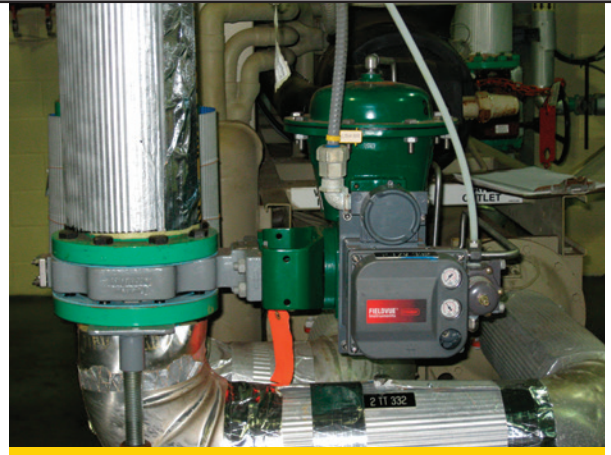


Fisher™ Control-Disk™ Valves Maintain Chiller Temperatures and Reduce Energy Usage at CAMECO Uranium Refinery

RESULTS

- Maintained chiller temperature between 26 and 28 degrees Celsius
- Reduced energy usage by the chiller from 100 to 80 amps



APPLICATION

Cooling-water, heat-exchanger system

CUSTOMER

CAMECO uranium refinery in Blind River, Ontario

CHALLENGE

Canadian Mining & Energy Corporation (CAMECO), headquartered in Saskatoon, is growing along with the nuclear power market worldwide. Its refinery in Blind River, Ontario processes uranium ore for new nuclear facilities in Canada, the US, India, and Australia. The transformation of uranium ore to nuclear fuel is a complex process, many parts of which require tight control.

Two, four-inch (competitor) TFE-lined plug valves with rack and pinion actuators and pneumatic positioners were installed on a cooling water, heat-exchanger system, but not performing well. Chiller temperatures varied from 26 to 35 degrees Celsius and drew up to 100 amps of power. Though not in the radio-active area of the plant, these valves are considered critical because they help the plant reduce its energy usage.

No piping rework was needed, but CAMECO installers did add spool pieces to make the new Fisher Control-Disk valves fit where the old plug valves had been.

“The Fisher Control-Disk valves have enabled our compressors and chillers to run smoothly, with less loading and unloading required. Control of temperature, by varying flow rate, is also more accurate and consistent.”

Jonathon Smith
Process Engineer
CAMECO, Blind River plant

SOLUTION

Emerson sales engineers from Lakeside Process Controls recommended replacement Control-Disk valves. Emerson supplied two four-inch, stainless-steel lugged, size 1 versions of the new Fisher butterfly design.

The unique, patented disk profile and true equal-percentage characteristics enable the Control-Disk valves to adapt to changing process conditions and to provide control over a wider range. In this situation, the new valves maintained chiller temperature within two degrees (26 to 28 Celsius) and reduced the energy required to 80 amps or less.

RESULT

“The Control-Disk valves worked well, even before they were fine-tuned,” said Jonathan Smith, a process engineer at the Blind River plant. “We have tried competitors, but we always return to Fisher valves.”



The two new Control-Disk valves installed at CAMECO include Type 2052 actuators and FIELDVUE™ DVC6020 digital valve controllers with Advanced Diagnostics.

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

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

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

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

© 2011, 2018 Fisher Controls International LLC. All rights reserved.

Fisher, Control-Disk, FIELDVUE, and Vee-Ball are marks owned by one of the companies in the Emerson Automation Solutions business unit of Emerson Electric Co. 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 Automation Solutions
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™ For more information:
www.Fisher.com

