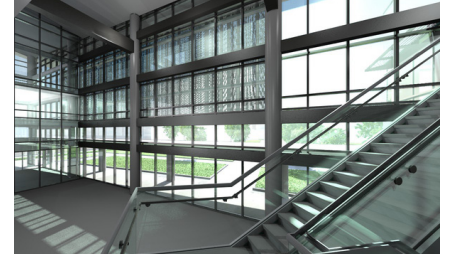
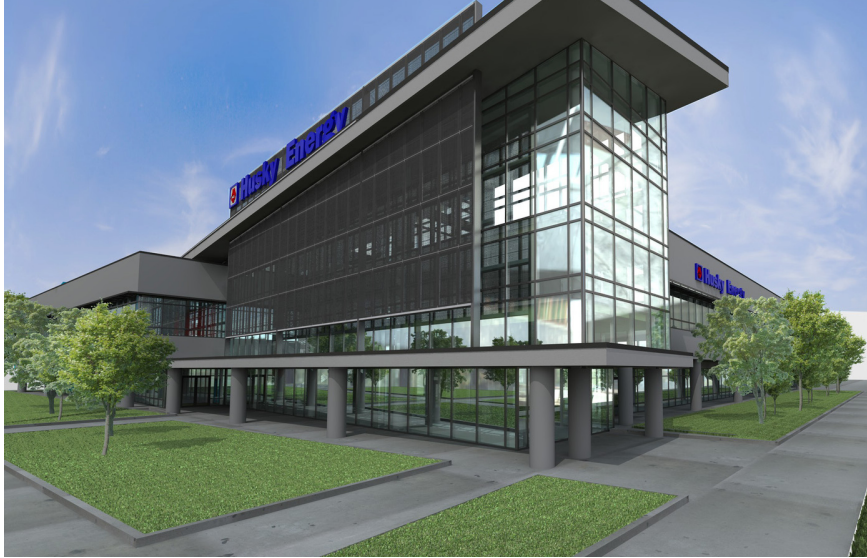


Husky Energy, Inc.

Blast Resistant Central Control Facility



In an effort to improve operational safety and communication at their Lima refinery, Husky embarked on an ambitious plan to relocate all non-essential personnel away from blast risk zones to a centralized location outside the battery limits of the production facility. They called upon SSOE's extensive refinery expertise and familiarity with blast resistant structures to design their new control building. SSOE provided full architecture and engineering for the 250,000 SF, two-story structure, which consists of a central control room, laboratory, warehouse, maintenance shops, vehicle repair center, and unit personnel housing.

Due to its proximity to plant production operations, the facility was designed to resist a substantial blast over-pressure while maintaining an open and architecturally appealing structure. SSOE collaborated with the owner, specialized design consultants, constructors, and material systems providers to provide a functioning structure that is fully code compliant, protects its occupants from hazards, and allows for the operation and controlled shutdown of systems should an event occur. This collaboration and the application of specific design techniques resulted in a \$3 million reduction in the cost of the structural frame alone.

As part of the project, SSOE customized the fire alarm, access control, data cabling, and raceway systems including the specialized protection needs of potentially hazardous operations. SSOE's Data, Fire, and Security (DFS) team also designed an electronically secure enclosed area featuring anti-passback technology within the access control system to control and identify access.

value promise

SSOE applied significant value engineering to the preliminary schematic design. Through design innovations, utilization of specialists in blast resistant design, and other ideas, Husky realized more than \$7 million in savings.

size 250,000 SF

location Lima, Ohio

highlights

Design-build

Designed to withstand reflected pressures of 7.1 psi

Compliant with API Recommended Practice 752

Office features an atrium, which filters natural light throughout the building

Complete data, telecommunications, security, access control, and fire alarm design