# Joseph Wirzburger

## Mechanical Design Engineer seeking new opportunities

Westampton, NJ - Email me on Indeed: indeed.com/r/Joseph-Wirzburger/d45d9898b039fe07

To utilize my strong work ethic and passion for continuous improvement in electro-mechanical design to bring new and innovative products to market.

Willing to relocate to: Mount Holly, NJ - Plymouth, MA Authorized to work in the US for any employer

#### WORK EXPERIENCE

## **Mechanical Design Engineer**

Boekel Scientific - Feasterville, PA - April 2014 to Present

#### Responsibilities

- Use Solidworks to design new benchtop laboratory equipment product lines and upgrade/maintain existing lines.
- Create and modify parts, assemblies, and detail drawings as required for development of small-medium volume product lines.
- Work with fabrication shop personnel, assembly technicians, and outside vendors to solve issues related to design.
- Fabricate, build, and troubleshoot prototypes/mockups as required for proof of concept.
- Conceptualize, design, and carry out experiments to verify proof of concept and design approach (DOE)
- Familiar with ISO-13485, IEC 60601
- Compose, review, and edit project and regulatory documentation including:
- = Operation, Installation, and Maintenance Manuals
- = Functional Requirement Specifications (FRS)
- = Hardware Requirement Specifications (HRS)
- = Hardware Design Specifications (HDS)
- = Operation, Installation, and Maintenance Manuals
- = Functional Requirement Specifications (FRS)
- = Hardware Requirement Specifications (HRS)
- = Hardware Design Specifications (HDS)
- = Device Hazard Analysis
- = Bills of Material (BOM)
- = Engineering Change Requests/Notices (ECR/ECN)
- = Verification & Validation Test Procedures (V&V)
- = Corrective and Preventative Actions (CAPA)

## **Mechanical Project Engineer**

IEDCO - Turnersville, NJ - September 2005 to October 2013

- Design customized OEM stainless steel powder handling equipment for pharmaceutical, food, and chemical industries
- Responsible for the mechanical design, layout, and construction of multiple, concurrent projects ranging in scope to a million dollars
- Maintain robust designs which suit cGMPs, adhere to electrical room classifications, are easily cleanable, and are designed for easy manufacture and assembly
- Generate complex layouts and innovative mechanisms to solve unique customer requests

- Manage control, software, and field service engineers to ensure deliverables conform to project specifications
- Guarantee projects are within profit margin goals by negotiating with vendors or optimizing fabricated component materials and methods of construction
- Create customer approval drawings and fabrication drawings for manufacturing
- Develop customer/fabricator/vendor relationships and quickly resolve any technical or scheduling issues to ensure project meets performance, lead time, and budgetary goals
- Compose equipment/project documentation including:
- o Operation, Installation, and Maintenance Manuals
- o Functional Specifications
- o Factory and Site Acceptance Tests (FAT / SAT)
- o Bills of Material (BOM)
- o Piping and Instrumentation Diagram (P&ID)
- o Installation and Operational Qualification (IQ/OQ)

## **Program Coordinator**

Rotary Youth Leaders Academy - West Long Branch, NJ - 1996 to 2010

- Consulted with senior staff members on the long-term vision and logistics of the program as well as addressing current issues important to the youth leaders of today
- Created and facilitated five innovative, training programs which emphasize teambuilding, effective communication, self-reflection, and critical thinking
- Advised counselors on proper conflict resolution for RYLA participants
- Wrote and presented Setting Beneficial Goals seminar to 2001 and 2002 attendees

## **Undergraduate Teaching Assistant**

Carnegie Mellon University - Pittsburgh, PA - September 2002 to November 2002

- Supervised weekly laboratory sessions consisting of 20+ students which tied together classroom theory and hands-on practice in robot mechanical design, motion control, path-planning, and software programming
- Designed and constructed the scaled-down Urban Search and Rescue robot test site with a team of 9 teaching assistants

## **EDUCATION**

### **Bachelor of Science in Mechanical Engineering**

Carnegie Mellon University - Pittsburgh, PA December 2002

#### SKILLS

Microsoft Office (10+ years), Microsoft Project (4 years), Solidworks (2 years), Autocad (8 years), Peachtree Accounting (8 years), Mathcad (4 years), Anilam Conversational Programming (Less than 1 year), Manual Mill (2 years), CNC Mill (Less than 1 year), 3D Printing (1 year), Draftsight (2 years)

#### LINKS

http://www.linkedin.com/pub/joe-wirzburger/2/460/940

#### **AWARDS**

## **Boy Scouts of America - Eagle Scout**

## CERTIFICATIONS

## Certified SolidWorks Associate (CSWA)

March 2014 to Present