

SK ENERGY CASE STUDY



SK Energy was the first oil refinery in Korea and has played a central role in the economic development of Korea for the past half century. They have been producing various petroleum products such as gasoline, diesel and asphalt at its Ulsan Complex, which has a refining capacity of 840,000 barrels of crude oil per day. They sell in both domestic and overseas markets. They sell more than 2 million tons of asphalt per year, maintaining the number one position in the domestic asphalt market.

Project Overview

SK is constructing a new desulfurization unit in Ulsan, Korea to open by 2020. This project (S-Project) is part of an initiative to produce cleaner shipping fuels. Under the plan, a 40,000-bpd Vacuum Residue Desulfurization (VRDS) will be added to an 840,000-bpd refinery in Ulsan. AMETEK Solidstate Controls won the bid to supply four customized Uninterruptible Power Supply (UPS) systems.

Challenge

SK had multiple UPS systems from another manufacturer that were no longer functioning properly. They searched for:

- A new supplier who could replace the UPS systems with a higher quality product while also offering extensive customizable solutions.
- A partner who had comprehensive knowledge of their entire system and understanding of their specific requirements, to ensure the equipment would perform well within their critical application
- Superior engineering expertise was expected for the company to spearhead the project with limited direction
- A manufacturer who had the capability to quickly adapt and make changes, as they knew last minute modifications are usually inevitable

Solution

SK chose Solidstate Controls for their all-encompassing knowledge base and superior project management skills. These attributes were put to the test when half way through the project, SK requested a change to the cable entry on all four UPS systems. Due to in-house customization capabilities, Solidstate Controls was able to quickly adapt and make the necessary changes. Throughout the process, additional features were added without extending the original due date.

Results

SK visited the Solidstate Controls facility during a week-long Factory Acceptance Test. During this visit, any detected issues were corrected, and SK was able to leave the facility on-time and with a peace of mind that the systems were functioning to their standards. The last night in Columbus, Ohio ended with a celebratory dinner and a toast to a successful installation.

“We are impressed with the quality of their equipment and project management. We look forward to working with them again.”

- Manager, S-Project Team