## Jamie Payne BSME PE

Ph: 616.901.0378 email: ultrant.llc@gmail.com

### Product Development Engineering Leader

Successful leadership of complete PD Cycle: concept, analysis, prototype, testing and launch

Manufacturing | Engineering Services | Automotive | Office Furniture

Creative and innovative problem-solving Mechanical Engineering Leader with 5 patents. Well versed in all phases of the product development process including blank sheet concepting, brainstorming, CAD, analysis, prototyping, evaluation, testing, validation, and launch. Experienced in designing parts and assemblies using many different materials and manufacturing processes. Thorough knowledge of Creo, GD&T, FEA, dFMEA, DFA, DFM and tolerance stack-ups. Proven engineering leader on several successful multi-million dollar product lines leading a team of Product Engineers and Mechanical Designers. A self-starter with high perseverance. Professional, organized, ethical engineer with integrity and strong leadership skills. Great team member. BSME, University of Michigan, Ann Arbor.

#### Engineering Tool Experience:

CAD: Creo, Solidworks, Unigraphics

FEA: Patran / Nastran / MARC, Pro / Mechanica Calculation Tools: Mathcad, Microsoft Excel

#### Design for Manufacturing Experience:

3 Axis CNC Milling
Finishes
Plastic Extruding
Progressive Die Forming
Spring Coil Winding
Alum. and Zinc Die Casting
Hydroforming
Hydroforming
Plastic Injection Molding
Roll Forming
Transfer Die Forming
Transfer Die Forming

Aluminum Extruding
MIG/TIG/Spot Welding
Powdered Metal
Sheet Metal Forming
Turning

Steelcase, Inc., Grand Rapids, MI

2013 - Sep 2020

Global developer and manufacturer of world-class office furniture and accessories

#### **Engineering Team Leader**

- Launched a flip top table product line with single point activation, refined aesthetic and best in class nesting capability.
- Launched a low profile power distribution system to accommodate user power needs into all areas of a room.
- Brainstormed concepts to address customer needs and refined them using CAD, DFA, and DFM.
- Evaluated feasibility of concepts with engineering tools such as hand calculations, dFMEA, and FEA.
- Established full drawing specifications for parts and assemblies.
- Generated test plan for the engineered systems and evaluated performance.
- Worked with project team members to arrive at optimized solutions for the customer.

#### Managing Principal

- Launched a bench mounted sliding table top desk for the convenient storage of cords and power receptacles enabling the user to have a more versatile desk space.
- Launched storage and work surface connection components for an existing panel system which provided the customer with greater flexibility on personal work station and storage layouts.
- Launched door latching components for glass doors.
- Performed Pro/Engineer CAD work and led mechanical designers to create CAD parts, assemblies, layouts, and drawings.
- Performed 2D programming, setup, and machining of parts on 3-axis CNC mills.
- Directed employees in duties required to complete machine shop tasks.
- Responsible for bookkeeping, analyzing profit/loss, monitoring cash flow and performing human resource duties.

# Virtual Engineering, Inc., Grand Rapids, MI Engineering Services and Machining Company

2000 to 2005

#### Senior Project Engineer

- Brainstormed solutions to product needs for companies in the automotive and furniture industries using mechanical engineering principles.
- Used the Patran/Nastran/MARC FEA software package to support customers with linear static and nonlinear static analyses.
- Performed 2D programming, setup, and machining of parts on a 3-axis CNC mill.
- Trained in the Pro/Engineer CAD package.

#### Navistar International, Inc., Ft. Wayne, IN

1996 to 2000

Manufacturer of Heavy Duty Semi-Tractors and Medium Duty Trucks

#### Senior Project Engineer

- Designed reinforcement structure for the front seat attachment and the extruded elements for the aluminum cab structure on a new heavy duty semi-tractor product line.
- Worked with suppliers to ensure windshield and wiper system designs met Navistar's standards for performance and quality for a new heavy duty semi-tractor product.
- Verified part fitment and performed tolerance stack-ups utilizing CAD layouts.
- Worked with mechanical designers, suppliers, manufacturing personnel, test lab personnel, and project leaders to achieve the goals of the new heavy duty semi-tractor product line.
- Trained in the Unigraphics v10 CAD package.

#### Education:

Bachelor of Science in Mechanical Engineering The University of Michigan-Ann Arbor, MI 1991 to 1995

#### Patent Credits and Applications:

#6,969,129 Anti-tip interlocking linkage mechanism #8,276,523 Worksurface assembly #9,685,730 Floor power distribution

#7,017,872 Height adjustable boat seat pedestal #8,850,762 Vertically adjustable partition wall door #20190307242 Flip Top Table

#### Other Certification:

Professional Engineer License, State of Michigan

License Number: 6201063133

2015 to Current