



INNOVATING SINCE 1989

ENGINEERING & CONSULTING



Designed for Better Work

With vast construction experience, our engineering team specializes in practical solutions that leverage cutting edge trends in both construction and engineering. With comprehensive engineering capabilities, ISC offers field-proven and construction-minded engineering services.

At ISC, construction and execution is top-of-mind. We know our customers need to effectively build their critical assets, not endlessly receive bills for design. Our approach is to "Build It, Not Bill It" to ensure our customers' hands-on investments stay on time and on budget, and achieve a positive return on investment.

Professionally engineered with construction and safety experience.

BUILD IT vs BILL IT

COMPREHENSIVE ENGINEERING SOLUTIONS

- ▶ Technical Services
- ▶ 3D Scanning & Surveying
- ▶ Process Hazard Analysis
- ▶ PSV Sizing & Dispersion Modeling
- ▶ Process
- ▶ Mechanical & Piping
- ▶ Civil and Structural
- ▶ Electrical & Instrumentation
- ▶ Control Systems

► TECHNICAL SERVICES

ONSITE TECHNICAL STAFFING PERSONNEL

ISC offers onsite technical staffing to supplement customer representatives in their facility. We provide a team including Project Managers, Engineers, Designers, and CAD Drafters, with the technical competence to ensure quality performance.

CONSTRUCTABILITY

By suggesting alternative installation methods and material selection, ISC's constructability experts can identify cost savings for our customers in the design phase of a project. We are routinely requested to provide these services on major industrial expansions as globally recognized experts.

ADVANCED WORK PACKAGING (AWP)

AWP is a planned executable process that encompasses the work on an EPC project, beginning with the initial planning and continuing through detailed design and construction execution. ISC provides customers with electrical and instrumentation expertise starting with project setup, interactive planning, and defining construction and engineering work packages.

► 3D SCANNING & SURVEYING

Our in-house team uses ISC-owned laser scanning equipment to gather, analyze and model field data to provide our customers with an accurate mapping of the customer's existing facility. This service allows the customer to review design options before construction installation to ensure accuracy and streamlined engineering and design.

► PROCESS HAZARD ANALYSIS (PHA)

We provide experienced leadership, preparation, and attention to detail, fulfilling the requirements of an effective PHA. Typical PHA services that we provide include: Initial, Revalidation, Clean Sheet, MOC and RFC, Capital Project, FEL, Detailed Design, and PSSR.

► PSV SIZING & DISPERSION MODELING

ISC specializes in evaluating pressure relief systems (PRS) from both an equipment protection perspective and an associate and community safety perspective. ISC can assist in all aspects of pressure relief device validation and sizing, including gathering process safety information, developing over pressure scenarios, and performing sizing validation calculations.

► PROCESS

Our licensed engineers provide a wide range of subject matter expertise across a variety of operations. We have served customers handling HF, HCL, chlorine, fluorocarbons, industrial wastewater and many other processes.

► MECHANICAL & PIPING

ISC's mechanical and piping division drives the design of new piping systems or retrofitting existing systems. Our efficient processes and construction first approach reduces risk, decreases cost, and minimizes project durations. Existing equipment, piping, and structures are precisely scanned using our 3D precision laser scanner, which can be used in 3D modeling software giving a real time, accurate representation of proposed design while minimizing construction modifications.

► CIVIL & STRUCTURAL

Our civil and structural group uses organization, experience, and proven methods to solve industrial issues with the aid of modern technology. ISC's civil engineering professionals build industrial development plans by considering all geographical factors, environmental constraints, and customer feedback without sacrificing safety, quality, or cost of the completed construction package.

► ELECTRICAL & INSTRUMENTATION

ISC's electrical and instrumentation engineering capabilities cover all facets from large, site wide power distribution and temporary power design to DCS/SIS modernization and instrumentation upgrades. Our innovative technical staff combines professional engineers with experienced construction experts and state-of-the-art software to provide a cost effective, efficiently constructed complete package. ISC excels in power and motor feeds, unit substation design, motor control center (MCC) upgrades, cable raceway system design, power system studies, and area lighting design.

► CONTROL SYSTEMS

Our controls system engineering group specializes in Safety Instrumented Systems (SIS), Burner Management Systems (BMS), and DCS modernization projects to provide customers accurate control and feedback of process systems.