

Roger Beatty II, PE

MECHANICAL ENGINEER / INSPECTION ENGINEER - Midrex Technologies

Dallas, NC - Email me on Indeed: [indeed.com/r/e9a559f832dbe20a](https://www.indeed.com/r/e9a559f832dbe20a)

A licensed Professional Engineer pursuing a position in a progressive organization where one can apply the expertise, knowledge and experience that has been acquired through years of Design Engineering and Project Management

Authorized to work in the US for any employer

WORK EXPERIENCE

MECHANICAL ENGINEER / INSPECTION ENGINEER

Midrex Technologies - Charlotte, NC - March 2010 to Present

Midrex Technologies, Charlotte, NC, March 2010 – Present

MECHANICAL ENGINEER / INSPECTION ENGINEER

- Designated Piping Engineer for the largest project in Midrex history to date. Directed a team of engineers and designers while checking piping layouts using P&ID's, Isometrics and Navisworks Freedom Viewer 2011 (PDMS) to ensure proper design calculations and piping flexibility.
- International travel; Supervised a team of twelve engineers at Jacobs Engineering in Mumbai India for the completion of detailed piping design
- Developed and verified stress packages for small, medium and large bore piping from 25mm to 2000mm.
- Appointed site and crew manager for a 23 week commissioning / construction project for a DRI plant in Bahrain (Persian Gulf). Specialized in commissioning of pumps, hydraulic systems, fans and hot conveyors.
- Created and edited technical specifications, including requisitions for various equipment and guidelines utilizing ISO 9001 procedures and standards.
- Developed protocols, qualification, and validation procedures documents for the vendors and ensure procedures are followed.
- Inspector of vendor supplied equipment including, but not limited to piping, pumps, valves compressors and heat exchangers. Ensured that equipment meets all needed criteria of Midrex and conforms to drawings, specifications, requisitions and quality control plans.
- ISO 9001-2008 Internal Auditor

PROJECT / PROPOSAL ENGINEER

Mammoet USA (Nuclear) - Fort Mill, SC - November 2008 to May 2009

Responsibilities

- Designed and drafted lift and transportation drawings using 2D and 3D AutoCAD for the replacement of critical components in the Nuclear and Petrochemical industries utilizing some of the world's largest cranes.
- Created fabrication drawings of highly specialized (one time used) complex lifting equipment.
- Adept in various rigging methods and structural steel design for the lifting of both temporary and permanent structures.
- Proficient in heavy lifting, rigging and transportation utilizing cranes, SPMT's, jack and slide systems, and gantries.
- Traveled domestically and worked on various nuclear projects including: Diablo Canyon, HB Robinson, Crystal River, Cooper River, and Monticello.
- Assistant Project Engineer at outage (1R15) at Diablo Canyon Nuclear Power Plant for the removal and replacement of four steam generators.

COMPONENTS DESIGNER

Southern Wholesale Supply - Harrisburg, NC - August 2006 to August 2008

Southern Wholesale Supply, Harrisburg NC, August 2006 – August 2008 (Out of Business)

COMPONENTS DESIGNER

- Estimated and created material take-offs for complete residential and commercial engineered framing packages.
- Estimated and designed engineered wood systems for prospective and existing customers. Used AutoCAD to create installation layouts.
- Provided face-to-face training seminars with clients to teach and update them on new products and technology.

DESIGN ENGINEER

Hope Lumber - Kings Mountain, NC - January 2005 to August 2006

Hope Lumber, Kings Mountain, NC, January 2005 –August 2006 (Out of Business)

DESIGN ENGINEER

- Designed over 2 million dollars a year in roof, floor trusses, wall panels and I-joist products that included the calculations of structural beams and creating layout using Mitek and AutoCAD.
- Followed BOCA and IBC building codes to obtain professional engineering seals for trusses and beams.
- Generated complete material take off list for residential and commercial applications.

ARCHITECTURAL DESIGNER

McFarland Design Group - Denver, NC - September 2003 to August 2006

- Entrepreneurial experience with small architectural firm; duties included drafter/designer, sales, accounts payable/receivable, technical and customer support.
- Worked with contractors to design, draft and engineer complete working sets of residential and commercial construction drawings using AutoCAD. Drawing packages included the design of foundations, framing, electrical, HVAC, elevations and details.
- Project Manager / General Contractor on multiple construction projects. Responsible for most aspects of the project from following all local/national codes ensuring proper safety is being practiced at all times while maintaining and improving quality.

COMPONENT DESIGNER / SUPERVISOR

Kent Trusses - Charlotte, NC - November 2000 to January 2003

Responsibilities

- Designed and setup initial layout for production process for manufactured building products. Performed analysis of assembly line productivity. Reconfigured to increase efficiency of product flow.
- Supervised up to fifteen employees for the construction of manufactured building components. Improved production more than 33% within six months.
- Managed and mentored employees to achieve personal goals; consistently met targeted and increasing quotas. Provided training of junior designers on computer aided engineering (Mitek) and computer aided design software (AutoCAD).

PROJECT ENGINEER

Anbroco, Inc - Stanley, NC - February 1999 to November 2000

Responsibilities

- Engineer of sanitary material handling/packaging in the food, beverage and pharmaceutical industries.
- Created as-built drawings employing ASME B31.1-31.5 codes for the fabrication and installation of process piping/utility systems utilizing stainless steel, copper tubing and black pipe using AutoCAD.

- Both design and field experience with material handling component layout and installation utilizing conveyors for the food and beverage industry.
- Experienced in preparation of calculations, drawings, procurement and specifications. This includes the estimation of material and labor cost. Significantly reduced estimation time while increasing accuracy of bids.
- Created and conducted technical presentations to clients during sales meetings to secure new business and addressed questions or concerns by assisting in the identification and resolution of technical issues.

EDUCATION

Bachelors of Science in Mechanical Engineering

University of North Carolina at Charlotte - Charlotte, NC

SKILLS

AutoCAD r12 - 2010 (10+ years), Microsoft Office (Word, Excel, PowerPoint). (10+ years), Trane Trace 700 (Less than 1 year), Caesar II (1 year), Construction and Commissioning (5 years)

CERTIFICATIONS

North Carolina General Contractor

North Carolina Licensed Professional Engineer

North Carolina Licensed Professional Engineer (# 043188)

December 2016

North Carolina General Contractor (# 59618)

December 2016

GROUPS

ASHRAE

January 2016 to Present

ADDITIONAL INFORMATION

COMPUTER SKILLS SUMMARY

- Extensive computer knowledge of AutoCAD r12 - 2010. Design experience with mechanical, structural, architectural and the fabrication specialized equipment.
- Solid working knowledge of Microsoft Office (Word, Excel, PowerPoint). Trane Trace 700, Caesar II, SAP and SmarTeam