

Advanced MEASUREMENTS



Advanced Measurements Celebrates 25 Years of Uptime

by Stephen King

“When you’re running a frac job, you simply can’t afford downtime with your control system.”

That’s the first sentence of the new Advanced Measurements video script, introducing people to the company and its FracCommand hydraulic frac automation technology.

It’s a good first sentence. And a great place to start when thinking about Advanced Measurements. Their customers are pressure pumping service companies that need to deliver consistently and efficiently; especially in today’s competitive marketplace where a little bit of knowledge goes a long way! And, yes, Advanced Measurements knows a lot.

The Calgary-based company was founded in 1989 with a background of hardware and software integration. Into the late ’90s, they provided turnkey solutions for a variety of industries, including automotive, process control, telecommunications, exploration, drilling, fuel cell testing, and of course, oil and gas. In 2002, Advanced Measurements began to focus exclusively on mobile oilfield service equipment monitoring and automation, and hasn’t looked back since.

These days, the FracCommand Suite from Advanced Measurements is the industry’s premier frac control system. This provides service companies around the world with a complete end-to-end suite of software and hardware controls to optimize frac jobs. The high-quality controls are made in their Calgary manufacturing facility. When shipped to customers worldwide,

the controls are connected to pumps, blenders, chem units, etc. for use in a frac spread. During the frac job, Advanced Measurements data van software is used to automate the frac schedule and to log all the data channels, providing monitoring, reporting and post-job analysis.

It’s all about delivering reliability, consistency, safety and profitability to their customers. Learn more about Advanced Measurements products on their YouTube channel or through their website www.advmeas.com.

World-Class Frac Technology Based in Calgary

The unassuming building just off Macleod Trail in southeast Calgary disguises the technology, innovation and world-class manufacturing hidden within its walls.

With over 80 people in the Calgary head office and more worldwide, Advanced Measurements is a high-performing team that optimizes the use of information from oilfield equipment in an integrated hardware/software perspective – they’ve made it their main area of expertise.

On the 25th anniversary of the company, Rod Berreth, president of Advanced Measurements, says the success and longevity of the company is a direct result of that focus.

“The average tenure of the senior managers here is 9.5 years,” states Berreth. “That’s a testament to people who enjoy the work and like to contribute to advancing the world. I’ve always been

impressed with the team's dedication in dealing with a wide range of variables and keeping the quality and reliability of our products so high. This is our real competitive advantage that has enabled us to lead the industry for many years."

FracCommand Suite Technology, Development Processes and Manufacturing Delivers Reliability

The FracCommand Suite is a collection of highly configurable hardware controllers (PumpLink, BlenderLink, HydrationLink and Chemlink) and DVCommand software that can control an entire frac spread from a centralized data van.

The FracCommand software platform is Advanced Measurements's secret sauce. The company estimates that it has invested over 50,000 man-hours of software engineering into the platform. It helps the company provide flexible and fast customization for clients, with bulletproof code that's been tested in the harshest conditions.

"Our customers have already realized a lot of control solutions," says Mike King, director of technology development. "They've benefited from continual system enhancements that control many different pieces of equipment. This knowledge allows customers to benefit from products with more time spent focusing on innovations and customer solutions, rather than reinventing the wheel."

Safety of customers' employees and their assets is extremely important to Advanced Measurements. Not only is the team proud of reducing injuries on the worksite, it's also contributing to an even greater decrease in downtime for frac jobs. Advanced safety features include redundant hardware and intuitive software controls, fail-safe pressure kick-outs, and automation that reduces operator error.

It's challenging to build quality, reliable controls that provide years of dependable service. Advanced Measurements facilities include full end-to-end manufacturing and focuses on high-quality production. It's important to get things right in Calgary because it's far more costly to deal with errors out in the field. Throughout the product development and manufacturing cycle, the company puts every piece of equipment and functionality through simulation testing and quality assurance before shipping.

Global Footprint

Advanced Measurements controls have been used on over 100,000 jobs globally. More than 1,700 systems are deployed in Russia, China, Oman, Bahrain, Mexico, Colombia and Argentina, and all producing regions of Canada and the United States.

In particular, the team is spending a growing amount of time looking for export opportunities in China. They've had a booth with the Canadian and Alberta Pavilion at CIPPE (China International Petroleum and Petrochemical Exhibition) in Beijing over the last few years.

"In addition to growth in our current markets, the China market is of particular interest to us. China has the largest shale gas basins in the world, and they are in the very early stages of development and will benefit from reliable and innovative



frac control systems. Our products could really help development of these basins, especially with the latest efficiencies that our technology has to offer," says Jeff Aitchison, VP of business development. "The Australian shale gas play is also starting to really heat up, so that interests us as well."

To win in the global market, Advanced Measurements offers 24-7 phone support from anywhere in the world. Training certification is offered in multiple languages to support the deployment of systems worldwide. All of which helps end users take confident ownership of their controls and software.

The Key Energy Connection

Advanced Measurements is a wholly-owned subsidiary of Key Energy Services Inc. After being acquired, the relationship provided a tremendous amount of knowledge about the pressure pumping market that Advanced Measurements was able to leverage. Customers gained the benefit of all Key Energy's experience and expert input into technology development, as well as Key Energy's global reach.

In the summer of 2010, Key Energy Services, Inc. and Patterson-UTI Energy reached an agreement whereby Key sold its pressure pumping assets to Patterson-UTI and totally divested itself from the pressure pumping market. Patterson-UTI continues to be a valued customer of Advanced Measurements.

Strong Customers and Partners

Also key to Advanced Measurements' success are their customers and partners.

Global partners include companies like NRG Manufacturing, UE Manufacturing, Turnkey Industries and the new partner in China, Northern Heavy Industries. They provide



Rod Berreth, president; Wayne Wilkinson, service and support manager; Ian Graham, PMO; Ryan Faith, reporting and QA manager; Mike Tracy, design and manufacturing manager; Mike King, director of technology development; Douglas Chacin, director of finance; Jeff Samis, product manager; Jeff Aitchison, VP business development.

equipment for their customers with Advanced Measurements controls, pre-installed.

For customers who are slowly upgrading their fleet, it's comforting to know that the controls work with hundreds of different engines, transmissions and other existing equipment. In addition, the FracCommand Suite is designed to work with third-party controls systems. All this is designed to make it easy to integrate FracCommand into customers' operations – fleet conversion can happen over time, all the while maintaining an interoperable fleet. It's future-proofed because customers aren't locked into a single equipment manufacturer.

Big Data? Big Future.

Advanced Measurements has been a leader in frac hardware controls and software automation for 25 years. What lies in store for the future?

"The FracCommand Suite logs thousands of channels of real-time data, more than any other solution available," says Jeff Samis, senior global product manager. "This data is used to run the frac job from the data van, of course, but also can be used for post-job, trend and predictive analysis, which is where we can add a lot of value in the future."

The skilled engineering and development teams are putting a business focus on providing customers with decision quality information at their fingertips. For example, data can be used to produce customized maintenance and treatment reports based on sensors that monitor actual wear-and-tear on the equipment, not just an estimate or "monthly" maintenance. This reduces non-productive time by identifying specific repairs at time of need before a failure occurs, rather than an arbitrary schedule.

Advanced Measurements closely follows the EPA (Environmental Protection Agency) studies on the potential impacts of hydraulic fracturing. It is widely anticipated that the results of EPA studies will require compliance reporting that will demand sensor verified activity data; something that Advanced Measurements excels at.

Whatever challenges come, Advanced Measurements is committed to leading the industry into the next 25 years.



7110 Fisher Road SE Calgary, AB T2H 0W9
403.571.7273 • www.advmeas.com



Congratulations to Advanced Measurements Inc.
on your 25 year anniversary!

MVP Talent Corp. is proud to be a part of your success!

MVP Talent Corp. Professional Career Search
marcello@mvptalent.ca | 403-239-1140 | www.mvptalent.ca



Copyright of Business in Calgary is the property of OT Communications and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.