

chemical

⌘ ssoe®. making clients successful.



Why SSOE? The SSOE Experience is the combination of our Value Promise and Great Client Service that results in trusted relationships.

To consistently exceed clients' expectations is a common goal in our industry. So, how is our promise of outstanding performance any different from others? We have proof. Greater than 98% of clients we surveyed would recommend SSOE Group to a colleague. And more than 150 of our clients have been with us for at least 20 years. These endorsements are a result of our Great Client Service—our corporate-wide commitment to understand and exceed your expectations and deliver unexpected benefits.

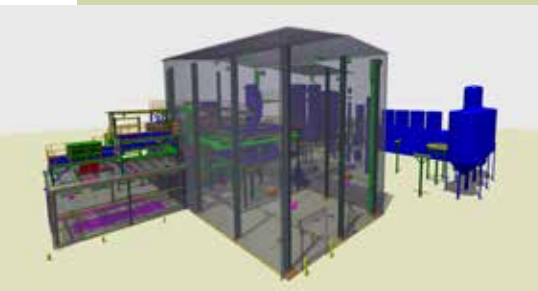
For decades, we've found ways to deliver greater value to clients. You can count on us to deliver high quality projects, on schedule, with fewer problems, and for lower total cost to save you time, trouble, and money. Through this Value Promise SSOE returned 105% of our fee to clients in the form of project savings over the last 5 years.

"SSOE has been our primary engineering firm to design highly complex chemical processes in a series of major expansions. Our chemical processes are very challenging, requiring novel and conventional engineering solutions. SSOE has performed exemplary work and... has demonstrated a high degree of skill in all of the core engineering disciplines for chemical plant design."

Plant Director
Specialty Chemical Manufacturer

Advantages

- By implementing advanced design innovations and technology we have saved our chemical clients more than \$50 million in the last 6 years.
- Designing unique and customized processes in specialized environments is our forte. We help develop your process from schematic design to mass / energy balance, P&IDs and equipment specification, through construction and start-up.
- Improved plant performance. Reduced production costs. Increased safety. Lower installation costs. As a Top 20 Chemical Plant Design Firm for the past decade (*ENR*), SSOE has set itself apart from the competition by delivering an integrated project solution to the chemical industry. We bring together the top echelon of both process and facilities engineers to provide you with the optimal plant design.
- High technology process simulation software, such as CHEMCAD®, Aspen®, HYSIS®, and PIPE-FLO® are the tools we utilize to give you a clear picture of your process and piping systems and help improve design accuracy and efficiency.
- Speed to market. Our diverse manufacturing background provides the expertise needed to get your product to the market place immediately.



Technical Specialties

- 3D CADD modeling
- Batch processing
- Blast resistant structures
- Commissioning and start-up
- Environmental permitting and reporting
- Front-end conceptual engineering and studies
- Hazardous and flammable material storage and handling
- Industrial wastewater treatment
- P&ID development
- Process automation, programmable logic controller (PLC), and human machine interface (HMI) programming
- Process equipment specification
- Process hazard reviews
- Process instrumentation and controls
- Process piping design and pipe stress analysis
- Procurement and construction support
- Project management and project controls (scheduling, cost estimating)
- Systems integration, control system upgrades
- Turnaround expertise
- Utilities and infrastructure (roads, sewers, power)
- Vessel, tank, and pump sizing

Products

- Catalysts
- Coatings
- General chemicals
- Graphite / Carbon
- Resins
- Specialty chemicals

Representative Clients

- AkzoNobel
- BASF
- Dow Chemical
- Dow Corning
- Durez
- INEOS Nitriles
- PCS Nitrogen Ohio
- PPG
- PQ
- Rhodia
- Specialty Minerals

Locations

Albany, NY
Alliance, OH
Atlanta, GA
Birmingham, AL
Chandler, AZ
Chengdu, China
Cincinnati, OH
Columbus, OH
Hamburg, Germany
Huntsville, AL
Kalamazoo, MI
León, Mexico
Lima, OH
Midland, MI
Monterrey, Mexico
Mumbai, India
Nashville, TN
Omaha, NE
Penang, Malaysia
Portland, OR
Raleigh-Durham, NC
Riverside, CA
St. Paul, MN
Santa Clara, CA
Shanghai, China
Shenzhen, China
Toledo, OH
Troy, MI
Washington, DC

Markets

Energy
Life Sciences
Manufacturing / Process
Telecommunications

Services

Architecture
Construction management
Data / Fire / Security
Energy consulting
Engineering
Master planning
Procurement
Project / Program management
Site selection
Tool install
Virtual Design and Construction

Rankings

Engineering News-Record (ENR)

- Top 10 Manufacturing Design Firm for the past 6 years
- Top 20 Chemical Plant Design Firm for the past decade
- Top 25 Industrial Process Design Firm for the past decade

Building Design + Construction

- Top 10 Engineering / Architecture Firm for the past 5 years
- Top 10 Industrial Engineering Firm for the past 5 years
- Top 15 BIM Engineering Firm for the past 6 years

Named "Best AEC Firm to Work For"
(Building Design + Construction)

Named a "Great Workplace"
(Great Place to Work®)

SSOE Facts

- SSOE was founded in 1948 and currently has more than 20 locations worldwide.
- We are a global project delivery firm for architecture, engineering, and construction management, with projects in 40 countries.
- SSOE offers program management services from design through construction, to commissioning and start-up for seamless project delivery.
- SSOE's focus is using the appropriate project delivery method for your goals, including Virtual Design and Construction (VDC), which brings our clients better and faster results through more integrated teams and advanced technologies. Even when a more traditional delivery model is used, you'll see significant benefits from the collaboration strategies and technological capabilities our leadership in VDC necessitates.



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