) or greater of cutting force
- If available Proposer must bid optional heavy duty spindle bearings
- Table must be a 1,000mm x 1,000mm pallet. Multiple pallet or pallet switching capability is not required
- Axis travels must be approximately 1250mm (X), 1250mm (Y), and 1800mm (Z)
- Machine must have minimum 80bar (1000psi) through the tool coolant pressure
- Machine must have spindle face coolant
- Machine must have a wash down hose
- Machine must have an HSK-100 tool interface
- Machine must have an ATC capacity of 50 tools

- Machine must be able to support cutters up to approximately 15" max tool gage length and 40lbs max tool weight
- <u>Bidders should include their in-market standard controller offerings that provide the</u> most seamless communication and compatibility with their machine.
- Controller type preference for a Heidenhain TNC7 or a Siemens Sinumerk1. Proposer must provide either as options to be selected by Oregon Tech.
- Machine must be equipped with Renishaw RPM 600, OSP60 SPRINT, and NC4+ (including necessary software) if utilizing a Siemens based control. Machine must be equipped with a TS 460, TS 760, TT460, and Vt121 (including necessary software)
- Machine must be capable of supporting tools approximately 400mm in length and/or 20kg
- Machine must be capable of loading by overhead crane
- Machine must come with a mist collection system. Preference for Proposer to bid an Absolent air filtration system appropriately sized for machine volume. Oregon Tech will provide contact information as requested.
- Proposer must provide options for additional envelope lighting, windows, Visitec Visiport or Rotoclear S3, and a Rotoclear C2 with dual cameras for top view and spindle mounted tool view.
- Machine must come with all necessary hardware and software to support machine monitoring by a 3rd party through and IP XML trickle feed using FASOPC, OPCUA, MTConnect or similar protocols.
- Machine must be capable of integrating with a Caron Engineering TMAC system, to be installed by Oregon Tech after machine delivery. Machine Manufacturer or Proposer has no obligation other than to certify the machine is capable of integration.

End of Addendum Number One