

Electrical • Instrumentation



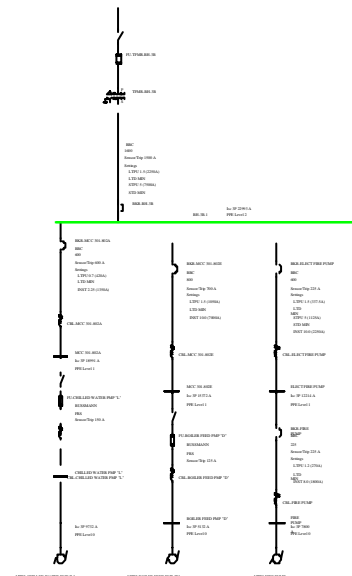
With over 250 years of combined experience, Perigon's Electrical & Instrumentation department has the experience to meet your engineering demands. From medium voltage power distribution through building electrical, from instrumentation selection to controls system design, our team of engineers and designers apply proven engineering know-how to tackle even the toughest problems. Our history as a plant engineering resource serving the fibers and chemicals industries, has made us the go-to resource for many customers with hazardous area concerns. The Perigon Electrical & Instrumentation department, experience you can count on!

See below for more detailed list of our capabilities.

Electrical & Instrumentation Services & Typical Deliverables

Electrical:

- Engineering and Design Drawings / Specifications for Industrial and Commercial Construction
- UL-96A Lightning Protection
- Cogeneration
- Electrical Power Distribution
- Grounding Design
- Transformers, Unit Substations, Switchgear and Relaying (ANSI / IEEE C37)
- Motor Control and Adjustable Frequency Drives
- Power System and Fault Current Modeling
- Short Circuit and Protective Device Coordination Analysis
- Load Analysis and System Stability
- DCS / PLC System Hardware and Peripherals
- Hazardous Area Classification
- NFPA 72 Fire Alarm Design
- IESNA Lighting Design
- Plant Security and Surveillance Design



Uniquely Qualified to Provide:

- Energy Management Consulting and Evaluations
- Adjustable Speed Drive (ASD) Application and Specifications
- Design / Build Projects and Construction Supervision
- NFPA Hazardous Area Classification Studies
- IEEE Recommended Power Quality Solutions including Analysis, Economic Evaluation and Mitigation Device Specifications
- NFPA 70E Arc Flash Analysis
- Technical Writing including O&M Manuals and Maintenance Training
- Certified Training Seminars and Hands-On Workshops dealing with:
 - Energy Management Organization and Performance Analysis
 - Energy Monitoring and Reporting Systems
 - Motors and Drive Systems
 - Power Quality Issues in Support of Productive Environments
 - OSHA 1910.147 Lockout / Tagout Procedures
 - NEC (NFPA 70)
 - Arc Flash Safety (NFPA 70E)

Instrumentation & Controls:

- Instrument Selection and Application of Appropriate Technologies and Materials
- ISA Format Instrument Specifications
- Standard Instrument Index: Including Procurement Status, Calibration Ranges, Model and Manufacturer Data
- ANSI / ISA-S84.01 Safety Instrumented System Design
- Instrument Procurement, Calibration and Commissioning
- Field Analysis and Troubleshooting
- PLC and DCS based control systems including Foundation FieldBus, DeviceNet, ProfiBus and ASI-Bus
- Control Panel Design
- Control System Hardware Specifications

Tools:

- SKM PowerTools® Captor (Device Coordination)
- SKM PowerTools® Dapper (Fault Current Modeling)
- SKM PowerTools® TMS (Motor Starting Analysis)
- SKM Power Tools® Arc Flash (Arc Flash Analysis)
- AmpCalc® Underground Ductbank Ampacities
- AutoCad, AutoCad Electrical, Microstation

Professional Affiliations:

- Professional Engineer Registration in the following states:
 - North Carolina
 - South Carolina
 - Tennessee
 - Georgia
 - Alabama
 - Texas
 - Arkansas
 - Virginia
 - Pennsylvania
 - Michigan
- IEEE
- NFPA
- IESNA