

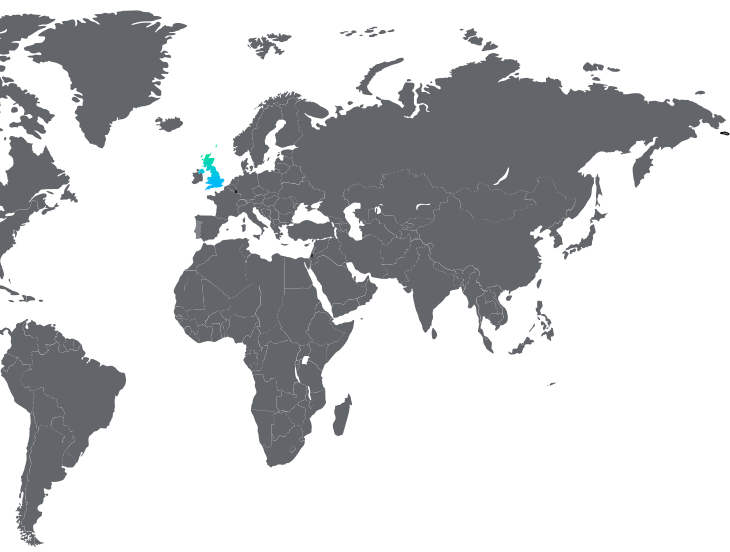


# Refinery SIS Upgrade

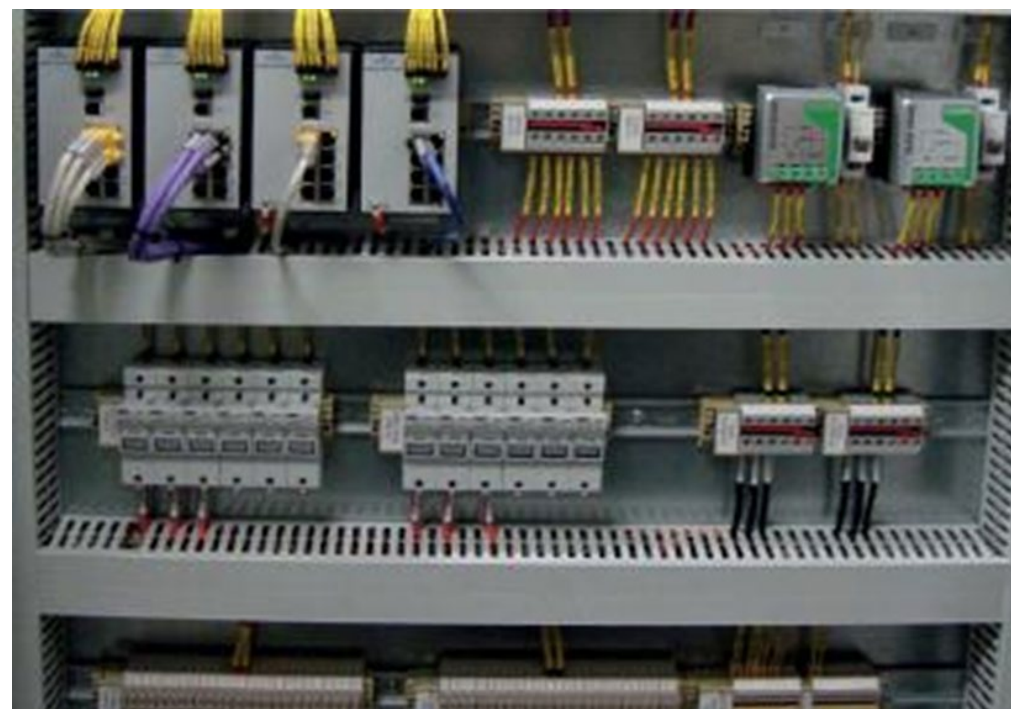
Key metrics

-  **Concept > FEED > Detailed Design**  
Project phases
-  **9,367**  
Hours of engineering
-  **220 weeks**  
Project duration



## AT A GLANCE

InSite Technical Services supported a UK oil refinery in upgrading its **Safety Instrumented Systems (SIS)** to meet critical instrument standards, ensuring a compliant and robust functional safety solution



## CHALLENGE

An oil refinery in the United Kingdom required support to upgrade existing **Safety Instrumented Systems (SIS)** to ensure full compliance with critical instrument standards, including **BS EN 61511**. The project spanned **multiple phases, from concept and FEED through to detailed design**, requiring expertise in functional safety to achieve regulatory compliance.

## SOLUTION

InSite assembled a **multi-discipline team** to execute the functional safety engineering scope supporting **all project phases, from concept and FEED through to detailed design**. The team ensured the design adhered to the **Safety Regulation Specification** and **Functional Safety Requirements Specification**, achieving the required **SIL requirements** and **Risk Reduction Factor targets**. Deliverables included an FSMP, SRS, safety PLC code, impact assessment, SIL verification calculations, test procedures, maintenance proof test procedures, and functional safety assessments, resulting in a system that met the customer's **SIL and STR requirements**.