
Summary

Innovative Sr. Project Engineer with over 35 years' experience in the development of industrial systems, products, tooling, machinery and automated manufacturing. Strong strategic thinker with relentless creativity and problem solving tenacity. Excellent leadership, project management and team building experience. I am uniquely prepared to accomplish business objectives through cost effective innovation and proven manufacturing technologies.

Areas of Expertise

- Engineering Management / Scope Development / Project Management / Design Mentor
 - Innovative Design / Advanced Manufacturing Methods & Techniques
 - Sales Engineer / Business Development / Contract Negotiation and Development
 - Experienced Multi-Discipline Manufacturing Engineer / DFMA Specialist
 - IP Development for proprietary products, methods and systems / Knowledge Engineering
-

Experience

Delta Air Lines 2018-
Principal Engineer / Project Management / Tool & Process Design
Repair Development Engineering, New Product Industrialization (GTF)
Development projects, GTF-NPI Team, Method & process design for component rehabilitation

- Project management for various P&W Geared Turbo Fan program plans.
- Design and manufacturing of component repair tooling, gauges and related equipment.
- Use parametric modeling to design products, machines, methods, tools and gauges.

Pangborn Group, LLC 2015-2018
Mechanical Engineer / Project Engineer
Engineering and Design of Surface Preparation Shot Blast/Peening Equipment
Design Engineering of large-scale blast and peening machines and all supportive systems.

- Design improved component manufacturing methods, many for European divisions.
- Mechanical engineering for key machinery product lines.
- Developed standard powered door system options for several equipment lines
- Met with customers to define customization of new machinery builds and facility installations.

Spyraflo, Inc. 2006-2014
Chief Engineer / Sr. Management / Quality Manager
Designed innovative new product lines and manufacturing systems to effect company growth. Redesigned legacy product lines. Expanded custom product business by over 80% and patented several new technologies.

Responsible for all engineering and development functions. Managed projects from first contact to full production encompassing: engineering, conceptual design, prototype development, verification, validation, and ultimately contract fulfillment in full scale production, including design of manufacturing tooling, methods and assembly machine systems.

- Worked with prospects to assess needs and determine how to help them realize their performance and cost goals. Document customer's design parameters. Generate quotations and project timelines.
- Designed all special application plain/rolling element bearings and associated manufacturing systems.
- Optimized legacy designs to improve performance and quality while reducing cost.
- Responsible for the design, performance and maintenance of all production tooling and equipment.
- Final authority on every aspect of product design, quality and production thereof.
- Designed and patented self-clinch, self-aligning ball bearing technology. Four new patents filed 2014
- Developed new adaptable injection molds to produce more part variations from the same tooling.
- Designed new high volume component feed system to provide jam-free part presentation necessary for SCARA robot utilization.

Previous
Professional
Memberships:



Megadoor (Assa-Abloy)
2006-2006

Mechanical Design Engineer / Project Engineer

Designed large vertical door systems for military & commercial aircraft hangers.

Responsible for total mechanical door design, all manufacturing drawings and interface information for door lift mechanisms and building support structure.

- Designed enormous door systems for various government and business aircraft hangers.
- Produced sales, manufacturing and as built prints.

Dutton & Hall, Inc.

2000-2005

Sr. Project Engineer / Plant Manager / Sales Engineer

Responsible for all engineering projects. Increased sales by 64%.

Responsible for all technical sales and engineering. Managed large contracted projects from inception to delivery.

- Developed tooling rehabilitation method that saved major client over \$8 Million.
- Designed robotic fixturing lock and unlock stations for pharmaceutical company's manufacturing system increasing product yield, on existing equipment, by over 30%.
- Responsible for contract scope definitions, drafting and contract negotiations.
- Advised on best solutions and validated solutions with laboratory testing data

W.B. George Manufacturing Co., Inc.

1996-2000

Sr. Mechanical Engineer / Manufacturing Engineer / Sales Engineer

Created W.B. George's first effective modular motor winding treatment ovens with integrated robotic pick and place systems.

Responsible for design and profitability of WBG Corporation's turnkey automated resin impregnation systems for electric motor industry.

- Managed product development, pricing and directed manufacturing. Responsible for quotations, estimates and contract definition.
- Established high efficiency manufacturing processes. Designed new tools and fixtures that increased production > 800%.
- Designed WB's first modular oven construction system reducing build costs by 45%
- Developed improved oven system tooling while reducing costs by over 90%.

Dutton & Hall, Inc.

1993-1996

Manufacturing Engineer / Sales Engineer / Sr. Programmer

Expanded automated manufacturing capabilities by computerization.

Determined tooling, fixturing and methods for machine manufacturing.

- Networked manufacturing cells and created programs to manage NC programs with client projects for efficient JIT production.
- Implemented workflow studies to improve operations and trained programmers to utilize advanced programming methods.

J.G. McGuffey & Co

1986-1993

Project Manager / Mechanical Engineer / Programmer / R&D Lead

Assured growth & profitability through efficient design and manufacture

Design and manufacture of custom machinery for hot melt adhesive applications.

- Product development, pricing and managed new equipment manufacturing.
- Refined several product lines to reduce manufacturing costs and increase margins.
- Developed ultra-high tolerance slot dies, applicators, spray heads and coating lines.
- Managed large equipment installations, tested systems and demonstrated functionality for final customer approval. Created 'As-built' technical documentation.
- Conducted ergonomic motion and time studies for machine design criteria.

Primary
Software:



SOLIDWORKS

A AUTOCAD

I INVENTOR

Mastercam