



200 Gas Lines. 1 Comprehensive Solution.

The Challenge

A leading chemical company was experiencing issues with a system designed to deliver dozens of specialty gases throughout a research and development facility. They needed to prevent leaks of hazardous gases to protect their workers while also finding ways to reduce their gas panel replacement and maintenance costs.

Replacing just 10% of gas panels cost an average of \$58,500 per year.

The Solution

Through the Swagelok® gas distribution program, advisors identified the opportunity to standardize gas panel design throughout the system:



Incorporated dedicated lines for safer purging

Easier access to critical relief valves enabled easier maintenance

A common panel footprint improved workflow



A major British chemical company uses various specialty gases to perform research and development functions. Many of these gases can pose a significant risk to workers if they are not safely contained, making leak-tight gas distribution and handling throughout more than 200 gas lines a top priority. The company took advantage of the Swagelok gas distribution program to enhance the safety of its system and realize new efficiencies.

An evaluation of the system identified several opportunities for improvement. Various components had been added over the years for purging and venting, creating unnecessary complexity. Removing critical relief valves via tapered, threaded connections during maintenance required significant labor time. And the customer's use of different gas panels from multiple suppliers made planning ahead for replacement difficult.

Swagelok source inlets and gas panels were installed to establish reliable connection points between high-pressure source gases and the rest of the distribution system.

The configuration of the new panels **enhanced operator safety** and provided easier access and removal of critical relief valves. This helped **reduce overall gas panel maintenance time by 75%**.

The Result

Through the Swagelok gas distribution program, the customer achieved:

- **Enhanced system and site safety**
- **\$52,000 saved on panel replacement every five years**
- **75% reduction in gas panel maintenance time**
- **Panel standardization, allowing their team to focus on more critical tasks**
- **Reduced carbon footprint by eliminating leaks and frequent panel replacement**

The standardized Swagelok panels' common design footprint also allowed the engineering team to **reduce labor hours and improve overall efficiency**. And the Swagelok panels can be serviced rather than replaced, **helping the customer save over \$52,000** every five years based on a 10% annual replacement rate with the old panels.

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