Varel Delivers "Value Through Technology"

Performance ... reliability ... technology ... expertise ... value ... service. These are the cornerstones of Varel International, the world's largest independent manufacturer of premium drill bits for the global oil and gas industry.

Founded in 1947, Varel was once recognized as a low-cost roller cone provider for the mining and oil and gas industries. But times (and the company) have dramatically changed! In 1999, the original owners sold the company to current CEO, Jim Nixon, at which time he recruited several drill bit industry veterans to join the new management team. During the next few years, this team revamped the company's engineering and manufacturing processes and expands its product offering to include polycrystalline diamond compact (PDC) bits. As the company became more and more successful, it began to attract some of the industry's leading drill bit experts to develop new technologies and to build relationships and performance histories with the company's impressive list of global customers. In 2005, the company experienced another important milestone when it was purchased by private equity firm, KRG Capital Partners. The purpose of this activity was to exponentially perpetuate the company's growth and opportunities. Today, Varel International is recognized as the largest independent drill bit company in the world.

"The growth and success that Varel has experienced is a direct result of our commitment to deliver value to our customers," said Jim Nixon, CEO of Varel International. "This growth has been very exciting to our employees and shareholders, but, the primary beneficiaries of this success has been our customers."

If you ask any of Varel's employees, the company's objective is to not just be another drill bit company. "We want to continue to be recognized as a drill bit technology leader," said Nixon. "One way we do this is by partnering with our customers on their projects." This collaborative process enables Varel to understand the drilling objectives and drill bit criteria for each customer and each project. Then Varel utilizes its internal processes, proprietary design software tools and experienced personnel to recommend the optimum drill bit solutions for the stated objectives.

To expedite product delivery and service, Varel has several strategically located, state-of-the-art drill bit manufacturing facilities. The PDC business unit is based in Houston with an impressive team of engineering support in Pau, France. The company manufacturers both steel and matrix-bodied drill bits ranging in sizes from 3 1/4" to 26" (88.9mm to 660.4mm) in its high-tech manufacturing facilities based in Houston and Tarbes, France. The roller cone business unit is based in Carrollton, a suburb of Dallas, and is where Varel's impressive team of mechanical engineers and roller cone drill bit designers work on product development and materials R&D. Carrollton is also home to a team of experienced and skilled personnel who manufacture more than 20,000 tungsten carbide inserts each day for Varel's premium TCI product line. At the heart of the roller cone manufacturing process, is an impressive 175,000 square foot lean manufacturing plant. Recently, to meet industry demand, Varel made a significant capital investment to expand their manufacturing capacity for large diameter roller cone bits—those ranging in size from 16" to 36".

Drilling Deeper

Varel employs more than 1000 employees and has global sales representation in the United States, Canada, Europe, Middle East, Africa, United Kingdom, Latin America, South America, Russia and the Asia Pacific. Recently, the company expanded its sales operations to better serve the Gulf of Mexico, a very important market to the company and the industry, and hired a team of professionals with impressive drill bit backgrounds to manage and service accounts in the Gulf of Mexico, particularly along the Texas and Louisiana borders.

Going in the Right Direction

Providing solutions for directional drilling applications has become a strong part of Varel's business. To optimize future push-the-bit and point-the-bit projects for customers, the drill bit technology leader is currently working with one of the industry's leading rotary steerable companies to optimize Varel's Navigator products, the company's directional PDC product line.

The bit design process for Varel's Navigator bits utilizes GeoScience™, SPOT™ and Computational Fluid Dynamics (CFD). GeoScience is Varel's proprietary mechanical rock properties model that utilizes well logs. Output information from GeoScience is fed into the design process through SPOT, Varel's proprietary design software, allowing bit designers to accurately model bit dynamics. The CFD program examines the nozzle orientation for optimum bit and hole bottom cleaning. By taking all these parameters into account we fine tune the bit design for the application, making it the most effective solution for your directional application.

Value Through Technology

"As the largest independent drill bit company in the world, we know how important technology, cutting-edge drill bit design and, ultimately, performance is to our customers," said Nixon. "We will continue to leverage our resources and be a driving force for drill bit technology and well-bore quality. This is what continues to drive Varel to deliver 'Value Through Technology' for our customers. ●