



fully integrated services.

Technical Consulting

- Facility Operations / Operations Strategy
- Operational Excellence and Planning
- Strategic Master Planning
- Technology Transfer
- Lean Approaches to Capital Projects
- Total Calibration Program Management
- Energy Audits / Conservation/Management
- Environmental Impact Analysis / Assessment

Engineering

- Process Architecture
- Architectural
- Mechanical
- Electrical
- Process Technology
- Process Engineering
- Equipment
- Computer Process Simulation and Modeling
- Environmental
- BIM Technology
- Conceptual Design / Engineering
- Detailed Engineering
- Energy / Sustainability
- 3D Simulation
- Automation

Construction

- Constructability Reviews
- Construction Management
- Cost Management
- Design Reviews
- Estimating
- Field Inspection/Execution
- Logistics Planning
- Process Equipment Installation
- Procurement Strategy
- Project Controls
- Project Management
- Risk Analysis
- Safety
- Schedule Management

Commissioning / Qualification / Operations

- C&Q / Validation Master Planning
- Qualification: IQ / OQ / PQ
- ASTM E2500
- FMEA / Fault Tree
- Risk / Value Mapping
- Logistics Planning
- Operations Strategy
- Design Qualification
- URS / FRS Development
- Retrocommissioning
- Commissioning
- FAT / SAT
- Project Information Management
- Quality System
- Implementation
- Test Plan Development
- Procurement Specifications
- Validation & cGMP Training
- Process / Cleaning Validation
- Automation and Computer Systems Validation
- Document Management
- Calibration
- FDA 483/WL Remediation