

PROFESSIONAL SUMMARY

Senior Mechanical Engineer with 20+ years of experience in analysis, design, and product development of a broad range of technical/industrial products.

Industry Experience:

Aerospace, Oil & Gas / Power Generation, Transportation, Industrial Cutting, Sensors, Food/ Pharmaceuticals, Marine, Construction

Product Exposure:

Gas Turbine Compressors, Gas Engines & Reciprocating Compressors, Vibration Isolation Mounts, Diesel Locomotive Engines & Systems, Gas Turbine Fuel Nozzles, Electro-Mechanical Solenoid Valves, Rotating Compressors, Automated Cutting Machine Systems, Piezoelectric Sensors, Dispensing Machinery, Boat Lifts & Docks, Hydraulic Construction Tools, Roofing Hoists

Engineering Capabilities:

- Analysis / Test
- Six Sigma Green Belt
- Continuous Improvement
- Solidworks
- Project Management
- Quality Initiatives
- Product Design / Development
- Lean Manufacturing
- Product Line Maintenance
- Unigraphics
- Leadership
- Finite Element Analysis
- Failure Analysis
- AutoCad / Inventor
- Pro/ENGINEER
- Mentoring / Coaching

PROFESSIONAL EXPERIENCE

REIMANN & GEORGER CORP. (RGC), Buffalo, NY

2/16 – 6/18

Celebrating 70+ Years of Quality Marine, Construction, and Roofing Hoists.

Engineering Manager – Engineering Department

Ran day-to-day Engineering Operations; provided strategic planning, drove product design & development / R&D / continuous improvement initiatives, provided team leadership/training/ professional development

- **Development:** C100 Concrete Chainsaw & Ring Saw; HV351212 Hydraulic Power Unit
- **Focused** on needs of all internal & external customers
- **Autodesk INVENTOR** and **AutoCAD**

Multisorb Technologies Inc., Buffalo, NY

7/13 – 7/15

Multisorb Technologies has been an innovator in sorbent technology and dispensers for over 50 years.

Electro-Mechanical Engineer - Equipment Systems Group (ESG)

Provided design-engineering support for high-speed dispenser machinery, product line maintenance, new product development, and continuous improvement projects.

- **Implement design changes** of machinery components and systems to address field issues, product improvements, vendor capabilities using **Autodesk INVENTOR** and **AutoCAD**.
- **Provide daily engineering support** to machine ass'y techs, inspection, purchasing, planning...
- **Developed** novel, simplified and reduced size, turn idler for sorbent product strip redirection.
- **Supported new ISO9001 certification:** created QSP's, QWI's, Forms; internal audits, etc.

PROFESSIONAL EXPERIENCE (CONTINUED)

PCB PIEZOTRONICS, Depew, NY

1/09 – 6/13

PCB leads in piezoelectric sensor technology for dynamic measurement of pressure, force, and vibration.

Design Engineer - Industrial Monitoring Instrumentation (IMI)/Power Generation

Provided design engineering support for the development of new piezoelectric sensors and continuous improvement for existing product lines.

- **Designed pressure sensors** targeted for combustion monitoring of gas turbine power generation engines using Autodesk **INVENTOR and ANSYS**.
- **Received Six Sigma training** and completed associated projects to earn **Green Belt** status.
- **Utilized novel bench testing & FEA** to analyze pressure sensor exhibiting erroneous data.
- **Supported** "Total Customer Satisfaction" quality program.

EASTMAN MACHINE COMPANY, Buffalo, NY

11/06 – 12/08

EASTMAN manufactures automated & manual cutting machines – "Over a Century of Cutting Expertise".

Mechanical Engineer, Engineering Department

Provided mechanical engineering support for development of new products and existing product maintenance.

- **Developed new Raptor Multi-Ply Automated Cutting System** using **SOLIDWORKS**.
- **Drove continuous improvement** of Eagle Conveyors cutting machines and material handling systems.
- **Supported** EMC's broad product line of hand-held cutters.

CAMERON COMPRESSION SYSTEMS (COOPER TURBOCOMPRESSOR), Buffalo, NY

2/04 – 11/06

Leading manufacturer in the compressor industry for more than 40 years.

Senior Engineer, New Product Development Group

Provided engineering expertise for development of modular air and water-cooled rotating turbo compressors.

- **Developed air-cooled TA2020 & aftermarket air-cooling units**; detailed project cost analysis, and provided manufacturing, purchasing, and quality support.
- **Conducted** TA2020 modular rotor cartridge design & development using **UNIGRAPHICS & ANSYS**.
- **Mentored** a team of college interns; provided training, guidance, career counseling, etc.

PERKIN-ELMER - FLUID SCIENCES DIVISION, Phelps, NY

10/02 – 02/04

Leader in fluid control for Aerospace and Power Generation applications.

Design Engineer, New Product Development Group

Provided design engineering support for electro-mechanical solenoid valve products; both New Product Development, and existing product lines.

- **Re-designed gearbox pressure regulator** eliminating hysteresis issue using **Pro/ENGINEER**.
- **Provided** support to Manufacturing, Quality, Assembly & Test personnel.
- **Received ANSYS** electromagnetic analysis training.

PROFESSIONAL EXPERIENCE (CONTINUED)

PARKER-HANNIFIN - GAS TURBINE FUEL SYSTEMS DIVISION, Clyde, NY 9/98 – 7/02

World's leading producer of aerospace gas turbine fuel systems.

Senior Product Engineer, New Product Development

Provided new product design engineering support for GE/Pratt & Whitney Aircraft Engine Alliance program, and product support for existing CF34-8 & CFM56 GE commercial aircraft engine fuel nozzle product lines.

- **Designed/built CF34-8 instrumented fuel nozzles** for on-engine data acquisition to investigate field issues and provide empirical data for thermal computer models.
- **Implemented \$250k cost savings** from a redesigned CFM56 flow-divider valve.
- **Received Lean Mfg training** and served on team to restructure operations into work cells.
- **Received extensive training in CADAM (CATIA) and Pro/ENGINEER.**

GENERAL ELECTRIC - TRANSPORTATION SYSTEMS (GETS), Erie, PA 7/98 – 9/98

GETS is a market leader for diesel-electric locomotives.

Senior Design Engineer, Diesel Engine Engineering/7FDL Reliability

Provided design support to address customer reliability issues and redesigns to address field issues.

- **Designed/developed/implemented \$2.5M field retrofit crankcase evacuation system** while being trained in and following Six Sigma methodology; **Green Belt** obtained.

LORD CORPORATION – MECHANICAL PRODUCTS DIVISION, Erie, PA 9/95 – 7/96

Lord is a world leader in vibration, shock, motion, and noise control.

Product Engineer, Industrial Products

Provided design support to new customer truck/bus/off-highway applications involving shock, vibration, and motion control, using standard or custom-designed rubber-bonded-to-metal vibration isolation mounts.

- **Performed** 6 DOF rigid body analyses for mounting engines, cabs, and other components and systems, in support of customers' new product development efforts.
- **Conducted** field tests of 'surface effect' mounts on new low-floor bus at Detroit Diesel.

COOPER INDUSTRIES - COOPER ENERGY SERVICES (CES), Various Locations 1/88 – 9/95

CES is a leading provider of power and compression equipment for the oil/gas/power, nuclear industry.

Design Engineer, Aftermarket Products, C-B Reciprocating Products, Grove City, PA (3/93 – 9/95)

Design Engineer, Adv. Products Development, Ajax-Superior Div., Springfield, OH (8/90 – 2/93)

Analytical Engineer, Analytical Group, Ajax-Superior Div., Springfield, OH (1/88 – 7/90)

UNITED TECHNOLOGIES - PRATT & WHITNEY AIRCRAFT (P&WA), E. Hartford, CT 7/83 – 1/88

P&WA is a world leader in the design & manufacture of aircraft gas turbine engines.

Analytical Engineer, Structures / Stage Vibrations Group (7/87-1/88)

Analytical Engineer, Compressor Aerodynamics Group (7/83-6/87)

EDUCATION, ETC.

GANNON UNIVERSITY, RIT

M.S.M.E. - Completed 12 credits

UNIVERSITY OF HARTFORD

B.S. - Mechanical Engineering

ERIE COMMUNITY COLLEGE

A.A.S. - Business Administration

A.A.S. - Mechanical Engineering Technology

US PATENT

Nozzle with Flow Equalizer (#20030164410)