

ENGINEERING

PROFESSIONAL PROJECTS SERVICES

Engineering, Procurement & Construction Management Overview

FRONT END PROJECT SERVICES

- Feasibility Studies
- Conceptual & Detailed Estimates
- 3D Modeling
- Preliminary Engineering

FULL SERVICE ENGINEERING SERVICES

- Process, Mechanical, Piping
- Materials Handling, HVAC
- Electrical & Instrumentation
- Control Systems, Automation
- Civil, Structural, Architectural
- Construction Management; Program Management
- Procurement - Equipment, Materials, Subcontract Management



Professional Project Services Headquarters Raleigh, NC

PRECONSTRUCTION SERVICES; DETAILED ENGINEERING

COMMISSIONING & START-UP; DECOMMISSIONING SERVICES

PROFESSIONAL ASSOCIATIONS

- AEE
- AIChE
- ASME
- IEEE
- ISA
- ISPE
- NCSE
- NSPE
- PENC

ENGINEERING

SAFETY, HEALTH & ENVIRONMENTAL

Safety Commitment

PPS is committed to beyond zero injuries.

- Our belief is there absolutely nothing we do that's worth putting a human life at risk for.
- Our safety program is designed to facilitate that goal.

Corporate Values: Safety is ALWAYS #1!

- Think, Demand, and Deliver Safety in ALL Aspects of our Business

Corporate Safety Goals

- Zero Injuries
- Zero Accidents
- Zero Tolerance

Human Rights

- Improve Worker "Quality of Life"

Sustainability & Community

- Responsibility to Environment

MISSION STATEMENT

Professional Project Services (PPS) has been formed to enhance and build lasting relationships with industrial clients in the Southeast by providing cost effective, timely engineered, procurement, construction management and design/build services while achieving highest industry standards and safety and quality.

ENGINEERING

TOTAL PROJECT SOLUTIONS DESIGN / BUILD



**THE ROBERTS COMPANY (TRC)
& PROFESSIONAL PROJECT SERVICES (PPS)**



- High Alloy, Complex Products
- Support Constr./Maint. Projects
- CS/SS Ht Exh, Tnks & Vessels
- OEM Product Line

FABRICATION

- Construction Projects in SE
- Design/Build Projects

CONSTRUCTION

TOTAL PROJECT SOLUTION

ENGINEERING

- Misc Plant Repair/Maint. Projects
- Multi-discipline Engineering
- Construction Management
- Design/Build Projects

PLANT PROJECTS

- On-Site Presence
- Repair
- Maintenance
- Improvement

FEASIBILITY STUDIES

PRECONSTRUCTION SERVICES

DETAILED ENGINEERING

CUSTOM FABRICATION

CONSTRUCTION MANAGEMENT

CONSTRUCTION

DESIGN BUILD

PLANT PROJECTS

SAFE / RELIABLE / CREATIVE / COMPETITIVE

ENGINEERING

PPS DEPARTMENTS

- Process
- Mechanical
 - Material Handling
 - HVAC
 - Piping
- Electrical
- Instrumentation/Controls
- Civil/Structural/Architectural
- Project Managers
- Administrative
- Project Controls
 - Estimating
 - Scheduling
- Procurement
- Quality Control
- Construction Management
- Management
- Business Development

AREA OF SERVICE



Professional Project Services Headquarters:

- Raleigh North Carolina

Professional Project Services other locations:

- Aurora, North Carolina
- Winterville, North Carolina
- Moncks Corner, South Carolina

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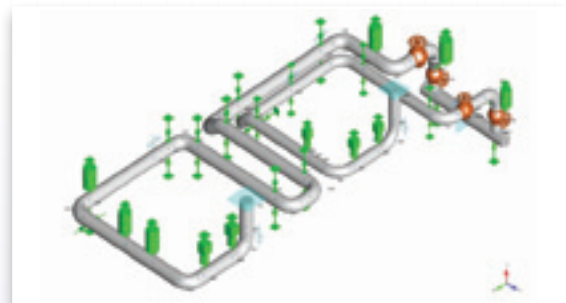
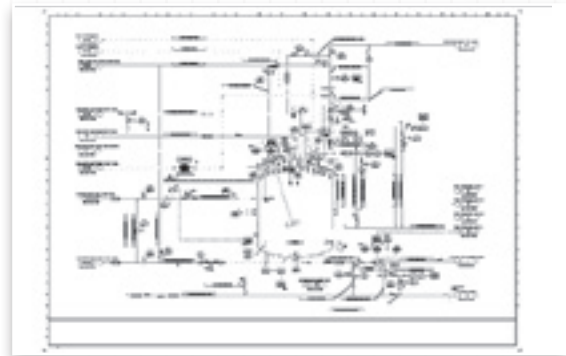
PROCESS ENGINEERING

- Process Safety – PHA & HAZOP
- Security Vulnerability Analysis – SVA
- PHA & SVA assist & lead
- PFD's and P&ID's
- Process Simulation
- Heat Transfer
- Extraction/Blending
- Heating and Cooling
- Process, Cooling Towers, Chillers
- Pressure Vessels and Relief Valves
- Waste Water Systems
- Boiler System Specification
- Combustion Safety
- Filtration
- Distillation

MECHANICAL/PIPING ENGINEERING

- 3-D with CAD AutoPLANT
- Equipment Specification
- Piping Design, ASME B31.1 & B31.3
- Pipe Stress Analysis
- Piping Orthographies and Piping Isometrics
- Heating, Ventilation, and Air Conditioning
- API 653 Repair and Alteration Design
- Design of ASME Section VIII, Div 1 Pressure Vessels
- Dry Material Handling, Receiving, Storage, Packaging
- Equipment Inspection
- Refrigeration
- API 650 Tank Design

- WFI
- Clean Utilities
- Slurry Handling
- Spray Drying
- Safety Studies
- Hot Oil Systems
- Vaporizers
- Dust Control Systems



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INDUSTRIAL AUTOMATION

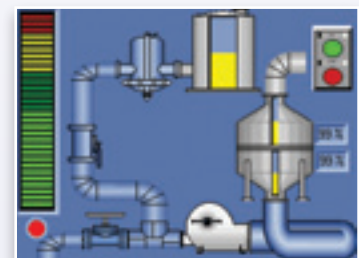
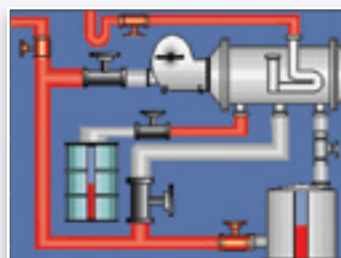
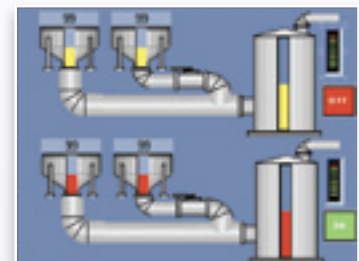
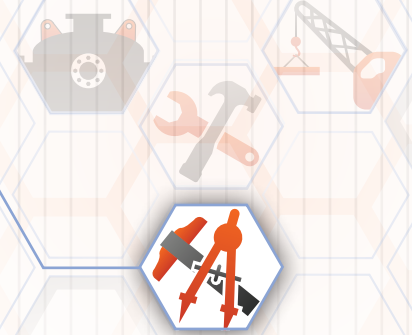


SYSTEMS & EQUIPMENT

- PLC
- DCS
- SCADA Data Historians
- Full bus designs/modifications
- Communication Systems
- HMI
- Graphics Development
- Data Highways
- Production Tracking
- Environmental Monitoring
- Closed Circuit TV Systems, Standard & Web Based
- Combustion Control Systems, Air/Fuel, drum level
- Power Plant Design, Steam Turbines Generators

HARDWARE/SOFTWARE EXPERIENCE

- Allen Bradley/Rockwell
- ABB
- Apax
- Bailey
- Delta V
- Emerson - Ovation
- Fisher Provox
- Foxboro
- Honeywell
- Keyence
- Modicon
- Nokia
- Square D

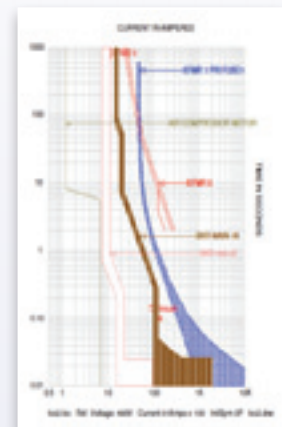
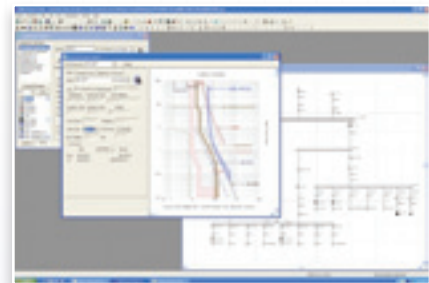
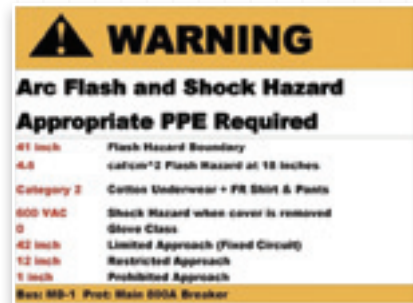
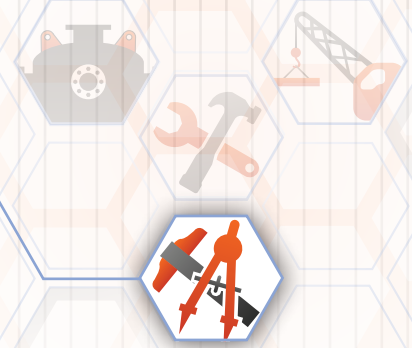


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ELECTRICAL POWER SYSTEMS

EXPERIENCE AND EXPERTISE

- Develop Engineering & Construction Documents
- Electrical Standards
- Plan drawings; power, lighting, grounding, etc.
- Single Line Diagrams
- Electrical Room Layout
- Conduit & Cable Schedules
- Electrical Specifications and Data Sheets
- Electrical Distribution Design
- Develop Maintenance Programs
- Technical training – customized, standard
- Point of contact service w/local utility company
- Synchronous and large motor applications
- System configuration and equipment reliability and application
- 120V - 480V - 600V - 24kV – 35kV – 69kV
- Harmonic analysis
- Frequency load shedding applications
- Master Planning, Power Systems
- Field testing, verification, commissioning and startup
- Power System studies (SKM) and designs
- Short Circuit
- Load Flow
- Voltage Regulation
- Protective Device Coordination
- Transient Motor Starting Analysis
- Grounding Systems
- Arc Flash
- Electric Flash Hazards



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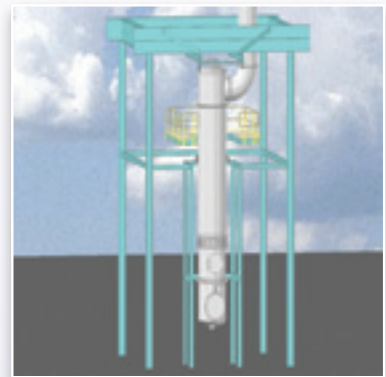
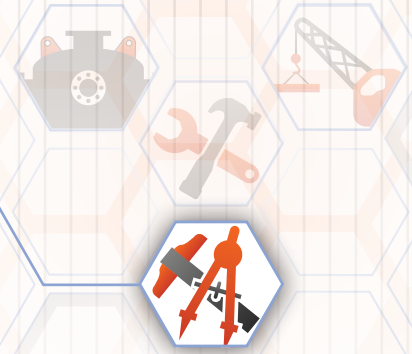
CIVIL / STRUCTURAL / ARCHITECTURAL

EXPERIENCE & EXPERTISE:

- Site Evaluation
- Permit Planning and Support
- Building Code Compliance
- ADA Compliance
- Structural Integrity
- Structural Modeling and Calculations
- Life Safety
- Facility Design and Layout
- Architectural Design
- Working Drawings
- Specifications
- Plumbing
- Construction Support

COORDINATED SERVICES INCLUDE:

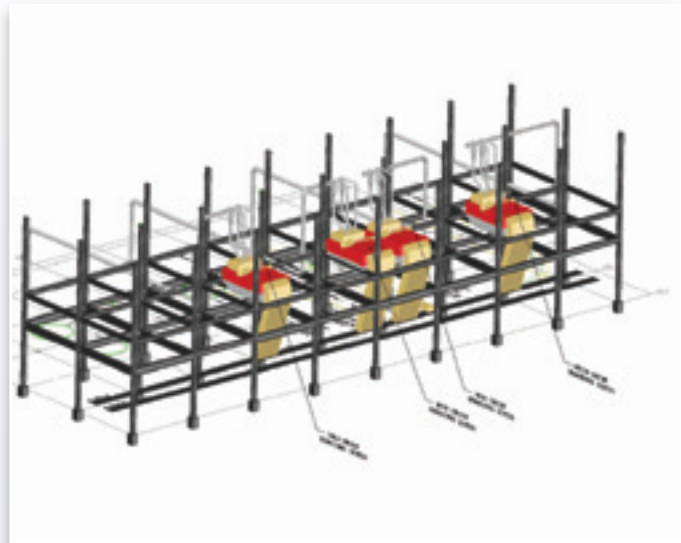
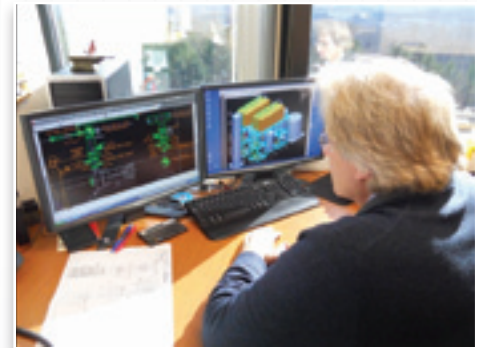
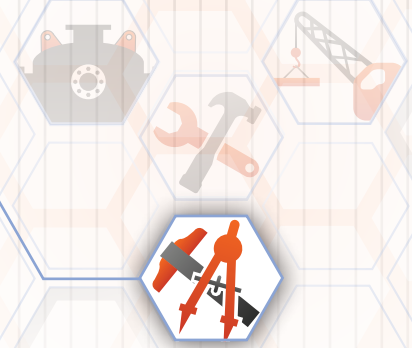
- Surveying
- Geotechnical
- Fire Protection
- Environmental
- Civil



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ENGINEERING SOFTWARE

- AutoCAD
- AutoPLANT 3-D
- PHA Pro
- AutoPIPE
- PIPE-FLO
- STAAD Pro
- SKM
- Visilogic
- CenterOne (Allen Bradley)
- TraceCalc Pro 2 (Tyco)
- Visual Professional Edition
- Control Valve Sizing
- Integrated Architecture Builder
- Caterpillar Electric Power Spec Sizer



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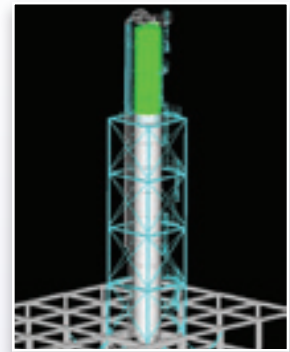
PROJECT MANAGEMENT AND CONTROL TOOLS

- Scheduling Software
 - Microsoft Project
 - Primavera P6
- Cost Control & Accounting Software
 - Viewpoint V6 fully-integrated accounting, operations, and project management data software application



ESTIMATING SYSTEMS

- Timberline Estimating Software
 - Streamlines take-off process
 - Faster, more efficient and more accurate
 - Project modeling accompanied by detailed cost data
 - Facilitates 'what-if' design change analysis by delivering instantaneous estimates of the cost impact
 - Process Modeling and Budget Estimating



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PROJECT MANAGEMENT

- Client Interface
- Organization
- Scope Development
- Scope Control
- Cost Control
- Planning and Scheduling
- Estimating
- Quality
- Safety
- Value Engineering
- Reporting
- Engineering Procedures

PROCUREMENT

We have the expertise to provide secure services and manage contracts for your project.

• CAPITAL EQUIPMENT

Procurement staff capable to manage or supplement your capital equipment purchases and deliver equipment on time.

• EXPERTISE IN THE FOLLOWING AREAS:

Source Planning; Bid Analysis; Receiving;
Risk Analysis; Shipping; Vendor Evaluation;
Expediting; Asset Management; Contract
Negotiations

CONSTRUCTION MANAGEMENT CONTROL IS THE KEY TO SUCCESSFUL CONSTRUCTION MANAGEMENT

- Costs; Work progress; Materials; Contractors

EXPERTISE IN ALL AREAS OF CONSTRUCTION MANAGEMENT, INCLUDING:

- Contract Management
- Fast Track
- Scope Management
- Capital Cost Estimating
- Sourcing/Field Procurement
- Construction Quality Program
- Start Up Management and Turn Over
- Design/Build Experience
- Planning and Scheduling
- Government Regulations
- Change Management
- Constructability Programs
- Construction Safety Program

CONTRACTING METHODS

- Lump Sum
- Design/Build
- EPC
- Construction Management
- Cost Plus Fixed Fee
- Time and Material
- Any combination of The Above

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FOR MORE INFORMATION CONTACT

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