

Job Description

Position Information			
JOB CODE DESCRIPTION		RADIUS POSITION TITLE	CATEGORY
Engineer – Material and Process		Welding Engineer	<input type="checkbox"/> UNION <input checked="" type="checkbox"/> NON-UNION
JOB FAMILY	FLSA	PAY GRADES	JOB CODES
Material and Process Eng.	Exempt	42-46	E1300E-E1304E

Position Summary

Evaluate, develop and monitor manufacturing welding processes and methods. Conduct material analysis, including failure analysis and cause analysis on welding issues.

Essential Duties and Responsibilities

- Develops welding techniques, procedures and application of welding equipment to problems involving fabrication of metals.
- Establishes welding procedures to guide production and welding personnel relating to specifications, material processes, pre- and post-heating requirements, fabrication methods, welding of critical joints.
- Evaluates and analyzes new developments or designs in welding for application to current welding problems or production processes.
- Investigate and troubleshoot manufacturing problems with welding processes.
- Conduct material analysis, including failure analysis and cause analysis on welding issues.
- Create documentation of welding parameters.
- Maintain and update documented training process for welders and supervisors.
- Maintain company NADCAP welding accreditations.
- Document machine standards for welding equipment and make recommendations for support equipment.
- Conduct training, observations and oversight of the welding procedures and processes.
- Know and understand company and department policies and safety procedures.
- Report to work on time, follow instructions from supervisor or management, interact well co-workers, understand and follow work rules and procedures.
- Other duties as assigned, requested or needed.

Position Requirements

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Education and Experience:

- Bachelor's degree in weld engineering or similar discipline (mechanical, aerospace, materials) from accredited college or university.
- 6 years' experience or equivalent combination of education and experience.
- Certified welding inspector or ability to get certified.
- Hands-on weld experience preferred.

Knowledge, Skills and Abilities:

- Knowledge of processes including Gas Tungsten Arc Welding (GTAW – TIG), resistance spot and seam welding, brazing and plasma.
- Knowledge and understanding of welding codes, materials, weld symbols and drawings.
- Experience with carbon steel, stainless steel, nickel alloys, aluminum and titanium.

- Knowledge of NADCAP requirements (AWS 217.1, AWS D17.2).
- Ability to perform basic arithmetic and express in measurements of percentage, fractions and decimals.
- Ability to provide verbal and written communication.
- Knowledge of manual or mechanized welding processes.
- Basic computer skills, including Word, Excel and PowerPoint.

Physical and Environmental Demands

Manufacturing environment may be exposed to noise levels, dust, grime and heat. Must wear appropriate personal protective equipment.

Physical and environmental conditions of the essential duties of the job.

"F" for frequently; "O" for occasionally; "N" for not at all.

On the job the employee must:		On the job the employee must be able to:	On the job the employee:
(O) Bend (N) Squat, kneel, or crouch (N) Crawl (N) Climb or balance (F) Reach with hands & arms (F) Use fine finger movements () Other _____ (F) Sit (O) Stand (O) Walk (O) Push/Pull (F) Talk or hear (F) Handle Objects (manual dexterity)	Carry/lift loads of: () Up to 10 lbs () Up to 25 lbs (X) Up to 50 lbs () Up to 100 lbs () More than 100 lbs	(F) Read/comprehend (F) Write (F) Perform calculations (F) Communicate orally (F) Reason and analyze () Other _____	(O) Is exposed to excessive noise (N) Is exposed to extreme cold (non-weather) (N) Is exposed to extreme heat (non-weather) (N) Is exposed to marked changes in temperature and/or humidity (O) Is around moving machinery (N) Is exposed to dust, fumes, gases, radiation, microwave (circle) (N) Drives motorized equipment (N) Works in confined quarters (N) Works in high, precarious places (N) Works with explosives (N) Is exposed to Vibration () Other _____

Prepared by Human Resources

Date

Approved by

Date

Acknowledgement

This document is intended to describe the general content and identify essential functions and requirements to perform this job. It is not an exhaustive statement of duties, responsibilities or requirements. Radius Aerospace complies with all laws pertaining to accommodation of disabled individuals and considers reasonable accommodation measures that may be necessary for eligible applicants/employees to perform essential job functions.

Employee Signature

Date

Manager Signature

Date