

Brian P. Rooney

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SUMMARY

Senior electro-mechanical design engineer with twelve years of experience in customer facing project management, prototyping, design, validation, and installation of vacuum based manufacturing equipment.

SKILLS

- Certified Solidworks Professional
- Solidworks PDM
- Solidworks Electrical
- AutoCad 2013
- LabVIEW 2013
- Melsec- Mitsubishi servo amplifier tuning
- TIA portal- Siemens PLC development software
- Codesys-Wago & Beckhoff PLC development software
- SPiiPluSC- Motion control development software
- Microsoft office suite
- Visual Basic- Macros for Solidworks & Excel
- Smart sheets-Project Management Software

EMPLOYMENT EXPERIENCE

Electro-Mechanical Engineer

Sputtering Components Inc.

Sep. 2011 - Present

Sputtering components is a capital equipment supplier of rotary magnetrons.

- Leading individual for controls and mechanical designs of industrial sputtering equipment
- Design vacuum systems for longevity testing of vacuum products
- Provide technical expertise to manufacturing on new design projects
- Specification of Electro-Mechanical Components
 - Stepping motors, Servomotors, Gearheads, Photo-electric transducers
 - Machine Safety specification of relays and safety circuits
- Write PLC software for production systems using Wago, Beckhoff & Siemens PLC's
- Management of production and research and development designs
- Travel globally to integrate mechanical & electrical systems
- Create LabVIEW based control software as needed for cross functional groups
- Collaborate with customers worldwide to meet their demands
- Translate customer needs into custom designs of existing products
- Create and implement phase gate New Product Development process
- Created accelerated life testing of new and existing products

Systems Design Engineer

SVT Associates

Dec. 2008 - Sep. 2011

SVT Associates is a manufacture of thin film deposition systems and tools designed primarily for R&D.

- Mechanical design of UHV systems and components
- Managed new component and system design projects
- Collaborated with vendors and senior engineers to meet design requirements and cost
- Created mechanical drawings for management, vendors and manufacturing
- Qualified and validated new vacuum deposition components
- Designed and oversaw manufacturing and assembly of vacuum equipment and components:
 - Atomic Layer Deposition/ Molecular Beam Epitaxy/ Pulsed Laser Deposition
 - Gas systems/heaters/transfer systems/buffer systems/elevators/x, y, z stages/ growth stage manipulator/effusion cells/RF sources
- Traveled to customer sites and provide customer support during installation
- Wrote Excel macros for reporting and purchasing

Plasma Process Engineer

Hutchinson Technology

Aug. 2006 - Dec. 2008

Hutchinson Tech. produces suspensions for the mechanical hard drive industries.

- Principle individual on eighty machines and thirteen process steps in a focus factory
- Conducted tests to ensure process capability and quality

Material Science Researcher

University of Wisconsin-Eau Claire, WI

Jan. 2005 - June 2006

- Maintained Ultra High Vacuum machines:
 - Scanning Tunneling Microscope & X-ray Photoelectron Spectroscopy machine

EDUCATION

Bachelor of Science in Physics from the University of Wisconsin-Eau Claire.