LAURANCE E. ROBBINS

Senior Mechanical Designer

Office: (860) 747-8574 **Mobile:** (860) 281-5114

Email: <u>laurancerobbins@gmail.com</u>

DESIGN SKILLS

Mechanical Design: Machined parts, investment castings, forgings, sheet metal, extrusions, injection molded parts, mechanisms, structural weldments.

Tool Design: Machining, assembly and inspection fixtures

Electrol/Mechanical Packaging Design: Electrical enclosures, electronic enclosures, control panel layouts, component chassis, mounting brackets, and card cages.

Electrical Design: Machinery controls, wireways, wiring layouts, wiring diagrams, wiring lists, and cable harnesses.

DESIGN CAPABILITIES

Conceptual design, redesign for cost reduction, component selection, material selection, vendor selection, best manufacturing methods, prototype model making, test and analysis.

AWARDED PATENTS (FIREARMS)

7,775,150 | 8,051,595 | 7,131,228

EDUCATION

Central Connecticut State University
Pro Engineer Solid Modeling

CAD SOFTWARE

Pro-Engineer, Creo, Pro-Assembly, Pro-Detail, Pro-Sheetmetal, Pro-PDM, Pro-Intralink, Windchill, Solidworks

OFFICE SOFTWARE

Word, Excel, Outlook, PowerPoint

PLAINVILLE ELECTRICAL PRODUCTS CO. (PEPCO)

Contract Position: Senior Mechanical Designer (Dec. 2015 — Mar. 2017)

Software: Pro-Engineer Creo, Intralink

Responsibilities: Preparing documentation for large switchboard cabinet weldment, and associated documentation. Design various components for inclusion in cabinet. Synchronize data between computer platforms.

O.F. MOSSBERG & SONS INC.

Permanent Position: Design Engineer (June 2012 - April 2015)

Software: Solidworks, Intralink PDM

Responsibilities: Design AR10 style Carbine and .357/.38 SPL lever action Carbine, from concept through pre-production.

Tasks included: Conceptual design, document details and purchase prototype components, provide incoming inspection and manufacturing support, build and test prototypes, prepare test plan, analyze failures, provide corrective action, and provide test report.

COLT'S MANUFACTURING CO.

Contract Position: Senior Mechanical Designer (May 2009 – May 2010)

Software used: Pro-Engineer Wildfire, PDM Link

Responsibilities: Conceptual design for new multi-caliber weapon system that is easily convertible between calibers (7.62 x 51 / 5.56 x 45). Virtual design completed in 3 months, proof of concept working prototypes in 6 months, complete with detailed drawing package.

Contract Position: Designer Engineer (Mar. 2004 – Dec. 2004)

Software: Pro-Engineer

Responsibilities: Conceptual design of SCAR-H modular weapon system that met requirement set forth by SOCOM, Awarded Patent #7,131,228

Permanent Position: Senior Product Designer (*Jan. 1991 – Sept. 1998*)
Software: Cadkey, Personal Designer, Pro-Engineer, Autocad
Responsibilities: Sole designer on the M16A2, M4, M4A1, AR-15,
9mm Carbines and SMG's. Design concepts for new accessories,
evaluate current products and improve by reducing cost and increasing
performance. Layout and detailing of sheet metal, castings, machined,
and injection molded parts. Control quality and provide manufacturing
support for new product designs.

DRS, CONSOLIDATED CONTROLS

Contract Position: Senior Mechanical Designer (Jan. 1999 – Dec. 2015)

Software: Pro-e Wildfire, Intralink

Responsibilities: Design electrical control cabinet weldments. Provide assembly drawings and detail drawings for all components and weldments. Create control panel layouts, door & panel hardware and brackets. Design enclosures and package electronic drive controllers for 5 & 10 hp. motors.

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STRYKER ORTHOPEDICS

Contract Position: Senior Mechanical Designer (July 2005 – July 2006)

Software used: Pro-engineer Wildfire

Responsibilities: Design instruments for Orthopedic surgeons. Revise and redesign instruments per surgeon's requirements,

create custom instruments if unavailable.

UNITED TECHNOLOGIES FUEL CELLS

Contract Position: Senior Designer (July 2006 – Oct. 2006)

Software used: Pro-e Wildfire, Intralink

Responsibilities: Design sheet metal enclosure for fuel cell power plant, provide conceptual design for structure supporting multiple fuel cells

Contract Position: Senior Designer (April 2002 – Feb. 2004)

Software used: Pro-engineer

Responsibilities: Qualification inspection and test fixtures for fuel cell components. Provide design support to team in all

capacities; mechanical, electrical, packaging.

INGERSOLL-RAND

Contract Position: Machinery Designer (July 2001 – April 2002)

Software used: Pro-engineer

Responsibilities: Design, layout, assemble, and document automated material loading device mated to a hydraulically operated hole piercing mechanism. Involved design of machined parts, sheet metal brackets, electrical controls, structural weldments.

HONEYWELL FIRE PROTECTION SYSTEMS

Contract Position: Senior Mechanical Designer (Dec. 2004 – June 2005)

Software used: Pro-engineer Wildfire

Responsibilities: Design sheetmetal chassis, brackets, mounting plates, facia panels and enclosures for mounting printed circuit boards and other electrical components.