



Chemical

Turning your specialty chemical process into production.



CLIENTS

AkzoNobel
BASF
Corteva
Dow Inc.
DuPont
Durez
INEOS Nitriles
PPG Industries
PCS Nitrogen Ohio
PQ Corporation
Rhodia
Specialty Minerals
W.R. 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 10 CHEMICAL PLANT

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



\$109M COST SAVINGS

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



EXPERTS PUBLISHED & PROVEN

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





"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 projects ranging from \$1 million to \$100 million total installed cost. In addition, we've demonstrated the capability to respond to long-term programs with a cost of \$100 million to upwards of \$500 million.

Performance Materials, Metals, Graphite, Paints / Coatings / Resins / Adhesives, and Catalysts

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



TECHNICAL SPECIALTIES

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