

# Specifications

1. **Overview / Scope:** Department of general Services (DGS) will be ordering a 66 ton Ironworker with five integrated working stations to be delivered to and installed at Thaddeus Stevens College of Technology 750 E. King Street Lancaster, PA 17602. Any shipping and installation charges must be factored into the unit cost of the item. Bid pricing should be a unit price for one unit.
2. **Eligibility:** In order to be eligible for award, a bidder must comply with the following:
  - A. bidder must be the manufacturer of the products being offered, or be an authorized representative reseller or distributor of the manufacturer's products
  - B. Bids must be received on time and completed in its entirety
3. **Method of Award:** An award will be made to the lowest responsive, and responsible bidder.
4. **Documents to be returned with bid:**
  - A. Cover letter with contact information of Representative with knowledge of this procurement
  - B. Documentation of machine being proposed with specifications such as owner's manual
  - C. Lobbying Certification and Disclosure Form
  - D. Reciprocal Limitations Form
5. **Specification:**
  - A. Products must meet all requirements and be equal to or exceeding quality and specification.
  - B. All items provided resulting from this IFB must be NEW, and not demonstrator, rebuilt, reconditioned refurbished, remanufactured or used in anyway.
  - C. Quantities listed are estimated. Each piece of equipment must possess the features listed to follow the program curriculum at Thaddeus Stevens Collage:
    1. 66 ton Ironworker
      - Ironworker will have a heavy 40" duty adjustable back gauge system for the plate shear
      - Five fully integrated working stations
      - Two cylinder operation with separate remote foot pedals, one for the punch and one for the shearing stations
      - Simultaneous operation of both punch and shearing stations (controlled independently)
      - Punch cylinder with 4" stroke length and adjustable limit switches
      - Cylinder is machined flat to insure proper alignment
      - Cylinder has high density bronze bushings
      - Heavy-Duty adjustable punch stripper with visibility window
      - Quick-change punch holder including all necessary punch sleeves to accommodate up to 2" round punch
      - Machined punch gauging table with adjustable X-Y back stops, scales and roller bearings for easy positioning
      - Dual-Opening die holder with overhang for punching channel flanges
      - All necessary die holders to accommodate up to 2" round hole

- Slug bucket
- T-slot bolster for rapid adjustment of die holder and easy accessory mounting
- Angle shear with no material loss cut and four-edge blades
- 45 degree miter cut of angles
- Section shear for 90 degree shearing of round and square bar up to machines capacity.
- Plate shear with special rake angle to keep shearing deformation to a minimum. Four edge lower blade and two edge upper blade
- Support table for plate shear with adjustable guides and scribe marks
- Adjustable plate shear hold down with opening for miter cutting of angles (Hydraulic hold down available)
- 40" electric touch – n – go back gauge adjustable to accommodate plate, angle shear and section shear
- Back gauge with proximity sensor
- Notching station with rectangular blades for shearing flat bar or angles
- Machined notcher gauging table with adjustable X-Y stops and scales
- Notcher station guard with electrical safety interlock and flashing warning light
- Short-stroke switch for notcher eliminates need to adjust limit switches to shorten stroke
- Magnetic LED work light
- Jog or full-stroke functions
- 13 sets punches and dies – 1/4", 5/16", 3/8", 1/2", 9/16", 11/16", 13/16", 15/16", 1", 1-1/16", 1-1/4", 1-3/8", 1-1/2"
- Hydraulic system protected with suction strainer as well as spin-on return line filter
- 480 volt operation. Low voltage at the controls
- Emergency stop palm buttons on both ends of machine
- Start Up and Training Video, Tool kit, Manual, Electrical and Hydraulic Schematics
- 1 day on site set-up, training and support

## Ironworker Capacities – Based on Mild Steel

- **PUNCH**
- 66 tons
- PUNCH CAPACITY - 1-1/2" in 3/8" material or 2" in 5/16" material
- Throat depth - 12"
- Stroke length - 4"
- Cycles - 30/min
- Working Height - 40" to top of die
- **ANGLE SHEAR**
- Maximum capacity 90 degree - 5" x 5" x 1/2"
- Maximum capacity 45 degree - 2-1/2" x 2-1/2" x 5/16"

- Working Height 44"
- Angle shear blades will have (4) cutting edges for sharpening
- **SECTION SHEAR**
- Round bar capacity - 1-1/2" (blade includes 1/2", 1", 1-1/2" openings)
- Square bar capacity - 1-1/2" (blade includes 3/4" and 1-1/2" openings)
- Working Height 48"
- **PLATE SHEAR**
- 14" wide x 9/16" thick
- Maximum - 10" wide x 3/4" thick
- Angle mitering capacity - 4"
- Working Height - 36"
- **NOTCHER**
- 2" width x 3-1/2" depth in 3/8" material
- Working Height 36"
- **Motor**
- 7-1/2 HP - 3/60/480
- **Filtration**
- Hydraulic fluid will be filtered twice.
- A suction filter on the intake.
- Spin on filter on the return.

**Questions / Inquiries:**

All questions about this IFB must be submitted by email to Chasity Beward at [cbeward@pa.gov](mailto:cbeward@pa.gov). Questions must be submitted no later than seven (5) days prior to bid closing. Questions submitted by any other means will not be accepted.