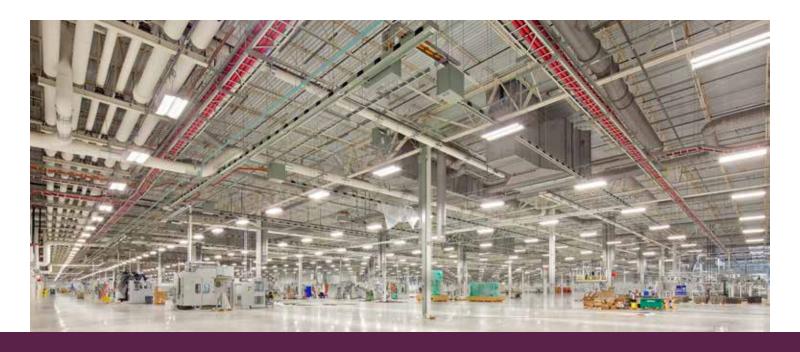


## automotive

88 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.

### **Advantages**

- Seasoned Professionals. Our staff averages nearly 20 years of experience serving the automotive industry. They have designed 12 new automotive plants in the last 20 years, including the world's first LEED® Platinum automotive assembly plant and most recently Nissan's 1.9 million SF assembly plant in Mexico.
- Efficiency and Value. In the last 5 years, we have saved industrial clients more than \$655 million by constantly challenging the standard approach. We look at business needs as our scope rather than design criteria. Through value engineering, scope modifications, and innovative design and material usage we find ways to meet those needs while driving out cost and compressing the schedule.
- An Institution in the Industry. Our storied history of working with automotive manufacturers, whom we count among our most loyal and longstanding clients, dates back to 1948. Case in point? Ford Motor Company, our first client, is still with us today.
- **Diversity of Services.** We're experts in site selection, the planning and design of greenfield plants, and the renovation and maintenance of older facilities—plus, everything in between.

SSOE received one of eight **Grand Awards for Engineering Excellence** at the 47th Annual Engineering Excellence Awards—a national juried competition sponsored by the American Council of Engineering Companies (ACEC). The award was presented in honor of the new **\$1 billion+Volkswagen Assembly production facility in Chattanooga, Tennessee** that produces the Passat.

SSOE performed full design and construction management for the 2.7 million SF facility. It is the **first** and only LEED® Platinum automotive manufacturing plant in the world, the first LEED platinum industrial campus in the U.S., and the largest platinum project in the U.S. (based on building area).



### **Clients**

- American Axle
- BMW
- Bridgestone / Firestone
- Caterpillar
- Chrysler
- Continental Tire
- Cummins
- Dana
- Daimler
- Detroit Diesel
- Durr Systems
- Ford
- General Motors
- Gallagher-Kaiser
- Guardian Industries
- Honda
- Hyundai / Kia
- Kenworth
- Magna International
- Nissan
- Paccar
- TKS
- Toyota
- TRW Automotive
- Volkswagen
- ZF Friedrichshafen

### **Project Types**

### **Support facilities**

- Automatic Storage and Retrieval Systems (ASRS)
- Bridges
- Conveyance
- Pedestrian
- Vehicle
- Data centers
- Distribution centers and parts warehouses
- Fire stations
- Logistics centers
- Offices, locker rooms, and cafeterias
- Paint mix / storage
- Security buildings
- Utility centers
- Visitors centers

### Manufacturing

- Body / Weld
- Die casting
- Final trim / assembly
- Foundry
- Frame and chassis
- Machining:
  - Heat treatment
  - Mist collection
  - Scrap handling
- Paint shops

- Plastics injection molding
- Press / Stamping
- Subassembly
  - Scrap handling
  - Chassis / Frame - Engine
  - Transmission

### **R&D** and testing

- Advanced vehicle design
- Anechoic chambers
- Coordinate measuring machines
- Dynamometers
- Emission soak rooms
- Environmental chambers
- Model / Machine shops
- Noise, Vibration, and Harshness (NVH) rooms
- Radio frequency interference chambers
- Scaled wind tunnels
- Test labs
  - Electrical
  - Fuel test
  - HVAC
  - Instrumentation
- Material
- Metrology
- Vehicle analysis
- Test sleds
- Test tracks

### Technical Specialties

- Air permitting
- Arc flash studies
- BIM
- Central plant utilities
- Cleanrooms
- Design studios
- Data systems
- Factory automation
- Fire alarm
- Full A / E design services
- Interior and landscape design
- Laser scanning
- LEED® certifications
- On-site owner's representative
- Pipe stress analysis
- Plant and infrastructure design
- Rail spurs
- Security systems
- Sequencing centers
- Site selection
- Stress analysis
- Tank farms
- VDC Steel (complete steel detailing)
- Wastewater treatment

### 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 5 Automotive Plant Design Firm for the past decade
- Top 10 Manufacturing Design Firm for the past 6 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

- 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.



