# Scope

This micro-credential sets the minimum criteria for a person to demonstrate competency pre-tensioning a fastener using hydraulic tension tools.

# MICRO-CREDENTIAL Hydraulic Tension Tool

* 1. Did the candidate complete all Workplace Safety Training topics?
     1. Candidate MUST
        1. Have completed ALL Workplace Safety Training topics prior to attempting this competency
  2. Did the candidate perform a hazard assessment for the work about to be demonstrated?
     1. Candidate MUST
        1. Perform a hazard assessment for the area in which they are to demonstrate hydraulic tension tools
        2. Use safety glasses as a minimum requirement for PPE
        3. Verbally communicate to the evaluator and include all recognized hazards
     2. Proper PPE MUST
        1. Be selected and inspected for the hazards identified
  3. Did the candidate locate the proper tension value for the fastener(s) they are preparing to tension?
     1. Candidate MUST
        1. Use a recognized resource to determine the tension value of the fastener(s) they intend to demonstrate the tension process with
           1. These resources include but are not limited to trades books, service manuals, ASME, ASE or vetted internet resources
        2. Evaluator MUST
           1. Verify the tension value BEFORE the candidate demonstrates the tension process
  4. Did the candidate set up the hydraulic tension tool properly?
     1. Candidate MUST
        1. Properly connect all hoses, tool head and power unit
        2. Use the correct tool head pressure chart to locate the required pressure setting
        3. Demonstrate setting the correct hydraulic pressure
        4. Demonstrate installing the tension head on the fastener
  5. Did the candidate properly demonstrate tensioning a fastener with the hydraulic tension tool?
     1. Candidate MUST
        1. Demonstrate tensioning the fastener(s) identified in Step C
        2. Demonstrate the rotation of the nut down to the surface
        3. Explain to the evaluator what torque value is used to ensure the nut is seated and that the tool has not been stressed beyond the design parameters
  6. Did the candidate demonstrate proper disassembly and storage of the hydraulic tension tool?
     1. Candidate MUST
        1. Correctly disassemble the tension tool while taking all safety precautions involving pressurized fluids
           1. Hose ends MUST

Be assembled together to prevent dirt intrusion

All protective caps MUST be in place

* + - * 1. Tool head, power unit and hoses MUST be inspected for any damages that occurred during use
  1. Did the candidate perform all tasks safely?
     1. Candidate MUST
        1. Demonstrate the task safely while incorporating all identified PPE from the hazard assessment in Step A