



Sadara Chemical Company optimizes plant operations with safer electrical solutions

Location:

Saudi Arabia

Segment:

Petrochemical

Challenge:

To provide Sadara Chemical Company with standardized, safety-enhanced electrical power management equipment to reliably power the world's largest petrochemical facility ever constructed in a single phase

Solution:

Eaton expertise and solutions including: motor control, power distribution, lighting, electrical connectivity equipment and engineering field services

Results:

The Sadara complex has established a safe and reliable power distribution system to fully support their 26 world scale manufacturing plants that produce materials to serve the rapidly expanding energy, transportation, infrastructure and consumer products sectors

Sadara Chemical Company is constructing a 26-plant complex in Jubail Industrial City II of the Kingdom of Saudi Arabia, the world's largest petrochemical facility ever built in a single phase. The facility will produce value-added products that serve, among others, the rapidly expand energy, transportation, infrastructure and consumer product sectors.

Eaton is providing motor control and power distribution solutions to help power Sadara's around-the-clock operations. Additionally, custom Bussmann series panel boards and Crouse-Hinds series hazardous and non-hazardous area lighting and electrical connectivity equipment are being provided. Eaton's engineering expertise support Sadara with solutions for safe and reliable lighting, electrical and mechanical power management.

Sadara is implementing Eaton arc-resistant AMPGARD® AR medium voltage motor control centers. Eaton's innovative arc-preventative design emphasizes prevention, insulation and isolation to ensure safety during operation, and are extensively tested and verified to meet IEEE C37.20.7 requirements for protection against internal arc faults.

With the AMPGARD AR, key safety features have been implemented including an innovative design that directs arc gasses away from the operator, strengthened front doors and latches to ensure closure during a fault, an insulated main bus that minimizes the risk of bus fault and a low voltage control compartment verified to meet arc resistant requirements.

To help provide accurate power control of their constantly operating motors, Eaton provided the Freedom™ 2100 low voltage motor control centers. The integrated design combines control, distribution to help standardize the platform.

Eaton's global capabilities helped expedite the delivery and fabrication of Eaton's Bussmann series Quik-Spec™ coordination panel boards. They provide

selective coordination of a fused electrical distribution system to reduce downtime. The panel boards integrate a fuse and disconnect into a compact package which optimizes power system flexibility and reduces the footprint of electrical control equipment

Sadara is also implementing Eaton's Crouse-Hinds series cable glands. Designed with nickel-plated brass to withstand corrosion, the cable glands provide dependable performance. The global offering provides a termination solution for virtually every cable type used in hazardous and industrial environments, and is designed for strict adherence to global specifications, international codes and standards.

In addition, Sadara is implementing Eaton's Crouse-Hinds series lighting solutions, including both hazardous and non-hazardous versions of high-intensity discharge (HID) lighting. For their processing environment, the specialized lighting solutions provide secure, safe lighting with a maximized product life. This reduces maintenance and associated costs.



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