



CASE STUDY

SAFER AND MORE EFFICIENT SHUTDOWNS AND TURNAROUNDS

Digital Confined Space Management (DCSM) system brings new levels of safety and efficiency.

THE CHALLENGE

Managing confined spaces with greater efficiency

Millions of workers enter confined spaces daily as part of their job duties. Many workplaces contain areas that are considered “confined spaces”, which are not intended for continuous occupancy, but are large enough for workers to enter and perform required tasks. During shutdowns, turnarounds, and outages, the frequency – and associated risks – of a confined space entry (CSE) increase significantly. Managing confined space work environments and mitigating the associated hazards, such as limited visibility and communication, hazardous atmospheres, and limited entry/egress are essential. With the increase of contractors on site to handle gas testing, ventilation equipment installation, and confined spacing monitoring, new bottlenecks form.

According to the Bureau of Labor Statistics (BLS), two or more people die each week in the United States from bodily injuries sustained from confined space incidents. An estimated 60% of people who died in confined space did so while trying to rescue fellow workers.

Most industries still perform confined space monitoring the traditional way, which consists of assigning one safety attendant to monitor each entryway. In addition to being costly and inefficient, this limits the confined space attendant’s ability to monitor both worker activity and the atmosphere within the confined space. With growing labor shortages, finding qualified people to do this monitoring work is challenging.



AT A GLANCE

- Conventional approaches to confined space monitoring are costly, labor-intensive, often inefficient and prone to human error.
- Digital tools reduce bottlenecks, drive greater efficiency and enhance safety on the worksite.
- DCSM partnership between Blackline Safety and Infosignal increases safety, reduces logistical burdens, and delivers cost savings of up to 30%.

5-7%

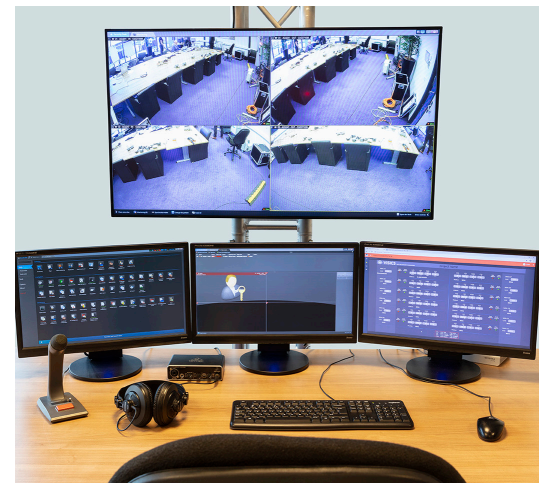
INCREASE IN PROJECT-WIDE
CSE EFFICIENCY

15-30%

MORE COST EFFECTIVE THAN
CONVENTIONAL MONITORING

80%

FEWER PEOPLE NEEDED
TO MANAGE CSE



“The integrated solution combines the best of both gas detection and confined space monitoring technology, offering greater insights with high levels of reliability to deliver absolute value to our customers.”

Jordan Smoliak
CEO, InfoSignal

THE SOLUTION

Integrated DCSM solution enhances safety, efficiency and accountability

Pitfalls from the traditional approach sparked a partnership between Blackline Safety, InfoSignal, and Access Technology Group, with the goal of making confined space management safer and more cost-effective for their North American clients. The DCSM solution integrates Blackline Safety's G7 EXO portable area gas monitors with InfoSignal's DCSM system and live streams the gas readings from inside and outside of the confined space adding another layer of proactive safety monitoring and protection. By integrating real-time gas monitoring, cameras, access control, ventilation equipment, and two-way communication, the DCSM system offers a complete solution to remotely monitor a greater number of confined spaces simultaneously with fewer operators.

“We can monitor the same number of spaces using 80% fewer people,” explains InfoSignal CEO Jordan Smoliak. “Reducing the number of workers on site has multiple benefits: it reduces resource management, decreases cost and lowers exposure hours, thereby reducing the overall safety risk.”

THE RESULTS

A flexible solution to streamline operations and reduce costs

The DCSM system reduces bottlenecks, delivers greater efficiency and enhances safety on the worksite.

“We can save a client anywhere from 15 to 30% in project costs,” adds Smoliak.

“EXO's integration with the full capabilities of the DCSM system means clients have even more valuable information available to them,” says Todd Connelly, Rental Sales Manager for Blackline Safety.

“DCSM operators have excellent situational awareness of each confined space. They can also share those real-time gas readings to on-site stakeholders for safety, compliance, and permitting purposes.”

One of the first clients using the integrated DCSM solution experienced huge success. Not only did the turnaround go off without a hitch, but the integrated solution helped the client complete the work on budget and on schedule, boosting efficiency by close to 10%. “After the project, we received feedback from the owners stating that we saved their turnaround,” Smoliak says. The owner was facing a staffing shortage heading into the turnaround which translates into a significant increase in project execution challenges. “The turnaround would have taken longer, and they would have spent more money than they should have.”