

FEASIBILITY STUDIES AND PRELIMINARY DESIGN

- Process Flow Diagrams (PFDs)
- Piping & Instrumentation Diagrams (P&IDs)
- Design Criteria
- Estimates of Probable Construction Cost
- Constructability Reviews
- Equipment Lists
- Performance Specifications
- Process Simulation
- Equipment Layouts
- General Arrangements
- Comprehensive Schedules
- Permitting
- Control System Architecture Diagrams

DETAILED DESIGN AND CONSTRUCTION DOCUMENTS

- Process – Chemical Design
- Material Handling and Dust Collection
- Equipment and Material Specifications
- Site work
- Structures
- Plumbing
- HVAC
- Quench and Process Air Systems
- PLC/DCS/MMI Software Programming and Configuration
- Instrumentation and Controls Systems
- System Integration
- Equipment Installation
- Buildings
- Piping
- Fire Protection
- Clean Rooms
- Electrical Power Distribution

PROCUREMENT

- Purchasing
- Bid Tabulation and Evaluation
- Requisitions
- Expediting
- Vendor Prints