



TOTAL SAFETY

CASE STUDY

Improved safety in confined spaces during a large-scale turnaround

KEY FACTS

12 Confined spaces monitored

70% Reduction of at-risk workers

30 Days of continuous confined space monitoring

4,893 Confined space entries monitored

THE CHALLENGE

24-hour monitoring for numerous confined spaces.

A refinery in Kansas was planning a major turnaround that involved entry into multiple confined spaces. To reduce the risks associated with this activity, 24-hour coverage, continuous gas monitoring and visibility within the areas were required. The goal was to improve overall safety and reliability from traditional hole-watch methods.

OUR SOLUTION

Innovative Centralized Confined Space Monitoring.

In order to more effectively manage worker safety within the confined spaces, we installed our fully integrated Centralized Confined Space Monitoring (CCSM) system, based on specific project requirements. Using advanced technologies, the system connected key safety equipment and highly-specialized operators/technicians to monitor workers in the confined spaces, all from a centralized control room. The solution included 12 Single-Point Monitors as well as the required safety monitoring equipment to ensure compliance in each of the confined spaces, including:



ELECTRONIC
ACCESS CONTROL



ATMOSPHERIC
MONITORING



VIDEO
MONITORING



TWO-WAY
COMMUNICATION



VISUAL & AUDIBLE
ALARMS

A team of highly trained and experienced personnel, consisting of 7 operators/technicians and operators, provided around-the-clock coverage over two alternating shifts to ensure the comprehensive monitoring of entrants.

TOTAL SAFETY OFFERING

Centralized Confined Space Monitoring (CCSM)

INDUSTRY

Refining

LOCATION

Kansas, USA



...to ensure the safe Wellbeing of Workers Worldwide®

THE CUSTOMER BENEFITS

A safer and more efficient turnaround.

Entrants to the confined spaces gained improved lines of communication and visibility by the operators in the control room, responsible for safeguarding the workers in the hazardous areas.

Because the system integrated the safety components required for confined space entry compliance regulations and connected them to a central monitoring platform, it proved to be more reliable and efficient than the traditional hole-watch method.

The system monitored 4,893 confined spaces entries over 30 days of continuous monitoring and gathered key performance data, providing insights to ensure compliance, productivity and safety throughout the project.

With the CCSM solution in place, 24 attendants once required by previous monitoring methods were replaced by a team of 7 experienced personnel, reducing the number of at-risk employees in critical path areas by 70%.



THE TOTAL SAFETY DIFFERENCE

As the pioneer in Centralized Confined Space Monitoring and with more than 15 years of experience with this technology, we are dedicated to providing best-in-class confined space monitoring solutions. We continuously innovate our systems to deliver improved safety, reduced costs and increased operational efficiencies during turnarounds.