Request for Proposals (RFP): CNC Plasma Cutting Systems

Project Overview: Fort Scott Community College is seeking proposals for two high-precision CNC Plasma Cutting Systems. One system 60”x60”, and the second 48”x90”. The system must handle a diverse range of materials and thicknesses with high stability and automation.

1. Technical Specifications

The proposed system must meet or exceed the following hardware and performance requirements:

- **Cutting Capacity:** Quality pierce and cuts from 16ga Stainless Steel up to 0.750” Mild Steel for the larger table and 0.625” Mild Steel for the smaller table.
- **Power Compatibility:** Integrated accommodations for Hypertherm Powermax 85 for the larger table and Hypertherm Powermax 65.
- **Motion Control:**
    - **4-Axis System:** Dual side drive with a 4-Axis CNC control system.
    - **Motors:** NEMA 34 double stack (700 oz-in) and single stack servo motors with onboard closed-loop control.
    - **Precision:** 25:1 precision concentric planetary gearboxes with 6 arc minute resolution.
    - **Backlash Management:** Pneumatic gear engagement for all axes.
- **Structure:** * 6061 Aluminum gantry beam.
    - 4”x4”x3/16” tube top rail and 3”x3”x3/16” tube frame construction.
    - Heavy-duty 30 series linear guide ways with wide-body cassettes.

2. Integrated Technology & Software

- **Torch Height Control:** Variable Sensing Technology (VST) Automatic Torch Height CPU.
- **Safety:** Magnetic breakaway torch holder with integrated proximity control.
- **Software Suite:** Full CNC, CAM, and 2D CAD software included.
- **Pre-Programming:** Must include machine posts for all gauge metals and specialized small hole cut quality settings.
- **Operator Interface:** Roll-around station with monitor, keyboard, and mouse; IP65 rated drive control enclosure.

3. Water Management System

- **Tray:** epoxy-coated water tray.
- **Level Control:** Pneumatic water level adjustment.
- **Storage:** Heavy-wall high-density polyethylene pneumatic storage tank with bronze valving.

4. Scope of Delivery & Support

- **Installation/Training:** In-house training and onsite training.
- **Warranty:** Minimum 2-year comprehensive warranty.
- **Table Sizes:** Minimum 60”x60” and 48”x90” effective cutting area.

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5. Proposal Submission Requirements

Please include the following in your bid:

1. **Itemized Pricing:** Base system price plus individual pricing for "Available Options" (Oxy/Fuel torch with AOF software and Pneumatic marking attachment).
2. **Lead Time:** Estimated time from order to delivery/installation.
3. **Service Plan:** Details on technical support after the warranty period.

6. Evaluation Criteria

Proposals will be evaluated based on:

- **Technical Compliance:** Adherence to the exact motor and frame specs provided.
- **Support & Training:** Quality of the training package offered.
- **Total Cost of Ownership:** Including consumables and maintenance.

All interested parties should contact Rory Chaplin (620-232-5644) for additional questions.

Proposals can be submitted by email to RFP@fortscott.edu

OR

Sealed envelope marked FSCC Perkins to:

Fort Scott Community College
Attention: Gina Shelton, FSCC Perkins
2108 S Horton St
Fort Scott, KS 66701

All proposals must be received by January 23rd, 2026 by 2:00 p.m. in the manner outlined above to be considered. Fort Scott Community College reserves the right to refuse any and all proposals submitted. All proposals are subject to board approval and availability of grant funds.