

Rick Cairns

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Professional Summary

Operational Manager with 20+ years of experience in Manufacturing Project and Product Design, Project Management, Process development and implementation, Mechanical Engineering, Tooling Design, and Injection Molding. Over 15 years experience leading cross functional teams and multilevel collaboration efforts. Directed various process analysis and redesigns for new product development, quality management, manufacturing efficiency, and customer satisfaction. Hands on expertise in LEAN Engineering and Six Sigma. BS in Engineering from the University of Colorado

Accomplishments

- Implement an Engineering Change Order process within the company ERP system including electronic approvals and notification as well as Product Change Notice to customers.
- Lead the team that evolved the New Product Developed process into a full phase gate review process including a deliverables check list, digital templates, approvals, and document management.
- Directed the efforts of a cross functional team to revamp the mold and product validation and verification process including centralized data collection, molding process development, and a production approval process.
- Drove tooling and molding process improvements as a result of material review board activities to improve product quality and reduce rework, scrap costs and down time.
- Managed the upgrade of CAD systems including advanced design verification CAE tools.
- Successfully recruited, hired and promoted many high value, high contribution employees for the engineering departments.
- Directed the efforts of R&D Engineers in Defining, Developing, and Deploying single step and multi-component units from concept to manufacture release.
- Guided a team of engineering, quality, sales, and manufacturing personnel in the realization of standardized part drawing formats as well as the implementation and publishing of those formats for all the company catalog products.
- Oversaw the development of a quick connect coupler for the blood pressure monitor industry including patentable design input and project management.
- Implemented a tool room on time delivery metrics and drove improvement from 85% to 98% in 6 months.
- Achieved annual cost savings of over \$500,000 (10%) through product substitution, increased work center efficiencies, vendor negotiations, and process enhancements.
- Reduced manufacturing costs by 20% to maintain competitiveness with foreign manufacturers, through cycle time reduction, value stream mapping, and manufacturing team driven improvements all while maintaining sub 50 DPPM levels.
- Team leader in the implementation of a new \$4 million highly automated product line including management of manufacturing engineering and vendor development.
- Developed key operational metrics including inventory turns, price of non-conformance, overtime premiums, on-time customer delivery, and cycle time reduction to monitor and drive operational improvements.

Experience

Tenere Inc, Westminster, CO

Program Manager (2/2017-6/2017)

A contract manufacturing company providing plastic injection molding, 3D printing, and custom overmolding services.

- Direct efforts of Customer Service Team; consisting of Customer Service, Project Engineering, and Quality Engineering teams.
- Collaborate with teams to implement New Product Introduction projects for customers.
- Partner with customer engineering teams to improve product and tooling designs and associated manufacturing processes for continuous improvement initiatives.
- Complete Order Execution involving receiving and processing order, pricing, scheduling, driving action items, and resolving issues including tooling and design.

CWF Precision Machining (via Express Temporary Services) Longmont, Colorado

CNC Machine Operator (11/2016-01/2017)

- Concurrently operate several CNC Milling machines for production metal products.
- Prepare and maintain CNC Milling machines for operation
- Complete regular dimensional and cosmetic inspections.

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- Verify manufacturing schedule of entire shop daily.

Magnum Plastics, Erie, Colorado

A complete contract manufacturing company specializing in complex, high precision injection molded components and assemblies in the medical component field.

Project Engineering Contract (02/2016-04/2016)

- Designed, sourced and qualified tools for Pad Printing and Ultrasonic welding operations
- Managed mold tooling, design review, improvements, changes, and qualification
- Specified and ordered mold tooling materials
- Sampled new molds and made recommendations for improvements
- Evaluated existing molding and secondary processes and implemented improvements

With the break from professional activities from 09/2013 to 02/2016 I stayed busy as a stay at home dad with my adolescent sons, provided free engineering consulting and volunteered for several community activities.

Value Plastics a Nordson Medical Company, Fort Collins, Colorado

Multi million dollar designer and manufacturer of a branded product line consisting of over 3,000 plastic fittings for medical and industrial industries.

Engineering Manager (5/2004-9/2013)

- Responsible for all aspects of the Engineering Departments including Sustaining Engineering, Research and Development, Tool Configuration, Tooling Engineering, and Tool Building.
- Corroborated with Customers, Sales and Marketing to develop products, strategies, and lunch plans to meet end product specifications, volumes, delivery and costs.
- Member of the company Leadership Team that developed, reviewed, and acted on key metrics that included financial analysis, quality management, strategic initiatives, and manufacturing efficiencies.
- Directed the efforts of the engineering departments to maintain ISO 9001:2000 certification.

Teledyne Interconnect Devices, San Diego, California

A division of Teledyne Technologies a manufacturer of electronic components, assemblies, systems, and engineering solutions for the government, government contractors, and commercial customers.

Director of Operations (10/2000- 12/2003)

- Responsible for all operations activities including materials management, facilities management, molding and assembly, process development, customer service, and information technology.
- Member of the corporate Operations Excellence team focused on “Lean (Six Sigma) manufacturing” to achieve quality improvements and cost reductions.
- Representative for the, retiring General Manager, at quarterly corporate presentations that included profit and loss, balance sheet, and product development status.

Complex Tooling and Molding. San Diego, CA and Boulder, CO

1989 – 1999

A \$100 million custom injection molder, assembler, and sheet metal stamper with domestic and international sales.

Director of Manufacturing (10/1997 – 3/1999)

Manufacturing Engineering Manager (1995 – 1997)

Manufacturing Engineer (1990 – 1995)

Operational Skills

Manufacturing and facilities equipment and process experiences:

- Lean manufacturing six sigma concepts
- Injection molding machines including gas assist, high speed thin wall and precision servo electric
- Part and tool DFM (design for manufacture)
- Familiar with use and capabilities of tool room equipment: Wire and Sinker EDM, grinding, multi-axes machining, etc.
- Able to use inspection equipment: Calipers, Microscopes, Micrometers, etc.
- Central Material handling, mixing and conditioning equipment
- Heating, ventilation, and Air Conditioning systems
- Air Compressors, Cooling Towers and Chillers
- Ultrasonic welders
- Fully automated Assembly lines
- Servo High Speed Robotics
- Working knowledge of many controllers including PLC's

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- Decorating with Heat transfer and Pad Printing
- Finishing with water based paint
- Thin metal stamping
- Nickel, Tin and Gold plating
- Lead frame and mass insert molding
- Clean room manufacturing GMP's, FDA

Proficient at reading and interpreting mechanical drawings and models including geometric tolerancing.

Optimize processes through Design of Experiments (DOE)

Scientific Molding activities including analysis of Sheer viscosity curves and gate freeze to minimize molding energy costs.

Experience with engineering grade resins and high technology applications.

Team improvement programs utilizing problem solving skills, process improvement efforts, and utilization of data to focus efforts and drive results.

Computer and Computational Skills

Microsoft Excel and IFS ERP master and 10 years experience with Solidworks

Additional experience with Microsoft; Windows, Word, Access, and Project in a networked environment as well as information (ERP) systems Symix/Progress, MAPIX/AS400, and IFS/Oracle.

Experience with various CAD/CAM/CEA programs: AutoCAD, Solid Edge, PROE, Gibbs CAM, MasterCAM, FEA, CFD, Moldflow, Simulation and many more.

Education

B.S. Mechanical Engineering. University of Colorado, Boulder, Colorado

M.B.A Studies, University of Colorado, Boulder, Colorado

Lean Manufacturing seminars from the California Training Cooperative

Leadership Development Conference from Loyola Marymount University

Leading From Within from Mountain States Employers Council

US Patents

7,448,653 November 11, 2008 Female connector for releasable coupling with a male connector defining a fluid conduit

7,770,939 August 10, 2010 Female connector for releasable coupling with a male connector defining a fluid conduit

7,806,139 October 5, 2010 Fluid conduit coupling assembly having male and female couplers with integral valves

D649,240 November 22, 2011 Male dual lumen bayonet connector

8,113,546 February 14, 2012 Latching female fluid tubing coupler