Charles Barragan

Mechanical Engineer

Hatfield, PA - Email me on Indeed: indeed.com/r/Charles-Barragan/26a5bdcc3b291e96

Seeking a challenging position in mechanical engineering that will draw on my solid mechanical skills, considerable experience interacting with customers and vendors, my broad knowledge of sealing, machining methods, materials and my educational background.

Summary:

• Strong communication skills developed in dealing with varied customers from widely different industries either applying a product or solving technical problems.
• Extensive knowledge of sealing technologies. Including the ability to design new seals for a given purpose. Something more possible now that seals are more commonly machined rather than just molded. Strong research skills identifying options to solve problems in design projects.
• Able to work on projects individually or in collaboration with others. Proficient using MS Office and AutoCAD. Presently set up to learn Solid Works. Comfortable with travel to vendor or customer and one on one contact.

WORK EXPERIENCE

Mechanical Engineer

Clayton H. Landis Company -Engineering Department - Souderton, PA - June 2001 to December 2006

Handled design projects at three Nucor Steel plants.
• Designed and altered machinery to meet the customer's needs and desire for increased plant capacity & ability to process new product.
• Heavily involved in the refurbishment of equipment now used at Nucor's CASTRIP.
• Developed proposal drawings, top level assembly drawings, detail drawings, and Bill of Materials.
• Checked the work of draftspersons used to help complete larger projects in a timely fashion.
• Used my knowledge of sealing to further the quality of Nucor's in house hydraulic cylinders, troubleshoot failed cylinders, and implemented changes to increase cylinder functional life.
• Asked to make trips to vendors to access their abilities and later design with their strengths in mind. For example: Coil car cylinders were changed to friction welded rods to increase their physical strength and dimensional repeatability. The vendor involved had perfected this ability manufacturing cylinders for Caterpillar.

Consulting Mechanical Engineer

J. Lyons & Associates - Hatfield, PA - July 1999 to June 2001

Involved with projects at several well known companies in this area. For instance DuPont, Merck, Rorer, Castrol, ATO Chemical, etc. Much of this was from contacts established prior to August 1996.

Engineering Manager

Pelmor Laboratories Inc - Newtown, PA - October 1998 to July 1999

Rehired by Pelmor to a higher position managing the engineering department and plant.

Mechanical Engineer

Eisenhower Tool Inc - Quakertown, PA - August 1996 to October 1998

Involved in automation, machine design, customer communications, on site servicing, and troubleshooting. Working with various local companies in the electronics, manufacturing, and the automotive after market industries. Cadkey was used for design and documentation.

Product Engineer

Pelmor Laboratories Inc - Newtown, PA - May 1992 to June 1996

Responsible for overseeing Pelmor's rubber molded products, assisting customers with problems and new design, quoting on more complicated parts, addressing vendor related problems in metallic and plastic components, and implementing appropriate manufacturing processes to enhance part quality. The basic function of a Product/Applications Engineer.

Senior Mechanical Engineer

Sonobond Ultrasonics - West Chester, PA - January 1988 to August 1990

Oversaw electronic engineers, drafts people, and electronic technicians. Had direct involvement in the purchase of capital equipment. Designed an ultrasonic ring welder used for making automotive air bag detonators. By changing how it was controlled the handheld welder used to weld shut copper tube was made repeatable enough to allow marketing across the US and Canada. This effort allowed sales to firms like Whirlpool, Subzero, Carrier, & Heil Involved with ultrasonic wire splicing at Electrowire for Ford Motor Company.

Project Engineer

American Olean Tile Company - Lansdale, PA - 1983 to 1987

Designed and supervised the making of several complex dies for plants in Lansdale PA, and Olean NY. Typically these exotic tool steel dies required seven different machining disciplines (including wire & conventional edm work) and were the first computer aided designs for AOT using a program capable of flipping a 3D part in two planes. Set-up a water recycling facility including a pump station, pipe line, and chlorinator. Assisting in the supervising the startup of a major expansion project known as FASTFIRE where state of the art equipment from Europe was applied. Supervised a 22 man newly refurbished machine shop involved in complex corporate work. Supervised a number of different crews involved in crafts such as woodworking, metal fabrication, production mechanics, and electronics.

Applications Engineer

Greene Tweed & Company - 1982 to 1983

Assisted customers through phone contact and in writing, regarding the application of existing seals, troubleshooting of old, and development of new seals and concepts. These customers ranged from the users of predeveloped industrial equipment to those designing their own sophisticated equipment for use on aircraft, military, and unusual applications of all kinds worldwide. Helped develop production equipment for several purposes involving induction heating, press operations, automation, etc.

EDUCATION

Bachelor of Science in Mechanical Engineering

Clarkson University - Potsdam, NY
May 1978

ADDITIONAL INFORMATION

- Passed EIT exam
- Present Member of AIST