

Chemical Client

Process Upgrade to Offset Hazardous Gas Release

When this chemical client embarked on an EPA mandated upgrade at four of its manufacturing facilities, SSOE was enlisted to execute the industry-wide directive. The project required integration of a new agent into its insulation board processing systems, a formulation change intended to reduce emissions. SSOE's extensive background in implementing process upgrades and modifications in the chemical industry proved integral to implementing the change. Putting multi-disciplined teams in place at each of the facilities, the firm ultimately helped the client save time and project costs had they conducted the upgrade internally, while simultaneously enhancing the existing process.

As part of the scope, an extruder needed to be upgraded and a blowing agent reformulated to manufacture insulation board. Ozone depleting hydrocarbon was replaced with more environmentally compatible agents. As a result, the existing layout was revised and different raw material handling equipment was installed and integrated into areas where existing operations took place. SSOE managed material handling, chemical additions, instrument upgrades, electrical upgrades, and ensured the environmental process transition. To create efficient space for the process, SSOE designed building additions at two of the sites, retrofitting them into the existing buildings, and added one transformer to support power requirements. The firm also handled procurement for three of the sites.

SSOE needed to consider several factors in its design plan, including the integration of explosion-proof electrical classified components (Class 1 Div 1 components), as well as the correct classification for process instruments. Sensitive to the confidentiality of the transition to alternative agents, SSOE created a task force with key clients to ensure ongoing communication efforts regarding the scope of the process enhancement.

value promise

Significant savings in total project cost.
Fast track execution to minimize manufacturing downtime.

location Midwest and South USA

highlights

Fast-track
EPA mandated upgrade
Procurement
Program management
3D modeling and retrofitting