



# ENGINEERING OVERVIEW

## 3D COORDINATION / MODELING

- | Virtual Construction Design
- | 3D CAD & Visualization
- | 3D Laser Scanning
- | Building Information Modeling (BIM)

## CONSTRUCTION ADMINISTRATION

- | Construction Assistance
- | Field Engineering
- | Product Selection & Prefabrication Design
- | Commissioning Support

## ELECTRICAL SITE EVALUATIONS

- | Facility Electrical Master Planning
- | Electrical Safety & Code Compliance Review
- | Plant Documentation - Electrical & Control System
- | Infrastructure Assessment
- | Maintenance Planning

## INSTRUMENTATION ENGINEERING

- | Instrumentation Specification
- | Process Safety Management (PSM)
- | Dust Hazardous Analysis (DHA)
- | Pressure Safety Valve (PSV) Audits

## POWER STUDIES

- | Coordination Studies
- | Arc Flash & Short Circuit Studies
- | Load Flow & Electrical Capacity Studies
- | Power Quality (Harmonic & Power Factor) Studies

## POWER SYSTEM ENGINEERING

- | Medium Voltage Distribution System Design
- | Low Voltage Distribution System Design
- | Generator & Backup Power System Design
- | Hazardous Area Classification Analysis
- | Grounding & Bonding Design
- | Lighting Design

## CONSULTING & VALUE DESIGN

- | Pre-Project Planning (Mini-Scoping)
- | Documentation & Specifications
- | Electrical Remediation Planning
- | Operating Cost Assessment
- | Constructibility Analysis

## CONTROL SYSTEM ENGINEERING

- | Control System & Network Architecture
- | Control Panel Design
- | Motor Starter Panel Design
- | Motor & Instrument Control Loop Drawings
- | Machine Functional Safety Design

