ssoe[®]. making clients successful.





V A L U E PROMISE

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SAVING MONEY THROUGH A LONG-TERM RELATIONSHIP.

Opportunity: By building a long-term relationship with a *Fortune 500* manufacturing company, we developed an intimate knowledge of its processes.

Action: We routinely provide a wide range of engineering services spanning 46 facilities in 11 countries. **Results:** Saved the client more than \$11.4 million in the last 7 years alone.

making history together.

150 of our clients have been with us for over 20 years. Decades later, we're still finding new ways to impress them.

The SSOE Experience:

The combination of our Value Promise and Great Client Service that results in trusted relationships.

Successful projects have a common characteristic. They're built on solid relationships. Building them involves caring to learn all about your business and how we can contribute to your success. We develop a rapport between our teams by adopting your protocols and learning how you like to work. The stronger—and longer—the relationship, the more value we add.

Successful projects are the SSOE Experience.



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V A L U E PROMISE

SAVING TIME ON THE SCHEDULE.

Opportunity: An ethanol manufacturing company needed to double its existing capacity. **Action:** We engaged our Shanghai office for 24 / 7 engineering design support and reduced this phase by 30%. **Results:** Client reached full capacity ahead of schedule and saved \$1.8 million.

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yes, we make promises.

SSOE returned 105% of our fee to clients in the form of project savings over the last 5 years.

Our Value Promise:

To deliver high quality projects, on schedule, with fewer problems, and for lower total cost. This saves clients time, trouble, and money, and makes them successful.

For decades, we've found ways to deliver greater value to clients. We promise to save you time, trouble, and money on every project and document the amount saved. It's our commitment, and we're willing to put our fee at risk to reinforce that commitment.

We focus on savings opportunities that align with your priorities and business objectives. If getting up and running faster is of prime importance, we'll hone in on compressing the project schedule. If construction costs are a concern, our procurement team can source the best value materials. Throughout this brochure, you'll see examples of how we've made good on our Value Promise. Everyday, we'll continue to find ways to add value.

We keep our promises.





VALUE PROMISE

SAVING TIME ON THE SCHEDULE.

Opportunity: Obtaining a critical air quality permit threatened to delay the start of one client's critical operations. **Action:** We helped expedite the approval of a 600-page permit in record time—30 days faster than any similar permit had been approved in the U.S.

Results: We preserved the schedule for this billion-dollar project, saving the client millions of dollars.



service first.

98% of our clients surveyed would recommend SSOE to their colleagues.

Great Client Service:

To understand and exceed the client's expectations and deliver unexpected benefits.

Delivering Great Client Service is our culture. We train our staff, monitor our performance, and improve our procedures so that each one of us contributes to an outstanding SSOE Experience.

It all starts with listening so we understand your expectations up front. Delivering the SSOE Experience requires us to determine how to exceed those expectations, put a plan in place to do it, execute the plan every step of the way, and measure the results.

Because we can't improve what we don't measure, we'll ask you to rate our performance. If we haven't exceeded your expectations, our step-by-step process kicks in so we will the next time.

Service first. Service always.



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comprehensive services. complete solutions.

Project Delivery.

Where our Value Promise and Great Client Service come together to achieve your business objectives.

planning

- 3D visualization
- Capital planning assistance
- Feasibility studies
- Front-end loading
- Master planning
- Program / Project management
- Public hearings
- Public relations
- Scope development
- Site selection
- Sustainability master planning

design

- Code studies
- Conceptual design
- Facility
- Architectural
- Civil
- Electrical / Power
- Environmental
- Fire protection
- Mechanical
- Structural
- Process
- cGMP
- Chemical
- Controls and automation
- Instrumentation
- Material handling
- Process machine design
- Packaging
- Programming
- Sustainable design / LEED® certification
- Value engineering

V A L U E PROMISE

SAVING MONEY THROUGH DESIGN.

Opportunity: The project required extensive earthwork and piping. **Action:** We used advanced 3D technology to change the siting of the facility. **Results:** Saved \$20 million prior to beginning design phase.



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construction

- 4D sequencing
- Bid meetings
- Commissioning and start-up
- Constructability and construction strategy
- Construction management
- Estimating
- Health and safety
- Operator / Staff training
- Owner's representation
- Permitting
- Procurement
- Site management
- Subcontractor management

professional services

- BIM models to enhance facility management
- Disaster relief
- Energy audits
- Inspections
- Maintenance engineering
- Manufacturing productivity enhancement
- On-site engineering support
- Six Sigma
- Sustainable and renewable solutions

CONSTRUCTION STRATEGY USES VDC TOOLS TO DRIVE PROJECT DELIVERY PERFORMANCE.

Opportunity: A food manufacturer engaged SSOE's EPCM services to add production capacity to an existing facility through the addition of a second line.

Action: VDC enabled a phased construction approach that pulled critical path activities forward. In one case, a fabrication-level 3D model allowed the modularization of liquid process elements on skids that could be constructed in a fab shop concurrent to facility construction.

Results: A project delivered 3 months ahead of schedule within the original budget—moving production forward, and translating to millions of dollars in revenue for the client.

our corporate values.

Here's a look inside SSOE ... an indication of what you can expect from us.

• Safety.

Provide employees, visitors, and contractors with a safe and healthy environment.

• Quality.

The practice of utilizing standard procedures to achieve consistent deliverables while meeting or exceeding client expectations.

Integrity.

Being honest, moral, and ethical.

• Agility.

The ability to rapidly and continuously adapt to market and environmental changes in productive and cost effective ways.

• Collaboration. Working together as a team to create a superior outcome.

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Innovation.

Employing creativity to develop new and fresh ideas that deliver maximum value.

world-class people,

delivering *world-class* projects, for *world-class* clients.



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we're where you are and where you want to be.



SSOE projects

Markets we serve

Life Sciences

Education Healthcare Pharmaceutical Science and Technology

Manufacturing / Process

Aerospace and Defense Automotive Carbon Fiber and Advanced Composites Chemical Consumer products Food General manufacturing Glass Semiconductor

Energy

Alternative energy Petroleum refining Pipeline and Terminals Power

Telecommunications

Data centers Wireless systems

OFFICE LOCATIONS

Albany, NY Alliance, OH Atlanta, GA Birmingham, AL Chandler, AZ 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

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Rankings

Engineering News-Record (ENR)

- Top 5 Automotive Plant Design Firm for the past decade
- Top 5 Semiconductor Design Firm for the past 5 years
- Top 10 Food and Beverage Design Firm for the past decade
- 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
- Top 100 Green Design Firm for the past 9 years

ENR Global Sourcebook

- Top 10 International Automotive Assembly Plant Design Firm for the past 5 years
- Top 35 International Manufacturing Design Firm for the past 5 years

Building Design + Construction (BD+C)

- Top 10 Engineering / Architecture Firm for the past 5 years
- Top 10 Industrial Engineering Firm for the past 5 years
- Top 10 K-12 Engineering Firm
- Top 10 Reconstruction Engineering Firm
- Top 15 BIM Engineering Firm for the past 5 years
- Top 25 Military Engineering Firm for the past 4 years
- Top 30 Retail Engineering Firm for the past 5 years
- Top 30 Federal Government Engineering Firm
- Top 35 Healthcare Engineering Firm for the past 5 years
- Top 50 CM Agent + PM Firm for the past 2 years
- Top 50 Science and Technology Engineering Firm
- Top 50 Government Engineering Firm
- Top 60 Data Center Engineering Firm for the past 4 years
- Top 60 Green Building Engineering Firm
- Top 65 Office Engineering Firm for the past 4 years
- Top 70 University Engineering Firm for the past 4 years
- Named "Best AEC Firm to Work For"

Modern Healthcare

• Top 100 Architectural Firm for the past 5 years

Great Place to Work®

• Named "Great Workplace" for the past 2 years

Zweig Group

• Named "Hot Firm"



