Position Summary:
The position will provide support for flexible metal piping products (bellows, expansion joints, hoses) being sold into the Aerospace, Automotive, and General Industries. Responsibilities include but are not limited to new weld process and parameter development, documentation, process optimization & automation, root cause analysis and corrective actions, new design development and support.

Essential Duties and Responsibilities
- Develop, optimize, and qualify weld processes and parameters for multiple welding processes including but not limited, to gas tungsten arc welding, plasma arc welding, resistance welding, and gas metal arc welding.
- Test and qualify welders in accordance with applicable techniques, standards, customer requirements, and other industry codes.
- Support production operations on full scale welded assemblies, providing direction to welding technicians and supervisors on correct techniques in a fast-paced manufacturing environment.
- Support design, manufacturing, and materials engineering with root cause analysis.
- Work closely with design, tooling, automation, and product design engineers to improve welded designs for manufacturing.
- Set up welding qualification test campaigns and interpret mechanical testing and NDE results.
- Work closely with NDE personnel to interpret weld quality on development and production hardware.
- Develop and implement process controls where possible using test and NDE results to improve overall weld process yield.
- Research and recommend new welding technologies that may be employed to improve rate/quality/efficiency.
Perform producibility reviews on engineering designs to assess manufacturability, ease of assembly, and material availability.
Generate special tooling solutions and shop aids for production level producibility.

**Required Education and/or Experience**
- Ability to learn quickly in a high pace environment.
- Bachelor’s degree in an engineering discipline required.
- Hands on welding experience of stainless steel, nickel-based, titanium, and aluminum alloys.
- Fundamental understanding of welding processes including, but not limited to, plasma arc, resistance, gas tungsten arc, and gas metal arc.
- Knowledge of basic weld destructive and non-destructive testing and interpretation thereof.

**Preferred Skills and Experience**
- Bachelor’s or Master’s degree in Weld Engineering or Material Science.
- Experience and/or domain knowledge of
  - GTAW linear seam welding of thin materials
  - Resistance seam welding
  - Pressure bearing piping or vessel components and codes. Namely: ASME Pipe and Pressure Vessel Codes, ASME Section IX, AWS D17.1 & D17.2
- Metallographic processing and interpretation.
- Robot programming experience for automated welding solutions.
- Tooling design experience for welded assemblies to reduce part distortion and improve part consistency.
- Military service is acknowledged and appreciated.

**Additional Competencies**
- Proficiency in computer applications including Microsoft Excel, Outlook, and Word. Advanced skills in Excel, Microsoft Project, Solidworks or other relevant software a plus.
- Familiarity with an ERP or MRP system such as SAP a plus.
- Excellent professional communication skills (written and verbal).
- Excellent organization skills with the ability to multitask and prioritize with minimal supervision.
- Ability to apply design theory across a multitude of industries/markets.

**Work Environment**
- Working conditions are split between a standard office environment and production environment.
- Ability to perform job duties that require standing, kneeling, crouching, twisting upper body, lifting of objects up to 25lbs.

**Travel**
- Travel requirements are minimal.
The above statements are intended to describe the general nature and level of work being performed by most people assigned to this job. They are not intended to be an exhaustive list of all responsibilities, duties, and requirements.