

Major Canadian Producer Achieves Greenhouse Gas Compliance with Fisher™ i2P-100 Transducers

RESULTS

- Achieved natural gas savings of \$103,000 CDN (\$80,000 USD) per year with Fisher i2P-100 transducers
- Reduced reporting complexity to the Canadian government



APPLICATION

Upstream oil and gas production wells

CUSTOMER

Large oil and gas exploration company in Canada

CHALLENGE

Countries across the globe have implemented programs to encourage lower emission levels. In Canada, producers can earn carbon offset credits by developing projects that reduce emissions. At one major Canadian oil and gas producer's remote, upstream production sites, quantity 443 pneumatic devices on wells were venting natural gas—and emissions—to the atmosphere as part of normal operation. The pneumatic devices were powered by natural gas because neither electricity nor compressed air was available.

The producer was looking for an effective solution to reduce the vented emissions from the pneumatic devices. They made the decision to voluntarily and proactively implement a “high-to-low bleed” gas instrument conversion program within their Canadian upstream oil and gas operating fields.

SOLUTION

Looking for a solution to reduce their emissions, they engaged Spartan Controls, the Emerson local business partner, along with an energy sustainability, to help develop a plan to replace or retrofit the 443 pneumatic devices.

The energy sustainability company and Spartan Controls looked at the producer's equipment inventory, completed inventory studies, and proposed a plan that could help achieve sustainability goals—and do it cost effectively.

“The producer implemented 443 low-bleed conversion/replacements while maintaining safe, reliable operations. In addition to reducing emissions, they saved money, fuel, and complied with regulations.”

Brian Van Vliet
Technical Specialist, Spartan Controls

Emerson has a reliable offering of Fisher electric and pneumatic products to help address regulatory compliance standards. Many Fisher pneumatic devices have been designed with a steady state exhaust rate of six standard cubic feet per hour (scfh) or less, without restricting high output or rangeability.

During six months of field work, 259 transducers were replaced with Emerson's Fisher i2P-100 transducers, and 184 transducers received Fisher i2P-100 low-bleed retrofit kits. Natural gas fuel savings amounted to \$103,000 CDN/year (\$80,000 USD/year) based on a price of \$2.60 CDN/gigajoule. The producer planned to continue with the "high-to-low bleed" gas instrument conversion program during the next calendar year to achieve:

- Greenhouse gas (GHG) reductions (global and Canadian business unit GHG reduction goals set)
- Fuel gas consumption reductions for additional sales
- Proactive "future" regulatory compliance
- Safety improvements (replacement of non-secondary seal devices with secondary seal devices - CSA code compliance [ANSI/ISA-12.27.01])

RESOURCES



Fisher i2P-100 Transducer

<http://www2.emersonprocess.com/en-us/brands/fisher/fieldinstrumentation/valveaccessories/electro-pneumatictransducer/i2p-100/pages/fisheri2p-100.aspx>



Fisher Products for the Oil & Gas Industry

<http://www2.emersonprocess.com/en-US/brands/fisher/oil-gas/Pages/oil-gas.aspx>



<http://www.Facebook.com/FisherValves>



<http://www.YouTube.com/user/FisherControlValve>



<http://www.Twitter.com/FisherValves>



<http://www.Linkedin.com/groups/Fisher-3941826>



The Fisher i2P-100 transducer has low pneumatic supply consumption which reduces operating costs. Maximum steady state consumption is less than the 6 scfh requirement set for the oil and gas industry by the US Environmental Protection Agency (New Source Performance Standards Subpart OOOO, EPA-HQ-QAR-2010-0505).

© 2016 Fisher Controls International LLC. All rights reserved.

Fisher is a mark owned by one of the companies in the Emerson Process Management business unit of Emerson Electric Co. Emerson Process Management, Emerson, and the Emerson logo are trademarks and service marks of Emerson Electric Co. All other marks are the property of their respective owners.

Emerson Process Management

Marshalltown, Iowa 50158 USA
Sorocaba, 18087 Brazil
Cernay, 68700 France
Dubai, United Arab Emirates
Singapore 128461 Singapore
www.Fisher.com

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, nothing herein is to be construed as a warranty or guarantee, express or implied, regarding the products or services described herein or their use, performance, merchantability or fitness for a particular purpose. Individual results may vary. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice. Responsibility for proper selection, use and maintenance of any product or service remains solely with the purchaser and end user.

FISHER[™]


EMERSON[™]
Process Management