## Hans Carpio

Virginia Beach, VA 23464 845-542-2303

hans.c.carpio@gmail.com linkedin.com/in/hanscarpio

Security Clearance: Active Secret (Adjudicated FEB 2021)

### **PROFESSIONAL SUMMARY**

Senior Operations Engineer and Military Veteran Spouse with a Secret Security Clearance and 11 years of proven experience in the engineering field specializing in sustainment, quality control, process improvement, system and production readiness and command and control (C2) with supervisory experience. Accomplished measurable results: Monitored Annual Plant Turnaround Environmental Health and Safety (EHS) performance by leading team efforts in achieving EHS goals through compliance with safety requirements, resulted in an outstanding safety record for an injury free workplace with zero incidents for the third consecutive year. Managed risk upon multiple lines overseeing \$55 million capital project, that supports the execution of the Refueling and Complex Overhaul (RCOH) of US Navy Nuclear Powered Aircraft Carriers. Career supported by a Master of Science in Engineering Management and Bachelor of Science in Chemical Engineering (Materials Engineering Concentration).

- Quality Control
- Supplier Management
- Production Readiness
- Component Development
- Risk Management
- Dynamic Leadership
- Policy Implementation
- Training and Development
- Data Analysis
- Process Improvement
- Lean Six Sigma Techniques
- Fluent in Spanish and English

#### PROFESSIONAL EXPERIENCE

## Newport News Shipbuilding, Nuclear Propulsion Division, Newport News, VA Senior Nuclear Test Operations Engineer

2019 - Present

Provide technical direction to multiple Integrated Product Teams (IPT) including Engineering Teams, Technicians and Operators, Production Trades, Program Office, Quality Control, Maintenance and Facility Contractors in a union environment while maintaining operational ownership of systems within the Steam Generator Chemical Cleaning (SGCC) Testing Program.

- Managed \$55 million capital project, that supports the execution of the RCOH of US Nuclear Powered Aircraft Carriers.
- Oversee the facility maintenance program and operations for the Chief Test Engineer & SGCC Engineering Manager.
- Mentored, trained, led, and delegate duties to 35+ personnel developing, reviewing, and revising, as required, the execution of Navy Work Authorization Forms (WAF), safety tag out documents and specifications to support efficient work execution of our Computerized Maintenance Management System (CMMS).
- Synthesized multiple internal and external customer's contractual needs and requirements into system test solutions that acknowledges technical, schedule and cost constraints.
- Selected by upper management for the Shift Test Engineer Program, a rigorous 40+ week program, encompassing a comprehensive Naval Sea Systems Command (NAVSEA) exam and a nuclear test management oral examination board.

# State University of New York at Orange, Middletown, NY Engineering Instructor

2015 - 2019

Taught and facilitated university level STEM courses on a rotating basis to support the adjunct and tenured staff.

- Provided technical/safety oversight of institutional laboratories for the Dept of Science, Engineering and Architecture.
- Developed and implemented effective strategies that incorporated technical field experiences and technologies in relation to curriculum design and instructional design that led to a 17% growth of STEM majors.

# The Dow Chemical Company, Texas Operations EDC/VCM – Unit 5, Freeport, TX Production Engineer

2014 - 2015

Monitored Annual Plant Turnaround Environmental Health and Safety (EHS) performance by leading team efforts in achieving EHS goals through compliance with safety requirements, Life Critical Standards, and other regulatory statutes resulting in an outstanding safety record for an injury free workplace with zero incidents for the third consecutive year.

- Trained through the Engineers Driven for Growth and Excellence (EDGE) Program allowing me to gain knowledge of all applicable process technologies, equipment and control technologies while supporting chemical plant roles.
- Utilized Most Effective Technology (MET) and Operating Discipline Management System (ODMS) optimizing plant operations, plant asset utilization, reliability, yield, and generating the most cost effective quality products.

## American Smelting and Refining Company, Ray Mine Operations, Kearny, AZ Process Engineer

2013

Coordinated teams of Mine Site Operators and Laboratory Technicians to extract process data in order to analyze, evaluate, and optimize daily industrial crushing and grinding operations of ball mills and hydrocyclones.

- Determined the evolution of ore particle size distribution as a function of the energy input, improved existing relationships by assessing the effects of the feed size and material type.
- Reduced ball mills and hydrocyclones specific energy consumption by a minimum of 25% kilowatt hours per ton per day, resulting in \$150,000 in daily savings.
- Utilized extractive metallurgy skills oxide sulfide leaching operations, solvent extraction, and electrowinning (SX/EW) operations, flotation reagent testing, process mapping, and maximizing grade recovery of in house products.

## BorgWarner Morse TEC, TC Plant, Ithaca, NY Metallurgical Process Engineer / Lab Quality Engineer

2012 - 2013

Facilitated robust engineering teams inclusive of union trades and craft workers under a Lean Six Sigma Master Black Belt as an Assistant Project Manager with a focus on continuously improving product quality and process recipes, evaluating product design and development application from a safety and productivity standpoint.

- Wrote and critiqued certifications related to QS 9000, TS 16949, IATF 16949, ISO 9001 and ISO 14001.
- Delivered \$14.6 million LSS Green Belt Project on time and on budget generating \$5.5 million in new revenue.
- Lean Six Sigma Manufacturing Skills: 5S, Production Part Approval Process (PPAP), Advanced Product Quality Planning (APQP), Failure Mode and Effects Analysis (FMEA), kaizen, value stream, root cause failure analysis (RCFA).
- Supervised 12 hour rotating shifts of Laboratory Technicians to perform daily evaluations, inspections and audits of heat treatment products produced in house and from suppliers.
- Utilized quality control techniques comprised Heat treatment, powder metallurgy, hardness testing, bend strength testing, tensile testing, microstructure analysis, micro hardness traverse, and vapor diffusion process layer analysis.

## Pepsi Co., Hudson Valley, NY

2010 - 2011

## Manufacturing Process Engineer / Process Systems Engineer

Directed cross functional teams that built consensus and implemented the best solutions for materials handling and delivery by collecting, analyzing, and applying operational process data through continuous improvement of existing manufacturing processes and tools from baseline support, customer service, training, and risk mitigation.

- Designed, fabricated, installed, and validated delivery system for a new business initiative that resulted in production yield improvements translating into \$2.4 million in annual cost savings.
- Implemented Supply Chain Management, Construction and Engineering Management, Cost and Financial Analysis, and Equipment Reliability Management for maximizing production line productivity.
- Managed production lines to develop the capabilities of Hourly Lead Operators and Technicians while building relationships with suppliers, vendors, Original Equipment Manufacturer (OEM), procurement and company partners; resulted in optimized route time linearization and direct store delivery (DSD) distribution systems.
- Achieved shift True Efficiency and Reliability, Productivity, Waste Reduction metrics, Annual Operating Plans (AOP) variable costs targets of Overtime, Yield and delivered plant Quality and Safety metrics.

#### **EDUCATION**

Clarkson University (ABET Accredited)

Master of Science in Engineering Management May 2021

Bachelor of Science in Chemical Engineering (Materials Engineering Concentration) August 2015

#### **CERTIFICATIONS**

PMP, Project Management Professional, Project Management Institute (in progress)
LSSGB, Lean Six Sigma Green Belt Training, BorgWarner Morse TEC Japan Project, Honda Motor Company Jan 2013

### **TECHNICAL SKILLS**

**Software:** Microsoft Office, Electronic Shift Operations Management System (eSOMS), Work Control Management System **Operating Systems:** Microsoft Windows