

CIVIL & STRUCTURAL

- Architectural Finishes
- Basins & Dams
- Bridge Design
- Cofferdams, Sheetpiles & Shoring
- Concrete Design
- Dewatering
- Drilled & Driven Piles Design
- Dynamic Analysis (Steel Structures)
- Dynamic Analysis (Vibrating Equipment Foundations)
- Earthwork
- Elevators
- Fireproofing
- Flue Gas Ductwork
- Geophysical Surveys
- Geotechnical Instrumentation
- Groundwater Management
- Grouting - Equipment & Base Plates
- Finite Element Analysis (GT Strudel)
- Landfills
- Liquefaction Analysis
- Masonry
- Post-installed Anchors
- Rebar Density 3D Modeling (TEKLA)
- Rock Blasting
- Roofing & Siding
- Security Barrier Systems
- Seismic Design
- Seismic Instrumentation
- Site Investigations
- Site Preparation Design
- Soil & Rock Anchors
- Soil/Structure Interaction
- Soil Dynamics
- Soil Grouting & Mechanics
- Storm Water System Design
- Structural Acceptance Test
- Structural Steel 3D Modeling
- Structural Steel Connection Design
- Wells

MECHANICAL

- Air Compressors & Air Dryers
- ASME B&PV Code, Sec I
- ASME B&PV Code, Sec VIII
- Auxiliary Boilers (Electric, Packaged)
- Auxiliary Steam Turbines
- Chillers & Chilled-water Systems
- Circulating Water Pumps
- Vertical Wet-pit Pumps
- Circulating Water System Optimization
- Combined Heat & Power
- Combustion Turbines
- Compressible Flow Analysis (ARROW)
- Condensers & Heat Exchangers
- Cooling Towers & Air Cooler Units
- Cooling Water Systems
- Cranes, Lifting Hoists & Monorails
- Design Basis Documents
- Diesel Engines & Support Systems
- Energy Efficiency Analysis
- Fans & Air Handling Units
- Filtration Systems (HVAC)
- Fire Protection
- Flow Measure Orifices & Venturis
- HVAC Duct Layout & Support
- HVAC System Design
- Hydraulic Network Analysis (FATHOM)
- Insulation
- Feedwater & Condensate Pumps
- National Board Inspection Code (NBIC)
- Non-destructive Testing (NDT)
- Open-channel Flow
- Overpressure Protection
- Performance Testing
- Power Boilers
- Pressure Vessels

- Pumps & Rotating Equipment
- Restricting Orifices
- Seismic Qualification of Equipment
- Set Point Calculations
- Siphons & Loop Seals
- SmartPlant® P&ID
- Steam & Condensate Systems
- Steam Turbines
- Strainers, Self-cleaning Strainers
- Steam Traps & Condensate Drains
- Systems Failure Modes Analysis (FMEA)
- Turbine Water Induction Prevention
- Tanks
- Valves
- Water Hammer Assessment
- Water Quality Analysis
- Water Treatment System Design
- Welding
- Post-weld Heat Treatment

MATERIALS ENGINEERING

- Buried Pipe Evaluation
- Cathodic Protection
- Corrosion & Erosion Prevention
- Corrosion Mechanism Identification
- Failure Mechanism Prevention
- Flow Accelerated Corrosion Analysis
- Fracture Analysis
- Friction & Lubrication
- Heat Treatment
- Materials Selection
- Materials Corrosion Testing
- Microbiologically Influenced Corrosion (MIC) Analysis
- Paint & Coating Systems
- Welding, Brazing & Soldering
- Packaging, Shipment & Storage

ELECTRICAL & INSTRUMENTATION AND CONTROL (I&C)

- Annunciators
- Continuous Emissions Monitoring Systems (CEMS)
- Controls - Combustion Turbine
- Digital Bus
- Distributed Controls Systems (DCS)
- Heat Tracing
- Instrument Application
- Instrument Design & Installation
- Inverters (Static & Manual Bypass)
- Lightning Protection & Grounding
- Metering & Relay Protection
- Motor Control Centers
- Motors
- Operator Interfaces
- Programmable Logic Controllers (PLC)
- Raceways
- Security Systems (Detection & CCTV)
- SmartPlant® Instrumentation (SPI)
- Steam Turbine Controls
- Supervisory Control & Data (SCADA)
- Switchgear (Metal Clad & Load Centers)
- Switchyards
- Thermowells
- Transformer Design
- Variable Speed Drives
- Vibration Monitoring

CONDENSERS & HEAT EXCHANGERS

- Condensers
- Cooling Towers, Coolers & Coils
- Deaerators
- Feed Water Heaters
- Gas Turbine Inlet Air Cooling
- Heater Drain Systems
- Shell & Tube Heat Exchangers
- Plate & Frame Heat Exchangers
- Steam Jet & Water Injectors

PIPING

- Buried Piping & Support Systems
- Pipe Sizing & System Design
- Pipe Steel & Non-metallic
- Piping Condition Assessments
- Pipe Support Designs
- Pipe Stress, Thermal Transient & Fatigue Analysis
- Pipe Whip Restraints, Jet Impingement Barriers & Shields (IP)
- Plant & Piping Layout
- Plumbing

THERMAL & HYDRAULIC ENGINEERING

- Fluid Flow Modeling (Phase 1 & 2 Slurries)
- Fluid System Steady State & Transient Analysis
- Gas Explosions & Dispersion Analysis
- Heat Transfer (1D & 3D models)

- Plant Heat Balance & Optimization (PEPSE, Thermo Flow)
- Safety Relief Valve & Discharge
- Thermal Lag Analyses
- Thermal Design (HTRI)

SPECIALTY SERVICES

- Critical Infrastructure Protection
- Electronic Document Management
- Emergency Planning
- Enhancement/Uprate Studies
- Plant Modeling
- Plant Testing & Start-up
- Project Management
- Program Management
- Project Controls (Schedule & Cost)
- Resilience Planning (Flood, Ice, etc.)
- Toxic Chemical Release Analysis

FIELD SERVICES

- Specialty Welding Services
- Machining Services
- Engineered Tool Design
- Weld Engineering
- Metrology Services
- General NDE Services & Products
- Specialized, Uniquely Designed NDE Services
- Specialized & Unique NDE Products
- Turbine Generator Inspection Services