

RICHARD FREDERICKSON

One Donna Drive • Pembroke, NH 03275
603.781.3597 • fds_6027@hotmail.com

Qualifications for:

MECHANICAL DESIGN/ENGINEERING

As a proactive and efficient design professional with over ten years of experience in the field of mechanical engineering, Rick demonstrates a strong work ethic as well as exceptional skills from concept through delivery and customer support.

Rick's track record showcases proven abilities in effectively using time, resources, and software to complete multiple, concurrent projects on time, within budget, and to client specifications with minimal supervision as he communicates comfortably with management, coworkers, customers, and suppliers.

Familiar with ISO 9001-2002, Six Sigma, STOP (Safety Training Observation Program), DFMA (Design for Manufacture & Assembly), Rick offers an approach to engineering, product design and development guided by safety and quality. In addition, Rick has the ability and experience performing FMEA (Failure Mode Effects Analysis) and RCFA (Root Cause Failure Analysis).

TECHNICAL CAPABILITIES

- Design/CAD Design
- Drafting to ANSI Y14.5
- Geometric Tolerancing (Intermediate)
- BOM Creation and Maintenance
- Documentation
- Facility Layouts
- Weldments
- Assemblies (Conventional & Exploded)
- Details
- Flow Diagrams
- Project Management
- Conceptual Drawings
- Automated Machinery
- Dust Collection
- Ventilation
- Pneumatics
- Environmental Acoustics
- Systems Installation
- Architectural Drawings
- Machine Guarding

SOFTWARE PROFICIENCIES

- Solidworks 2001-2007
- PDMWorks 2007
- Toolbox 2007
- eDrawings 2007
- AutoCAD 12-14
- Cadkey 99
- Excel
- Word
- Project
- PowerPoint
- Lotus Notes
- MFGPRO
- Robot Studio 3.2
- Arena
- CosmosExpress
- Adobe Acrobat 6.0
- Outlook
- Quickbase

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WORK HISTORY

Mechanical Designer, FLIR SYSTEMS, INCORPORATED. 2007-Present (Contract)

Develop & Provide mechanical designs, details, and documentation for commercial and military uses in the field of Thermal Imaging & Infrared Camera Systems. Contributions in Investment Casting design and product packaging as well as fixture design.

Mechanical Design Engineer, SEMEQUIP, INCORPORATED. 2006-2007 (Contract to Direct)

Provide mechanical designs, details, and documentation for the semiconductor industry. Provided R & D design support as well as improving existing products by reducing part count, changing fabrication method, changing materials and researching off-the-shelf replacement parts by applying DFMA. Use Arena, PDMWorks, & Quickbase databases to maintain documentation and track projects and tasks. Helped create documentation standards & work procedures to standardize design output. Present new concepts and modified designs to all levels of management as well as fellow engineers.

Mechanical Design Engineer, INTEGRATED ROBOTICS, LLC. 2005-2006 (Direct)

Coordinated all aspects of mechanical and machine design, including layout, assembly, weldment, and details for concurrent, custom projects involving automated robotic welding systems. Authored procedures and documented project organization and control strategies. Created documentation system and part numbering system. Supervised installations. Conducted site reviews. Provided internal and external customers with continuous assistance and support. Participated in Failure Mode Effects Analysis (FMEA) meetings.

Project Manager, MUNTERS 2004-2005 (Direct)

Managed projects by providing technical review of equipment orders, specifying components, scheduling all phases of projects, and communicating with sales representatives, distributors, and customers for dehumidification equipment. Provided product improvement concepts as well as process improvement recommendations. Addressed and resolved customer complaints in a professional and timely manner by providing immediate, corrective and preventive action and determining root causes.

Mechanical Design Engineer, DIGIMARC ID SYSTEMS 2003-2004 (Contract)

Provided mechanical design, documentation, detailing, assembly, testing, and debugging of automated identification machines. Completed the design of the first machine one month ahead of schedule. Converted existing machine documentation from paper drawings to electronic files and linked them to a PDM system. Conceptualized, designed, and made portable the new photos capture system. Identified procedural shortfalls and recommended corrective action. Recognized and reported less cost efficient practices and identified potential opportunities for improvement.

Mechanical Design Engineer, PRAXAIR SURFACE TECHNOLOGIES INC., 1998-2003 (Contract to Direct)

Coordinated all aspects of mechanical and machine design, including design, layout, assembly, weldment, and details for concurrent projects involving thermal spray coating and stripping systems, automated machinery and dust collection. Authored procedures and documented project organization and control strategies. Supervised installations. Conducted site reviews. Provided internal and external customers with continuous assistance and support.

Previously employed at Eaton Semiconductor Equipment Operations 1997-1998, Craig Systems Inc. 1995-1997 other employment includes Xenon Corp., Mosler Inc., and Harris Environmental Systems Inc. after attending Wentworth Institute of Technology.

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EDUCATION & TRAINING

New Hampshire Technical Institute: Mechanical Engineering Technology (Work-in-Progress)
United States Army: Basic Training Camp, Field Artillery Surveyor School
Computer Aided Products: Solidworks 2004/2003/2001 Training (3D Solid Modeling)
Productive Solutions International: VA/VE-Value Engineering; Value Analysis, FMEA-Failure Mode and Effects Analysis
International Institute for Learning: Project Management Professional (PMP) Training Program
Donaldson-Torit Training Program: Industrial Ventilation and System Effects; DFT and Cyclone Hands-On Operation; Fans and AN Rotary Valves; Checker™ Board Hands-On Operation and Troubleshooting
Dupont: STOP-Safety Training Observation Program
DTI Technologies: AutoCAD 12-14 Training
Wentworth Institute of Technology: AutoCAD 12 with AME Certification Course
New Hampshire Department of Safety: Machine Guarding OSHA Requirements
Better Communications: Technical Writing Workshop; Business Writing Workshop
ABB: Robot Studio 3.2 Offline Robot Programming Training
SMC: Pneumatics Training

COMMUNITY INVOLVEMENT

Coach: Suncook Youth Soccer-U6 thru U16 (1998 to Present)
Little League- Tee Ball, Baseball, Softball (1998 to Present)
Suncook Youth Basketball-Grades 3 thru 6 (2007 to Present)
Assistant Den Leader-Cubscouts (2005 to Present)

Coordinator: Suncook Youth Soccer-(2005 to Present)

Sponsor: Suncook Youth Sports-Frederickson Design Services
Sean T. Bryant Memorial Golf Classic (1999 to Present)
Robert Fermon Memorial Golf Tournament (10yr)

REFERENCES

- **Brent Copertino**
Senior Mechanical Design Engineer
978.262.3640
- **Doug Adams**
Vice President, Engineering and Product Development
978.262.3641
- **George Sacco**
Mechanical Engineering Manager, Chief Systems Engineer
978.262.3602
- **David Hartnett**
Mechanical Design Manager
978.262.3667
- **Chuck Stanley**
Mechanical Design Engineer
978.262.3616
- **Ted McIntyre**
Senior Scientist
978.262.3638