



CHEMICAL

TURNING YOUR SPECIALTY CHEMICAL PROCESS INTO PRODUCTION



CLIENTS

Akzo Nobel
BASF
Dow Chemical
Dow Corning
Durez
INEOS Nitriles
PPG
PCS Nitrogen Ohio
PQ
Rhodia
Specialty Minerals
WR Grace

SSOE's focus on specialty chemical manufacturers makes us experts at delivering faster, better projects with documented savings for our clients—more than \$100 million to be exact. The difference comes not only from our specialized expertise, but from the way we deliver your project, including a more collaborative approach, a better use of technology, and a full menu of delivery methods—from single discipline design to EPC and integrated project delivery (IPD). Our size and geographic diversity positions us to provide ongoing maintenance support for smaller projects in addition to execution of your larger capital projects. The result is a team that has been ranked by ENR as one of the top providers of design services for over a decade.

TOP 20 CHEMICAL PLANT

Top Chemical Plant Design Firm for the past decade (*ENR*)



EXPERTS PUBLISHED & PROVEN

Our experts have been published in *Chemical Processing*, *Area Development*, and *Manufacturing.net*

\$109M COST SAVINGS

More than \$109 million in documented savings to chemical clients since 2009





“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, Confidential Specialty Chemical Manufacturer

PROJECT TYPES

WE SPECIALIZE IN PROGRAMS RANGING \$1 MILLION TO \$100 MILLION AND PROJECTS WITH A TOTAL INSTALLED COST OF \$1 MILLION TO \$10 MILLION

Performance Materials, Paints / Coatings / Adhesives, and Catalysts

- Unit operations experience with reactions, separations, mixing, and extrusion
- High purity chemicals: production, storage, and distribution
- Solid, liquid, and gas bulk material handling for demanding conditions
- High temperature experience: furnaces, calciners, and dryers

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
- Vessel, tank, and pump sizing