

Jeffrey T. Powell

Engineering Project Manager

Professional Summary

A successful Project Manager with a background in Manufacturing Engineering and experience in Mechanical and Machine Design. Manager of process-improvement projects that successfully reduced product waste, reduced machine downtime, improved process efficiency, and ultimately reduced production operating costs. Managed the design, fabrication, assembly, and acceptance-testing of automated liquid-filling machinery for the pharmaceutical and industrial supply industries.

Professional Experience

FPC Job Services Incorporated

2009 - Present

Director of Workforce Placement

- Successfully found temporary work for members of networking group.
- Created terms of agreement between organization and employers & employees.
- Developing a workforce database to help match group members with employment opportunities.

Chase-Logeman Corporation

2006 - 2008

Mechanical Design Engineer

- Designed stand-alone machines that perform automated filling, plugging, capping, and conveying operations for the pharmaceutical and industrial-supply industries.
- Retrofitted older machines with new designs for product handling, conveying, and labeling.
- Used Solid Edge to design machine components and create fabrication drawings, bill-of-material assembly prints, and exploded-view assemblies.
- Utilized Made-To-Manage MRP software to generate bill-of-materials for purchasing.
- Wrote instruction manuals that accompanied each machine and/or system produced. Created Factory Acceptance Test and IQ/OQ documentation for customer's FDA approval process.
- Improved standards for documentation, modeling, part design, and drafting for fabrication.

ENG Solutions

2004 - 2006

Design Engineer

- Utilized Autodesk Inventor to generate 3-D machine & part models, fabrication prints, and assembly drawings. Created the initial design of an automated pick-&-place/conveyor system for a cosmetic's manufacturer. Involved in component identification and purchase, machine assembly, and on-site installation.
- Managed the installation of a roller conveyor system for an automotive parts manufacturer.
- Installed a pneumatic ionization system to clean polymer wine corks for printing process.
- Completed mechanical designs for quotation and client's approval.

Cormetech Incorporated

1998 - 2003

Manufacturing Engineer

- Managed process improvement projects from conceptual design to installation.
- Manager of all CAD drawings & standards. Improved standards for equipment drawings.
- Wrote a number of machine specification and SOP manuals; generated appropriation requests to justify purchase of new equipment and modification of existing equipment.
- Provided on-call engineering support to production. Assumed the role of module procurement engineer when previous engineer was called to military duty.
- Redesigned a catalyst dipping system using components from a dismantled unit; increased throughput by 300% over the original for approximately one-fifth the cost.
- Installed a die-positioning device that reduced job setup time by 80%.
- Installed an automated screen changer that increased production output by 30%; designed all auxiliary equipment to retrofit screen changer into existing process.
- Installed a dual die wash system to reduced die wash times by 75%. Installed a reservoir with level controls to reduce the burden on the facility's water pressure & to recycle unused water.
- Increased the cut capacity of an automated saw to handle extended-length cuts.

Corning, Incorporated**1996 - 1998*****Mechanical Design Technician***

- Coordinated manpower, equipment, and scheduling to refurbish original pilot machine to meet increased production requirements; converted machine to a prototype test-bed for high-capacity blank-making; led to the retrofit of eight additional production machines.
- Contracted an external engineering firm and machine shop to design and fabricate a developmental burner manifold and subsequent burner assembly modifications.
- Supervised installation and quality certification for fiber anti-whip devices on all machines.
- Contracted a material handling firm to design and fabricate a set of transfer cases.
- Developed a new method to change consolidation furnace seals that was safer and prolonged the life of the seal; trained tradesmen in new method.
- Modified transfer arm design for extended reach and adapted to two variations of product.
- Designed end-burner set-up & alignment fixture; retrofitted into eight machines.
- Researched & implemented a safety torch used to ignite burners during process startup.
- Managed design and installation of a cooling tower & ductwork retrofit to waste-abatement.
- Redesigned & installed a new chuck for development products in production machine.
- Designed a rupture disc fixture for a burner manifold - prevented expensive repairs and lengthy downtime associated with burn-back to the main gas cabinet.
- Updated machine specification documents, spare parts lists, and machine parts lists.
- Updated mechanical drawings and designed setup gauges using AutoCAD; updated copies of as-built drawings; issued approved drawings to CAD department.
- Assigned as Development Group Leader when supervisor was out of plant; led weekly project status meetings and communication updates.

Education**North Carolina State University****2004 - 2006*****Masters of Science Degree in Integrated Manufacturing Systems Engineering***

- Completed Internship at John Deere Turf Care, Fuquay-Varina
 - Utilized Autocad and Factory-CAD to generate 2-D and 3-D plant layouts.
 - Produced a training manual and instructed a course in 3-D FactoryCad for ME's.
 - Completed a prototype layout that combined two existing assembly lines into one.
 - Utilized simulation software to analyze the ergonomic impact on a virtual human; analysis confirmed complaints of assembly workers; validated accuracy of software.
- Completed a team project involving image-recognition and teaching a five-axis robot to perform pick-and-place operations on detected objects.

Western Carolina University**1991 - 1995*****Bachelor of Science Degree in Manufacturing Engineering Technology***

- Completed Internship at Schwitzer, Asheville
 - Tested and implemented a pneumatic turbocharger auto-fastening system.
 - Updated QA documents for turbocharger assembly and rebuild procedures.
- Senior Design Project involved creating a virtual business to fabricate and sell a leveling device for typical aluminum extension ladders.

Professional Skills

- Ability to design intricate mechanical components for material processing and product-handling machinery.
- Proficient in 3-D part modeling, assembly modeling, GD&T fabrication prints, and exploded-view assemblies.
- Knowledgeable in materials, coatings, metallurgy, and good manufacturing methods.
- Familiar with PLC programming, CNC programming, and the integration of controls & sensors for automation.
- Ability to interpret customer's requirements and turn ideas into practical design.

Personal

- Active participant in Society of Manufacturing Engineers.
- Active participant in National Tooling & Machinists Association.
- Volunteered time & tools to work on a Habitat for Humanity Home in Greensboro.
- Received Industrial Safety Certification from NC Department of Labor during undergraduate studies.
- Interests include: mechanical design, personal/business/entrepreneurial development, photography, motorcycling, home-improvement, industrial automation, and outdoor sports.