

ENGINEERING RESUME

16008 Lumberjack Lane
Louisburg, NC 27549

enginerr4@netzero.net

H: (919) 444-7779
C: (919) 444-5555

SUMMARY OF QUALIFICATIONS

Motivated, energetic professional with extensive experience in a variety of commercial and industrial automation and electrical distribution competencies.

Experienced in low voltage control system design, layout, manufacture, installation, sales, marketing and project management, in the industries of; water/wastewater, material handling, HVAC and pumping, hoist and crane, food and beverage, oil and gas, building automation, lighting, and energy and power management.

Recognized for producing efficient, innovative and cost-effective control systems for industrial applications that always met or exceeded customer expectations. An effective, cross-trained, self-guided individual with a solid and unbroken record of achievement.

Eager to lead or participate on a design, maintenance, sales, or support team of commercial or industrial electric products, manufacturing processes, and/or control and automation systems. Willing to work inside or outside of the office.

A diversity of **Leadership and Management successes** that includes:

- Design, document, and implement control panel and drafting standards (note: most standards and templates still in use after 10 years). Developed and configured standard parts catalog, which significantly reduced lead time on engineering.
- Design Team Leader: Senior member of 3-person hardware (panel) design team. Developed system and schematic templates which reduced development time by over 30%.
- Subject Matter Expert, Codes and Standards: was corporate “go to” for all NEC code and UL standard compliance matters.
- Panel Shop Supervisor: Led a small company initially into the industrial control panel business, resulting in \$1.5 million in profitable annual sales after 4 years, with only two subordinates. Sold, designed, and managed projects start to finish. Managed the subordinates in the fabrication, test, and shipment of custom control systems for niche markets.
- Coordinated design and manufacturing teams for maximum throughput and guarantee of on-time deliverables.
- On-site supervision of installation and commissioning of machine, process and plant control systems.
- Consumer Electronics Store Manager
- Convenience Store assistant Manager

A diversity of **Sales and Marketing experiences** that includes:

- Trade Show: Designed and built trade show demo units; staffing of trade shows.
- Catalog and Brochure creation: Marketing team player responsible for creation of a company’s first ever product catalog. Developed numerous technical brochures and flyers.
- Direct Customer Interface: Numerous sales and engineering support roles at customer facilities.
- Market Analysis: developed questionnaires and surveys to determine marketability of new commercial and industrial products.

A diversity of **Business Development experiences** that includes:

- Customer On-site Liaison: Full time, long term factory representative serving the customer’s engineering team at their facility. Provided elbow-to-elbow technical support during numerous fast-track component conversions.
- Consulting, Codes and Standards: performed numerous UL508A audits of in-use systems.
- Consulting, Operation and Maintenance: Worked with customers to develop easy to use, intuitive systems operations manuals. Developed sustainable, low cost equipment maintenance plans.
- Product Design and Promotion: worked with manufacturers of mechanical equipment, with no electrical or automation competence of their own, to develop controls and bring to market.

SUMMARY OF QUALIFICATIONS (CONTINUED)

A diversity of **Technical Capabilities** that includes:

- Design of hundreds of industrial machine and centralized/de-centralized plant control systems and interfaces, from simple machine control, to multi-controller, 6000 amp manufacturing campuses.
- Specified dozens of low voltage power systems, including switchgear, distribution, motor control center, power factor correction, power quality, and uninterruptible segments (generator backup).
- Short Circuit Rating / Testing / Fault Analysis: Developed test plans for UL witnessed short-circuit tests; Wrote preliminary and follow up reports. Participated in product liability, safety labeling, and FMEA/fault tree studies. Assisted customers in the transition to short-circuit rated control systems as required by code.
- Hazardous Area / NEC 500, 501, 502, 503: Designed and built LVLE, intrinsically safe, and purged industrial control systems for use in classified hazardous areas.
- UL508A / NFPA79 compliance
- AutoCAD / ACAD Electrical; Eplan 21 / P8
- Variable Frequency Drive and Soft Start: Sales, service, and commissioning roles; Participation in product development teams.

PROFESSIONAL EXPERIENCE

SCHNEIDER ELECTRIC

2006-20012

Senior Application Development Engineer, Global OEM group

Worked directly with design teams of global OEMs to develop more efficient, transparent, and flexible control systems for global product offers. For example, Carrier div. UTC, McQuay div. Daikin Industries, Flygt Pump div. Xylem Water Solutions, American Marsh, Terex Crane, Franklin Electric.

BUHLER, INC.

1996-2006

Senior Hardware Designer

Lead position of three member panel design team. Coached European panel design teams through UL508A certification process. Created drafting and design standards which significantly reduced engineering time, while dramatically improving reliability, quality, cost profile, and comprehension.

EARLY EXPERIENCE

HVAC Equipment, Sales/Service (2 years), Panel Shop Supervisor (6 years), Journeyman Electrician (3 years), Service Center Operations Manager (2 years), Consumer Electronics Store Manager, Convenience Store Assistant Manager

EDUCATION

University of Minnesota – Minneapolis, MN
Anoka Technical Institute – Anoka, MN

TECHNICAL SKILLS AND PROFESSIONAL DEVELOPMENT

- | | |
|---|---|
| • Low Voltage Electrical Safety < QUALIFIED > | • Product Safety Alert Process (PSAP) |
| • Failure Mode Effects Analysis (FMEA) (subject matter expert on numerous design FMEA committees) | • Fault Tree (risk) Analysis (deductive failure analysis method used to determine the probability of a safety accident or a particular system level (functional) failure) |
| • Microsoft Office Suite proficiency | • Lean Manufacturing |
| • Six Sigma (basic understanding) | • Problem Solving Methodology |
| • Project Management Fundamentals | • Product Safety in Literature |
| • Effective Email Communication | • Product Liability |