

# Welder Job Description

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## Duties and Responsibilities:

- Utilize plasma, gas or electric arc in welding metallic and composite materials together
- Heat and dissolve metal parts to obtain molten substance used in welding or extrusion
- Oversee the installation of tank linings, valves, lead pipes, and floor
- Conduct x-ray, hydrostatic, and tolerance tests on welded parts to verify weld quality and conformance to specification
- Operate manual and semi-automatic welding equipment in vertical, horizontal, or overhead positions
- Use power saws, chipping knife and hand shears in cutting, beveling, and contouring metal workpieces
- Repair structures by dismantling, reshaping, and reassembling metal components using cutting torches and hand tools
- Maintain an up-to-date knowledge of local and international building codes/legal requirements
- Monitor work equipment to ensure usage is within optimum temperature to avoid overheating or expansion
- Prepare metal surfaces by cleaning with chemical solutions and wire brushes to remove impurities such as scale, rust, grease, and moisture
- Design patterns and models for a welding project using specifications contained in a blueprint
- Direct electrodes on or across metal workpieces to melt, bend or straighten them
- Mount and secure workpieces on production equipment using cranes, hoists or banding machines
- Conduct estimates to determine the amount and cost of materials required for construction
- Mix and apply protective or decorative coat on finished products.

## Welder Requirements – Skills, Knowledge, and Abilities

- Education and Training: To become a welder, you require a high school diploma and several years of training as a welding apprentice. You are required to pass welding competency tests in order to obtain relevant welding fabricator certification. About 2-6 years of welding experience is also necessary for the welder job
- Math Skill: Welders are able to carry out complex calculations to determine the dimension and configuration of a welding project
- Physical Stamina: They are able to perform welding operations under extreme conditions such as inclement weather and limited workspace
- Manual Dexterity: They are able to operate and utilize a range of power and hand tools in carrying out welding activities
- Pre-employment tests: To be hired for a welding job, or for an apprenticeship position, you may be required to take an assessment test. Learn about [job assessment tests](#) for this role and how you can make high scores in them.