JOB DESCRIPTION

CONSTRUCTION BOILERMAKER

TASKS ASSOCIATED TO THE CONSTRUCTION BOILERMAKER INDUSTRY:

Assemble, erect and maintain boilers, tanks, pressure vessels, heat exchangers, calandrias, pollution control systems, furnaces, condensers, water towers, penstocks and scroll casings using hoisting, rigging, welding equipment, tools and hardware as required by drawings, specifications and the applicable codes and standards.

Describe and comply with the regulations under the Occupational Health and Safety Act during the performance of all work.

Demonstrate ability to work in confined spaces wearing restrictive personal protective equipment while performing all tasks effectively.

Demonstrate ability to work at heights wearing restrictive personal protective equipment while performing all tasks effectively.

Erect and connect support structures for the installation using hoisting, rigging, welding and fitting equipment, tools and hardware as required by drawings and specifications.

Plumb and align components using precision measuring and leveling devices and equipment, securing with temporary supports to achieve the fit and tolerances required by drawings and specifications.

Weld, bolt and torque the fasteners of component pieces and sections following the specified bolting and welding sequence and procedure required by drawings and specifications.

Select materials, tools and equipment; fabricate or modify plate fitting devices; clean, grid, gouge and prepare joints; fit and align plate sections and weld as required by drawings and specifications.

Set up, maintain and operate oxy-fuel, shielded metal arc, tungsten inert gas, metal inert gas, high frequency, plastic and stud welding equipment; perform cutting operations with oxy-fuel, plasma arc, and air-arc cutting and gouging equipment; pre-heat and post heat metals with propane, oxy-fuel and electrical equipment; produce welds of sufficient quality to meet the applicable codes and standards established by the Technical Standards and Safety Authority (T.S.S.A.), the Canadian Welding Bureau (C.W.B.), or the American Society of Mechanical Engineers (A.S.M.E.).

Tie off material, demonstrate standard hand signals, perform calculations and rig and hoist material in compliance with (O.H.S.A.) using slings, shackles, blocks, tuggers, boom trucks and related equipment to effectively control load balance and direction and disassemble all equipment safely.

Assemble and disassemble hoisting and rigging equipment including slings, shackles, spreader bars, lifting beams, turnbuckles, and blocks and demonstrating care and handling to ensure that rigging and hoisting operations are performed safely and effectively.

Determine platform and scaffold requirements by inspecting the work location to establish; the height of the installation, accessibility, proximity of work, total bearing load, number of workers, and degree of maneuverability necessary for the work to be performed.

Install ladders including site fabricated and permanent types, securing all components and removing where required in compliance with O.H.S.A.

Install site fabricated work platforms including angle iron, channel, pipe, beam and decking types, securing all components and removing where required in compliance with O.H.S.A.

Erect knee brace and clip scaffold, ensure correct clip welding and spacing and securing all components and removing where required in compliance with O.H.S.A.

Erect swing stages, including manual and power operated types, testing operation of all components and removing where required in compliance with O.H.S.A.

Erect safeway scaffold, including related brackets and attachments, securing all components and removing where required in compliance with O.H.S.A.

Erect tube and clamp scaffold including related brackets and attachments, securing all components and removing where required in compliance with O.H.S.A.

Set up and operate mechanical man lifts following manufacturers' operating instructions to ensure safe effective operations in compliance with O.H.S.A.

Hang suspended scaffolds, including related brackets and attachments, securing all components and removing where required in compliance with O.H.S.A.