



JOB TITLE: COLD SPRAY PROCESS DEVELOPMENT ENGINEER (OFF-SITE)  
REPORTS TO: TBD  
FLSA STATUS: EXEMPT  
PREPARED DATE: FEBRUARY 9, 2021

**SUMMARY:** Design, develop and produce Cold Spray processes and evaluation procedures. Facilitate development and testing of recipes in support of company capabilities. Determine applicable testing regimen to quantify and qualify results of spray operations. Oversee production runs of the spray operation. On occasion supervise experts in cold spray applications. This position will require at least 3 months of training at VRC before relocating to a site for a determined amount of time.

**QUALIFICATIONS:** To perform this job successfully, the individual must be able to perform each essential duty and responsibility in a safe and satisfactory manner. The requirements listed below are representative of the knowledge, skill, and/or ability required.

**ESSENTIAL JOB FUNCTIONS:**

- Manage daily workload for Spray Ops Department
- Adjust any and all variables in Cold Spray Process to improve existing recipes and create new ones
- Long term planning to coordinate multiple complex development activities
- Work with project engineers and technicians to plan design projects and production runs
- Evaluate test data and help troubleshoot recipes
- Work with Spray Ops team to evaluate processes and procedures to achieve repeatability
- Maintain document system that conforms to ISO 9001-2015 requirements

Reasonable accommodations may be made to enable individuals with disabilities perform the essential functions. Other duties may be assigned.

**SUPERVISORY RESPONSIBILITIES:**

Engineers and technicians when working on directed projects

**EDUCATION and EXPERIENCE:**

- Bachelor of Science in Engineering, advanced degree highly desired
- Understanding of automated controls systems
- Solid understanding of powdered metals, alloys, and mixed metallic/ceramic
- Expert with heat transfer, thermodynamics, stress analysis
- High level understanding of numerical and finite elements analysis methods
- Firm knowledge of 3D modeling software and familiar with manufacturing design records keeping

**LANGUAGE SKILLS:**

- Read and interpret documents in English such as safety rules, operating and maintenance instructions, and procedure manuals, newspapers, periodicals, journals, and manuals
- Able to develop, write, format, and communicate policy and procedure
- Write routine business and technical reports, correspondence, business letters, summaries, and reports in English using prescribed format, conform to all rules of punctuation, grammar, and style
- Ability to speak effectively in English before groups such as customers or employees
- Ability to develop and maintain a professional working relationship with all team members

**COMPUTER SKILLS:**

- Microsoft Word, Power Point, and Excel at an advanced level

- Proficiency in CAD/CAM and robotics software highly desired
- Proficient in electronic forms of communication including email, web searching, and data organization

**REASONING ABILITY:**

- Apply common sense understanding to follow instructions furnished in written, oral, or diagram form
- Use mathematical skills to interpret mechanical and metallurgical findings, financial information, and prepare budgets

**PHYSICAL DEMANDS:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. While performing the duties of this job, the employee is regularly required to stand; walk; use hands to finger, handle, or feel; reach with hands and arms; stoop, kneel, crouch, or crawl; and talk or hear. The employee must regularly lift and/or move up to 10 pounds and frequently lift and/or move up to 50 pounds. The employee must be able to see differences in widths and lengths of lines such as those on graphs. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**ADDITIONAL POSITION-RELATED DEMANDS:**

This position is a safety-sensitive role, as defined in 14 CFR part 120. The employee will need to understand and acknowledge that they will be required to undergo a DOT/FAA pre-employment drug test for the prohibited drugs defined in 49 CFR § 40.3 and must receive a verified negative result prior to being hired or transferred into a DOT safety-sensitive position. The employee will also be subject to random, post-accident, reasonable cause, return-to-duty, and follow-up drug/alcohol testing. Any employee who refuses to submit to testing, will be terminated. Any employee testing positive for drugs or alcohol will be directed to an education/rehabilitation program to allow them to stay employed. The employee will need to test negative before returning to work. If the employee fails to test negative, further consequences will be taken and will result in termination of employment.

**ENVIRONMENTAL CONDITIONS:**

Inside: Protection from weather conditions but not necessarily from temperature changes. Much of the work will be done in a machine shop type environment with high noise levels, dust, and other hazards associated with machining work. A job is considered "inside" if the worker spends approximately 75 percent or more of the time inside.

**WORK ENVIRONMENT:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

- Must be able to work effectively in a dynamic and fast-paced environment, communicate well with others, effectively deal with technicians and customers, and accept constructive criticism
- Must be able to change activity frequently and cope with interruptions

**IMPORTANT NOTE:** Essential functions of this job are described under the headings above. The job requirements and features are subject to change from time to time due to the dynamic nature of the Company.

It is the policy of VRC Metal Systems not to discriminate or allow the harassment of employees or applicants on the basis of sex, gender identity, sexual orientation, race, color, religious creed, national origin, physical or mental disability, protected veteran status, or any other characteristic protected by law with regard to any employment practices, including recruitment, advertising, job application procedures, hiring, upgrading, training, promotion, transfer, compensation, job assignments, benefits and/or other terms, conditions, or privileges of employment, provided the individual is qualified, with or without reasonable accommodations, to perform the essential functions of the job. This policy applies to all jobs at the Company. The Company will continue to take affirmative action to ensure that individuals are employed, and that employees are treated during employment, without regard to their sex, gender identity, sexual orientation, race, physical or mental disability, protected veteran status, or any other characteristic protected by law in all employment practices.

Employees and applicants with disabilities and disabled veterans are encouraged to inform Human Resources if they need a reasonable accommodation to perform a job for which they are otherwise qualified. The Company makes, and will continue to make, reasonable accommodations to the known physical or mental limitations of an otherwise qualified applicant or employee to promote the employment of qualified individuals with disabilities and disabled veterans, unless such accommodations would impose an undue hardship on the operations of the Company's business.