



PHARMACEUTICAL

AWARD-WINNING TEAM WITH EXPERTISE IN HIGHLY REGULATED INDUSTRIES



CLIENTS

Abbott Laboratories
Bristol-Myers Squibb
Johnson & Johnson
Kemin Industries
Novartis
Qualitest
Sandoz
Pfizer

For more than three decades, SSOE has focused on design for highly regulated industries that rely on the most stringent standards of cleanliness—both in their manufacturing and research facilities. From material selection, to clean-in-place systems, to specialized HVAC systems, our experts will design a space that optimizes performance with compliance.

Working with SSOE, you will experience a collaborative process that benefits from your early and frequent input. We use Virtual Design & Construction (VDC) to facilitate that collaboration—improving your ability to intuitively see a view of how your lab or your process line will be laid out so that you can provide feedback before it is built in the real world.

EXACTING STANDARDS

In addition to pharmaceutical, our work in the regulated industries has made us experts at combining high performance with the high standards of care required in your operations

EXPERTS PUBLISHED & PROVEN

Our pharmaceutical experts have been published in *Lab Manager*, *Product Design & Development*, *Pharmaceutical Manufacturing*, and *Laboratory Design*



PROJECT TYPES

PROCESS

- Biotech
- Vaccines
- Pharmaceuticals
- Sterile and aseptic
- Oral solid dosage

- Active pharmaceuticals ingredients
- Medical devices
- Containment
- Packaging
- Drug delivery systems

FACILITIES

- cGMP production facilities
- Laboratories and vivariums
- Offices
- Pilot plants
- Power plants
- Sterile cleanrooms



TECHNICAL SPECIALTIES

- Architecture
- Automation and process control system design
- Bulk material handling
- Code review, compliance, and permitting
- Commissioning and start-up
- Electrical power
- Energy efficiency analysis
- Environmental engineering
- Facility design
- "H" occupancy evaluations

- Industrial engineering analysis
- Industrial ventilation / dust collection
- Instrumentation and controls
- Interaction with Authority Having Jurisdiction (AHJ)
- Material handling systems design
- Power systems analysis including arc flash hazard
- Process automation, PLC, and HMI programming
- Process development and design
- Programming / pre-positioning

- Project management
- Site selection
- Structural engineering
- Systems integration / control system upgrades
- Telecommunications
- Thermal process design
- Wastewater treatment