

Case Stories: Hansen Pop-Eye™ Insight helps remotely monitor six dispersed machine rooms at the Springfield Underground

THE CHALLENGE

At the Springfield Underground, the refrigeration system is more than meets the eye. That's because it's a unique cold storage system leveraging six dispersed, above ground engine rooms cooling a brine solution for portions of a 3.2 million square foot underground facility. Monitoring every area of the refrigeration system is a nearly impossible challenge without a well integrated control system. "How do you manually keep an eye on a hundred relief valves? Even with Pop-Eye™ you had to physically identify a relief event," said Chandler Moenning, refrigeration manager at the Springfield Underground.

THE SOLUTION

The new Pop-Eye™ Insight wired PRV enables immediate communication and equipment automation through the facility Programmable Logic Controller (PLC) when an over-pressure event occurs. "When we learned about 'Insight', we wanted to start getting them in our engine rooms immediately," said Moenning. The initial installation was determined for machine room #9.

INVESTING IN LONG-TERM SAVINGS

"We knew this was going to cost us more time and money up front," said Moenning. "But future changeouts will be simple and we'll be able to automate a shutdown if ever needed to keep my team safe. You can't put a price tag on that. Plus, any release will now be easier to document for compliance sake."





"IF WE HAVE A PRESSURE EVENT, **WE'LL KNOW ABOUT IT IMMEDIATELY** WITH INSIGHT. THAT'S A GAME-CHANGER. THIS WILL BECOME **THE NEW INDUSTRY STANDARD.**"





FACILITY

- 3.2M Sq. Ft. climate controlled facility
- 6 dispersed engine rooms
 - 2-12 compressors each
 - 3,000-9,000 pounds of ammonia each
- Ambient temperature: 62°F
- Refrigeration range: 50°F to -20°F

MACHINE ROOM #9 INSTALLATION

- 13 Hansen Pop-Eye[™] Insight valves
- Electrical conduit and wire pull to PLC
- PLC programming integration by AutomatelT
- Time to completion: 2 days

INITIAL INSTALL LOCATIONS

- H5601: Condensers, Screw Compressor, Recip Compressor, CB Heat Exchanger, WB Heat Exchanger
- H5602: High Pressure Receiver