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ABB INC. FOTALFLOW PRODUCTS

CUSTOMER CONNECTION

APRIL, 2007

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Option 3 - Training

Option 5 - Sales

Option 6 - SCADA Vantage

(800) 442-3097

TOTALFLOW MEASURES SUCCESS IN BARTLESVILLE

ABB Totalflow Products in Bartlesville is one component of a global engineering and technology company — ABB Inc. With 108,000 employees in more than 100 countries, ABB distinguishes itself as a solution and support leader for utility and industry customers.



An employee of ABB Totalflow in Bartlesville checks equipment.

Once a wholly-owned subsidiary of ConocoPhillips, Totalflow grew out of a need to solve measurement problems in the natural gas industry, according to Totalflow General Manager Bob Rutledge. "Technology at that time didn't produce very accurate measurement", he said.

"The products we now have were developed from those problems." "Many other companies had those same issues."

The answer was an accurate, electronic way to measure natural gas.

"Since that time, we've broadened the things we do in the natural gas industry to other kinds of measurement and production monitoring and enhancement products," said Rutledge.

They include gas quality measurement, which calculates the heating value of gas; level sensors that measure the liquid levels in tanks; and gas production enhancement technology that can help wells produce more gas and lower maintenance costs.

According to Rutledge, Totalflow is considered one of the major growth industries in oil and gas for ABB.

"We are getting a lot of pressure to grow," he said. "If it looks like there is good opportunity, they (ABB) want to take a risk with us to see if we can make it happen."

Rutledge predicts ups and downs in the market, but predominately, the general trend will be up over the next several years, barring some major economic catastrophe.

"The summation is we feel good about the future, we have the opportunity and support of our parent company to grow, we've shown we're a good company, and they feel good about investing money with us."

As the company's product line improves, so do the number of employees. On par with the Oklahoma Quality Jobs program, which promises a cash incentive in exchange for job growth, Totalflow has doubled its number of employees over the last three years. Currently, 159 employees work in Oklahoma with all but two of those at the Bartlesville site. An additional 35 workers are hired on a contractual basis to coincide with the ebb and flow of demand.

To house the additional workforce, another 22,400 square feet of office space is currently being added.

Rutledge said one of Totalflow's best opportunities will be to grow internationally. Although their highest percentage of business is in the U.S., they have products all over the world.

The company has three major components in its business strategy:

- Continue to be an important supplier to the domestic natural gas production market in measurement and production enhancement.
- Develop a presence in natural gas distribution - probably industrial commercial sites within large cities.
- Develop a larger presence internationally.

The company is almost entirely selfcontained, according to Rutledge. Totalflow departments include research and development, manufacturing, customer service and tech support, documentation, quality control and shipping.



The ABB Totalflow facility located in the Bartlesville Industrial Park is undergoing expansion.

Barry Balzer, product manager, came on board Totalflow about two years ago, but he was already familiar with the products. He worked for a company called Duke Energy Field Services for 17 years as a measurement specialist supervisor. He and five others "roamed the country" working on special problems dealing with measurement or gas quality.

As a Totalflow user, he often interacted with the Totalflow staff during those years. (cont)

TOTALFLOW MEASURES SUCCESS IN BARTLESVILLE, CONT'D

"I always admired and respected the people here," he said. "Anyone will tell you the people here are a big plus."

Balzer said the Totalflow products are all about well automation and optimization, accurately measuring volumes of natural gas and the amount of energy within that gas.

One of those products, the natural gas chromatograph, analyzes the composition of gas within a pipeline or a network of connecting pipelines.

"It analyzes the percent of components like nitrogen and carbon dioxide, which don't burn, with methane, ethane, and propane, which do burn, and comes up with an energy amount or heat value to that gas."

A popular product is the flow computer, which measures differential pressure across an orifice plate within the gas line. With the differential pressure known, combined with temperature, a formula is able to calculate volume, said Balzer.

Close to 70 percent of their customers buy this entry-level flow computer, he said.

A third product is a sensor that measures the level of liquids in a tank. Balzer said a device

floats in the tanks to measure the levels. Large tanks sometimes reach 15 to 20 feet

Data from all of these products is transmitted via radio, phone line or satellite to a host computer sytem containing application software that provides customized information for Totalflow's customers.



Employee Cole Lippert prepares a device at ABB Totalflow Products in Bartlesville. Totalflow Products in Bartlesville is one component of a global engineering and technology company-ABB Inc.

With the products' remote operation, it cuts down time people spend in the field, he said.

"It's much more accurate. Companies can collect data every hour, every day, every week.

They know how much is coming in and how much they can let out. They can buy and sell every day."

Wells can also be automatically turned on or shut off, according to Balzer, adding to the convenience of remote operation.

Even after the sale closes, clients never have to worry about customer support.

"The people here are always trying to help," said Balzer. "They get back with customers promptly. They can help in the field or from the office. The technicians here can duplicate problems the client is having and walk them through a resolution on the phone."

Balzer said, too, if the client is having problems and has Internet service, Totalflow technicians can actually "take over" their computer to troubleshoot for the client.

Totalflow has come a long way since its inception as a business unit of a large company decades ago, but through research and innovation, it has met the needs of its clients and prospered as a major player in its own right.

Susan Albert, Business Editor Examiner Enterprise, Progress 2007 Report

LEVELMASTER FLOAT RENOVATION

After several months of exhaustive design and testing, we are pleased to announce the release of our new dual-level sensing, active circuit floats. As of March 12th, 2007, we began receiving orders for the new floats and shipping backlogged orders as quickly as possible.

During the past few months, we were able to improve the design and manufacturing processes to produce a more robust, longer lasting float. Some of the improvements include:

New pliable epoxy will not break

down the Nitrophyl float material during thermal expansion and compression often experienced in harsh tank environments.

- Revamped manufacturing process heats and vacuums epoxy to ensure a complete seal around the electronics
- Robust ceramic capacitors on circuit board that can withstand humidity introduced during the manufacturing process

To verify that the changes were effective, we performed a considerable number of in-house tests, and additionally shipped units to customers for field testing. The in-house tests included stress and limit tests as well as accelerated aging tests that simulated the life of a float in just a few days.

Rigorous Testing

The rapidly aged float shown to the right has undergone our battery of tests and survived. It successfully withstood 5 days in an environmental chamber that cycled from -20°F to 185°F every 1.5 hours and an additional 12 days at constant conditions of 180°F and 225 PSI. Not only did this float pass the tests, but so did over 30 other floats in more than 6 different test environments and field tests.



We believe these test results not only demonstrate a highly reliable float, but also our commitment to improving quality. Please feel free to contact me with any questions, concerns or ideas you may have for the future.

> Charles Nesser **Product Manager**

NGC C9+

At Totalflow's recent Global Technical Conference, a new model of the NGC 8200 series was introduced. The NGC 8209, the C9+ NGC (Natural Gas Chromatograph) performs on-site natural gas analysis and heating value computation using an extended analysis. The NGC 8209 utilizes the modular and scaleable XSeries software framework to integrate data from a third analysis train into the standard C6+ analysis of the Natural Gas. The extra chromatographic information is provided as NC6's, NC7's, NC8's and C9+ to provide this "extended analysis". Heating value (CV), Wobbe, Relative Density (SG) and other calculations are performed using the combined analysis data in a similar manner to the NGC 8206. Hydrocarbon Dew Point (HCDP) (future) and Speed of Sound (SOS) calculations are available options. A single computer controller seamlessly processes all this data for various outputs. It also handles the stream switching and the timing for the sample.

Incorporating a state-of-the-art built-in 32 bit digital controller, three electronic carrier pressure regulators, oven-mounted sensors and advanced low-noise digital electronics, the NGC 8209 performs with unparalleled repeatability and sensitivity.



This new C9+ GC is the latest model in the line of Totalflow's highly integrated manifold technology that started over 11 years ago with the Model 8000. The NGC 8209 provides custody transfer/metrology quality Chromatography for heating value and composition measurement. It provides the user with a C9+ GC that is lower in cost, easier to install and commission, and less costly to operate than any on the market.

XRC 6990 PANEL MOUNT

The XRC 6990 is a full featured unit that is provided without an Integral Multivariable Transducer (XIMV). In its base configuration this unit is equipped with standard IO designed to meet the requirements of many, low cost measurement and automation projects. The base I/O includes five (5) analog inputs (0-10 volts DC), 4 digital outputs and 4 digital inputs; two of which can be configured as either status inputs or pulse accumulator inputs.

The XRC 6990 mounts in a standard 19 inch rack. Standard configuration includes one (1) XRC 195 board, display, keypad, and local com port. The XRC 6990 can also be ordered with two (2) XRC 195 boards, displays, keypads, and local com ports. In this configuration, there are two (2) separate RTUs, each with their own unique station name and identifier, applications, configuration, communications ports, and I/O; sharing a common enclosure and battery/power supply.



MICROSOFT VISTA & TOTALFLOW

We have conducted preliminary testing of PCCU and WinCCU against Microsoft VISTA. Early indications are that some incompatilibies exist. Known incompatibilites are: PCCU help system, Driver for USB/Serial conversion. WinCCU help system, Active Reports. Of course we will be working to rectify these incompatibilites, and any others we find as we continue our testing.

As soon as we can, we will publish an estimated completion date for these testing and update activities. We will also include our other software systesm: VAS, TDS, Tf.net and SCADA Vantage.



NEW LOCATION IN LIBERAL KANSAS

An Open House was held on Tuesday, March 6^{th} at our new Liberal Kansas office located at 1013 South Kansas. Approximately 50 of our valued customers from Oklahoma, Texas and Kansas attended.



The open house was also attended by Don Salyards, Sales Manager out of Houston, TX; Barry Balzer, Jo Griffith and Judy Leighton all from Bartlesville, Oklahoma.

Food was prepared and served by a local establishment, Meisenheeimer Catering.



If you are in the Liberal area, you are invited to stop by and visit with us anytime.

Matthew C. Ward, Area Sales Manager

Paul Salley, Operations Specialist

Eugene Guitierrez, Senior Field Service Specialist

UPCOMING EVENTS

TRAINING

May 22: NGC 8200

June 5: Basic Flow Computer

June 12: SCADA Vantage User

June 19: Btu 8000/8100

TRADE SHOWS

April 24-26: American Gas

Association

April 30-May 3: Western Gas Measurement Short Course

May 9-11: Tennessee Oil & Gas

Conference

May 15-17: Int'l School of Hydrocarbon Measurement

May 31-June 1: Coalbed

Methane

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