

Dresser-Rand Introduces An In-Line Electric Motor-Driven Compressor

New DATUM-C centrifugal compressor is designed specifically for natural gas pipeline applications.

OLEAN, New York (December 27, 2005) -- For equipment operators in natural gas pipeline applications where quiet, emission-free operations are essential, Dresser-Rand (NYSE: DRC) has introduced the DATUM Model C (DATUM-C) electric motor-driven compressor.

The new pipeline compressor features an integrated, high-speed electric induction motor and the modular design advantages of the DATUM line. This unique design makes DATUM-C a solution for pipeline applications near urban areas where electric power is readily available, and environmental impact a concern.

The DATUM-C is the result of several years of research and development by Dresser-Rand in conjunction with a major U.S. pipeline client and the U.S. Department of Energy. "The idea really came about through our discussions with one of our clients," said Harry Miller, product manager, Marketing at Dresser-Rand. Miller is one of the key engineers responsible for the original DATUM design. "They sought to build a pipeline station in an underground bunker. This would require very little maintenance support and would be non-intrusive to the surrounding landscape. In addition, the client recognized there would be inherent security advantages with that type of installation. The challenge was designing a totally enclosed compression system with inline flanges and a natural gas-cooled electric motor."

As the early designs proved promising, D-R's project caught the attention of the U.S. Department of Energy (D.O.E.). In 2003, D-R secured funding as part of a larger initiative for U.S. manufacturers to develop leading edge technologies for infrastructure reliability in the natural gas industry. "The D.O.E. recognized the value of the DATUM-C, and the positive impact it could have on the pipeline industry. Their help has been instrumental in bringing this product to market."

DATUM-C offers the same advanced technologies and modular design concepts available in traditional DATUM compressors, providing equipment operators with greater ease of maintenance and life cycle value. "It's really the first spin-off technology based on the success of the DATUM compressor product line," Miller said.

In the early stages of developing the DATUM-C, D-R was presented with the challenge of selecting an electric motor suited for the project. After extensive research to find a motor company with a proven track record and technological capabilities, D-R selected Curtiss-Wright Corporation of Roseland, New Jersey. "Once we identified Curtiss-Wright and saw some of the things it had accomplished for the U.S. Navy, we knew we had a good fit," Miller said. "There are other great industrial motor manufacturers out there, but Curtiss-Wright had the best combination of high tech motor and engineering expertise for this project."

The integrated two-pole induction motor from Curtiss-Wright uses magnetic bearings supplied by Kingsbury, and a self-contained natural gas cooling system. The unit operates at 10 MW with 6,900 volts available at the terminals, and a maximum continuous speed of 12,000 RPM.

An Idea Whose Time Had Come While the natural gas pipeline industry was at one time largely limited to rural areas, in recent decades the ever-expanding network of pipes and stations has become commonplace in high-population centers. As a result, gas providers have had to balance the demands of a reliable supply of natural gas with the environmental and aesthetic concerns of their neighbors. These companies have continually sought new and innovative ways to reduce noise and emissions from their pipeline operations.

Originally, the proliferation of pipeline stations in remote areas required equipment that operated on the natural gas supply, and was not reliant on electric power. "Now with far more pipelines and stations, electric power is more readily available," Miller said. "And many industrial users can negotiate their own costs for electricity, so today the electric motor-driven compressor is even more practical."

The D-R DATUM-C compressor has a number of design features that make it uniquely suited to today's natural gas pipeline installations. The inline piping flanges of the DATUM-C allow the entire compressor to be installed directly into the line in both indoor or outdoor locations, greatly reducing infrastructure costs for new installations and for retrofit applications. The small footprint – approximately 8 by 12 feet – and modular design also make installation and maintenance easier. "The inline design makes the DATUM-C practical and efficient as a pipeline booster, and because of the compact size and quiet operation it would not even require the construction of a traditional pipeline station," Miller explained.

For pipeline applications, the DATUM-C is designed with a single-stage impeller for an inlet flow of 600 mmscfd, and inlet pressure of 650 psig at 60 to 80 degrees F. The discharge pressure is 1,160 psig. A second generation DATUM-C design is

already in development with up to five impellers for higher pressure requirements. "Most pipelines are operating at pressures of 1,000 to 1,200 psig," Miller noted. "But some companies are planning new pipelines at pressures up to 2,500 psig to transmit more gas in a given diameter. The DATUM-C will be able to meet those requirements, as well."

Magnetic Bearings Help Make It Green One of the most significant design features of the DATUM-C is the use of magnetic bearings. While magnetic bearings have been around for many years, previous systems relied on older analog control systems, making the bearings difficult to tune and adjust, according to Miller. "Previously, the magnetic bearing control system was designed, built, and tuned on the test stand, but the only way to adjust it was to change the resistors and capacitors. Then if something changed in the field, one had to do it all over again, making it very difficult to manage, time consuming and expensive. "But with today's digital controls, the computer-based algorithms make tuning very simple and quick. Now that operators have become more comfortable with the advanced, Windows-based digital controls, magnetic bearings will continue to gain even wider acceptance."

Because of the magnetic bearings, there is no need for an oil lubrication system, oil film seals, or dry gas seals. "The unit is a completely closed system," Miller emphasized. "With no gas turbine or gear box, the entire system is extremely quiet and produces no on-site emissions. So it's very environmentally friendly."

The DATUM-C provides variable speed operation and can remain pressurized during shutdowns.

According to Miller, the DATUM-C compressor is already drawing favorable response from pipeline clients, and additional frame sizes are planned. "Because of the scalability features of DATUM, an entire family of units could be developed in the 5MW to 20MW size range to cover a variety of pipeline applications."

#

Dresser-Rand is among the largest suppliers of rotating equipment solutions to the worldwide oil, gas, petrochemical and process industries. The company operates manufacturing facilities in the United States, France, Germany, Norway, India, and Brazil, and maintains a network of 24 service and support centers covering 105 countries. Additional information about Dresser-Rand can be found on the company's web site at: <http://www.dresser-rand.com/>.

DATUM is a trademark of Dresser-Rand Company (D-R).

This news release may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts may be forward-looking statements. Many risks and uncertainties may impact the matters addressed in the forward-looking statements, and actual results may differ materially from those expressed or implied. For a discussion of the factors that could cause actual results to differ, please see the disclosure under the heading "Risk Factors" in the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2005 filed with the Securities and Exchange Commission on August 25, 2005.

Company Contact: Blaise Derrico, (716) 375-3152