

Samson Shepherd P.E.

Education

Drexel University
M.S, B.S, Mechanical Engineering
Concentration: Design for Manufacture

Philadelphia, PA
Sep. 2009-Jun.2013

Professional Experience

Arctic Manufacturing Services, LLC

Owner/ Principal Mechanical Engineer, PE

Anchorage, AK
Sept. 2020-Present

- Design, draft and stamp mechanical and plumbing drawings relating to; HVAC, chilled/heating water systems, domestic water/waste, O&G facility piping and modules.
- Conduct site-visits in remote work environments.
- Apply IBC, IMC, UPC, ASME B31, IX and UL 142 codes.
- Perform machine design and design for manufacturing using Inventor, SolidWorks and AutoCAD.
- Prepare feasibility studies, Code Compliance Reviews and peer/independent reviews.
- Fabricate small batch production runs including; design, procurement, cutting, welding, assembly and testing.

Dowland-Bach Corporation

Engineering Manager/ Principal Mechanical Engineer, PE

Anchorage, AK
Aug. 2018-Sept. 2020

- Managed electrical, mechanical designers and automation engineers for full system integration of products.
- Managed and maintained cradle to grave contracts for UL508a panels, stainless enclosures, skids and custom fabrication projects in both hazardous and non hazardous environments.
- Prepared proposals, submittals, 2D/3D drawings and oversaw manufacturing and final QC/testing of products.
- Pursued and developed alternative markets to diversify company's revenue streams.
- Conducted site visits in highly safety conscious and sometimes hazardous, Arctic and North Slope settings.
- Reviewed and applied ASME B31.3, 31.4,31.8, ASME Welding (IX) codes, UL 508A and 142 codes.

Norcoast Mechanical Inc.

Mechanical Engineer/Project Manager

Anchorage, AK
Feb. 2014-Aug. 2018

- Oversaw complex, multiphase and high-profile engineering projects while addressing financial constraints and complicated logistics associated with construction in Alaska.
- Exceeded in collaborating with clients, contractors and government agencies to meet or exceed design, quality, timeline and budget expectations.
- Updated and developed AutoCAD drawings from hard copy and red-lined drawings.
- Designed heating and ventilation systems; boilers, chillers, VRF systems, plumbing and HVAC systems.
- Ensured designs and construction meet international and uniform building, plumbing and fuel codes (IBC, UPC, IFC, ASHRAE).
- Estimated and prepared job proposals.

Paragon Machine Works

Design Engineer

Richmond, CA
Sep. 2014-Aug.2015

- Designed, developed and prototyped new components for the custom bicycle frame manufacturing industry.
- Prepared quotes for manufacturing of custom parts.
- Developed g-code using MasterCAM and manual programming.
- Setup new and existing jobs on CNC mills.

Awards and Activities

- Honorary Commander: 176th AMXS
- Chair/Treasurer: Alaska ASME Section
- ASME Early Career Leadership Intern Program to Serve Engineering (ECLIPSE)
- Volunteer Judge: FIRST Lego Competitions
- Member: ASHRAE
- Member: IAPMO
- Exceptional Service to the Mechanical Engineering Department

Relevant Skills

- SolidWorks, Mastercam, AutoCAD, Inventor, Quickbooks, LabVIEW, Microsoft Office, g-code development
- Product Development
- Rapid Prototyping
- Additive Manufacturing/3D Printing
- Reverse Engineering
- TIG, MIG, Oxy-Acetylene Welding
- CNC mill, CNC lathe, drill press, shop tools

*References available upon request.