LESLIE ELECTRICAL SERVICES

CASE STUDIES

Process Manufacturing

Industry: Oil Refinery
Duration: 4.5 Weeks
Value: $150K

The Situation

Our client operates a large organic oil refining facility and required a fully integrated electrical and automation solution for their external tank farm. The new system needed to integrate seamlessly with the existing SCADA platform, accommodate collaboration with offshore software teams, and deliver safe, reliable control across an expansive outdoor environment.

The installation presented additional complexity due to long cable runs, harsh environmental exposure, and the requirement to support future tank expansion without major redesign.

What We Delivered

- Collaborated with on-site teams, senior management and offshore programmers to define operating requirements
- Designed complete electrical schematics for wiring, control architecture and network communications
- Engineered and constructed two dedicated control panels – segregating VSD and motor control from PLC, safety, and I/O systems
- Implemented distributed remote I/O to reduce cabling infrastructure, simplify installation, and streamline commissioning
- Developed a weather-resilient installation strategy incorporating EMC-rated cabling, weatherproof isolation, and robust hardware selection
- Designed structured cable pathways to prevent operational interference and maintain safe site access

The Result

A modern, fully integrated tank farm control system delivering complete SCADA visibility, reduced cabling infrastructure, and improved operational efficiency. The scalable control architecture supports future tank expansion while strengthening safety performance and process reliability – establishing a dependable long-term automation platform for refinery growth.

Full SCADA Integration

50% Cabling Reduction

Built for Expansion

BOOK A SITE VISIT

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