

Structural Welder Job Description

- Calibrate welding tools and equipment according to the parameters listed in the welding procedure specification (WPS)
- Analyze blueprints and structural drawings to layout the framework of a structure
- Secure and fasten structural components using clamps, braces, jacks, and bolt straps
- Carry out post-welding treatment of structures by cleaning, buffing, and polishing finished workpieces
- Inspect and evaluate welds to ensure they are free of defect and conform to set specifications
- Conduct estimates to determine the cost of materials required for a welding project
- Employ appropriate welding methods in completing structural fabrications
- Operate cranes and forklifts to convey metal components and work materials to construction site
- Utilize manual and mechanical processes to weld in various positions
- Carry out fillet, tack, and full penetration welding on steel foundations and structural joints in aerospace carriers and submarines
- Apply welding processes such as GMAW (Gas Metal Arc Welding), FCAW (Flux Core Arc Welding) and SMAW (Shielded Metal Arc Welding)
- Carry out welding operations under intense conditions such as extreme heights, confined spaces and inclement weather
- Troubleshoot structures to identify and initiate repair of welding defects
- Fit and weld metal components for pipelines, boilers, tanks and structural steel
- Set equipment to weld in vertical, horizontal, flat or overhead positions.