

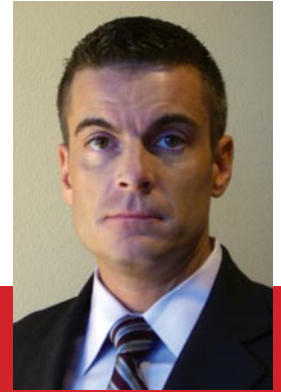


# NATIONAL OILWELL VARCO

One Company. . . Unlimited Solutions

## Bringing Offshore Technology Onshore

World Energy interviews Jason Whyte, Product Line Manager,  
National Oilwell Varco - RAPID RIG



National Oilwell Varco (NOV) is a worldwide leader in the design, manufacture and sale of equipment and components used in oil and gas drilling and production, the provision of oilfield inspection and other services and supply chain integration services to the upstream oil and gas industry.

**World Energy:** To what does NOV owe its status as a worldwide leader?

**Whyte:** We're a leader not due to size or numerous product offerings, but more so because of our tremendous in-house knowledge and experience – it is really unequalled. We continue to be focused on safety, efficiency and reliability – a combination that, at the end of the day, improves our customers' business.

**World Energy:** Can you update us on your company's most recent activities in drilling systems?

**Whyte:** AC power on drilling rigs is one of the technologies NOV led in the offshore market, and now we are seeing more acceptance of AC on land. It has significant advantages in terms of controllability, fuel savings and simplified machinery. Mechanization and automation are becoming more and more commonplace even on the smaller land rigs.

The recent increases in drilling activity have led to a lot of new companies and products entering the market and, with them, many new people who have little or no background in the industry. That is why NOV has been making major investments in our global supply chain and service capabilities, along with formal training programs to support our customers' growth. Beyond our technologies and products, much of the inherent value NOV provides comes from our company's ability to fully support our clients' operations.

**World Energy:** What competitive factors, other than horsepower and price, are important in the rig market?

**Whyte:** For the drilling contractor, most critical is the rig's ability to earn money. That means spending as much time drilling as possible, as safely as possible, with minimized downtime. So our goal is to provide rigs with technology that boosts efficiency, reliability and safety. Rig packages that combine all of these things allow the contractor to be competitive in today's market as well as in the future.

For operators, the key is to drill and complete a successful well as quickly as possible with minimal risk of problems that could jeopardize the project. Again, this gets back to reliability, efficiency and safety. Of course, the rig must also demonstrate its environmental friendliness, keeping in mind zero emissions and a reduced equipment footprint, to name a couple of concerns.

For both contractor and operator, having a reliable support system is vital. We are fortunate to have such a broad selection of well-known, proven products that are all supported by a worldwide network of field technicians and service facilities. As a company, we are in a leading position in terms of stability and longevity, so owners and operators of our rigs know we will be here to support our products well into the future.

**World Energy:** What was the strategic importance for NOV to develop the Rapid Rig?

**Whyte:** Our Rapid Rig can be summed up in three words that hold importance to drilling contractors and operators: smaller, faster and safer. We wanted to take advantage of the growing demand for higher-performance land rigs that operate in a more efficient, much safer manner.

To that end, the Rapid Rig's unique design brings proven offshore technologies to the land rig market and enables contractors to participate in a worldwide increase in shallow to moderate drilling depths on land.

The Rapid Rig takes advantage of NOV leadership in AC technology because it allows drilling contractors to replace dated, obsolete rigs with a much higher-performance drilling system. This rig can demonstrably improve a contractor's business.

**World Energy:** NOV is known for its latest technologies and for delivering increasing performance to its clients. How does the Rapid Rig fit into this equation?

**Whyte:** The Rapid Rig was designed from the ground up to maximize rig utilization and earning potential for contractors and to be the most effective system for completing drilling programs.

For example, we have taken proven high-tech systems and machines, many from offshore, and implemented them in a much smaller land-rig system. This leads not only to safer operation but also to conserved manpower, as fewer people are needed to drill the well compared to older rigs. That factor contributes to reduced costs associated with accidents and downtime. The AC technology further contributes with greatly improved drilling performance, reduced fuel consumption and reduced rig move costs.



[www.nov.com](http://www.nov.com)

In addition, NOV has taken important steps to make Rapid Rig the most environmentally friendly rig of its kind. The smaller equipment and minimal use of hydraulics and mechanical systems reduces our environmental footprint while creating a healthier work environment for the crew.

Finally, this advanced system positions drilling contractors as market leaders, allowing them to attract and retain the best people in a market where quality labor is scarce.

**World Energy:** How does Rapid Rig position NOV in the market?

**Whyte:** We see Rapid Rig as a logical extension of our already extensive land rig offerings. This technology bridges the gap between our successful mobile well service/workover rigs and our larger land rig packages, such as the Ideal Rig.

Rapid Rig demonstrates NOV's exclusive ability to design and build an entire drilling package from one vendor, which contributes to economies of scale for drilling contractors and operators. That's important from a technical standpoint, too. We have an unmatched ability to integrate an entire drilling system of our own supply as opposed to a mix-and-match of various third-party components.

This integrated system means NOV is a one-stop source for support on any issue, whether it is parts, troubleshooting, maintenance, technical support, field service, training, future upgrades – all under the NOV umbrella. And I know from experience that having that single point of contact makes life much simpler for our customers. That type of value is something that is realized for years to come.

**World Energy:** How do acquisitions, such as your recent partnership with Gammaloy, tie into your growth strategy?

**Whyte:** Gammaloy is an example of growth that follows our commitment to increasing our capabilities through strategic mergers and acquisitions. In the case of Gammaloy, their specialized downhole products complemented our leading downhole tools group and further enabled NOV to provide a more complete, streamlined source of downhole solutions for our customers. Again, we look at our ability to leverage economies of scale, our global sourcing and distribution network and our combination of technologies that, when put together, are greater than the sum of their parts.

In the end, it's our focus on making these combinations more valuable to the end user that helps improve our customers' businesses.

**World Energy:** NOV is a technologically advanced company. How do you identify and recruit talented employees to help you meet your goals?

**Whyte:** As is the case with companies across our industry, we are faced with filling the "talent gap" that resulted when the downturn of the 1980s and 1990s took its toll on personnel and we essentially lost a generation of our workforce. We have made a concerted effort at NOV to bring new talent into our company and nurture the future leaders.

In 2002 we started the company's "Next Generation" program, in which we annually recruit a group of college graduates from a wide variety of disciplines. We then rotate the graduates quarterly through various aspects of our business, from manufacturing and engineering to finance and administration. After one year of this rotation program, we place graduates in positions according to where they best fit. "Next Generation" has proven to be a highly successful program for NOV, and we have numerous examples of graduates who entered our organization as "Next Gens" and are developing into the company's future leaders.

Jason Whyte, manager of National Oilwell Varco's (NOV) Rapid Rig product line, began his career in engineering with Dreco Energy Services in Edmonton, Alberta. In 1997, following Dreco's merger with National Oilwell, he relocated to Houston as marketing manager for the company's Coiled Tubing Drilling Products.

Mr. Whyte was promoted to National Oilwell's corporate research and development group in 2000 as manager of New Product Implementation and, later, as manager of Engineering and Technology Coordination. He worked alongside the company's CTO assisting in the company's 2004 merger with Varco and in 2005 was assigned to lead development of an advanced land drilling system for the newly formed National Oilwell Varco. He became the Rapid Rig's product line manager in March 2007, responsible for continued growth of the business.

Mr. Whyte earned his associate's degree in mechanical engineering in 1993 from the Northern Alberta Institute of Technology.