Chris Carpenter, JPT Technology Editor

## **Mechanized Stabbing Guide**

The new Weatherford mechanized stabbing guide remotely guides tubulars to facilitate hands-free stab-in. The guide incorporates four axes of motion that are run by remote control in an automatic sequence, which removes the need for a rig hand to enter the red zone at the rotary table. It can be installed on platform, jackup, and semisubmersible rigs in any environment (Fig. 1). Bolted directly onto a flush-mounted spider, the guide moves from horizontal to vertical while the spider base remains stationary. The mechanized guide aligns to the pipe and adjusts to accommodate different pipe thicknesses and threaded-box heights. Operational flexibility is further increased by the guide's compatibility with a wide range of casing and coupling sizes. The tool also includes polyurethane clamping elements that eliminate metal-to-metal contact during stabbing, to protect sealing surfaces. When used in conjunction with Weatherford's OverDrive casing-running and drilling system, the mechanized stabbing guide enables the entire casing-running process to be executed without manual handling. The full system removes personnel from high-risk zones on the rig floor, thereby enhancing safety. For additional information, visit www.weatherford.com.

#### **Pipeline Connector**

Spirax Sarco introduced the PC3000 and PC4000 pipeline-connector range. This range has been developed to satisfy the needs of modern process industries, significantly simplifying installation and reducing maintenance time. Traditional steam-trapping assemblies often require the plant to be shut down for new traps to be installed, taking significant time and reducing production output. The PC3000 and PC4000 pipeline connectors, with single or double isolation, allow steam traps to be installed without need for process shutdown (**Fig. 2**). These pipeline connectors are ideal for



Fig. 1—Weatherford's mechanized stabbing guide enables automated stab-in of tubulars, which removes personnel from high-risk zones on the rig floor.



Fig. 2—The PC3000 and PC4000 pipeline-connector range from Spirax Sarco is designed to allow steam-trap installation with minimal process interruption.



Fig. 3–10% active solution of PQ Corporation's EcoDrill S45 without setting agent (left) vs. 10% active solution of EcoDrill S45 with setting agent and set for 4 hours at room temperature (right).

the oil and specialty-chemical industries and are suitable for manifold applications where steam traps are used on tracing and main-line drainage. Some of the range's features and benefits include an American Society of Mechanical Engineers 600-rated forged body suitable for use on lines up to 800°F, a fully shrouded piston-valve stem that reduces the potential of corrosion, and a standard fitted strainer that protects the steam trap from debris entrained in the condensate. A universal steam-trap connection allows the safe fitting of the complete range of steam traps without interruption to existing processes.

• For additional information, visit www.spiraxsarco.com.

### Water-Shutoff Chemical

PQ Corporation introduced the EcoDrill S45, an environmentally friendly chemical treatment for water control and profile modification. EcoDrill S45 uses new technology that enhances traditional benefits associated with sodium silicate chemistry. EcoDrill S45 is an alkaline, low-viscosity, aqueous solution consisting of nanosized presilica-sols. The silica species are converted into a highly durable silica gel with the addition of a setting agent. The choice and concentration of setting agent allow for flexible gelation times ranging from seconds to days within the reservoir. These silica species in solution are produced with a lower charge density that allows for morecontrolled gelation times while using sig-



Fig. 4—Two units of the HY-OPTIMA 2700 Series hydrogen-specific process analyzer from H2scan.

nificantly less setting agent (Fig. 3). Once set, the silica gel shows much greater dimensional stability. EcoDrill S45 can be formulated to suit a wide range of watercontrol and carbon dioxide problems. It effectively treats near-wellbore challenges such as fractures, or it can be placed deeper in the reservoir to combat high water/oil ratios, fingering, coning, and early breakthrough during waterflooding. Excellent safety and environmental characteristics provide the option for use across freshwater zones. Operational temperatures range from 10 to 250°C. For additional information, visit www.pqcorp.com/pc.

## Hydrogen-Specific Process Analyzer

The HY-OPTIMA 2700 Series hydrogenspecific process analyzer from H2scan uses a solid-state, nonconsumable sensor. H2scan's proprietary thin-film technology provides a direct hydrogen measurement that is not cross sensitive to virtually every other gas. The analyzer is ideal for use anywhere hydrogen is produced or consumed, such as refinery, natural-gas, petrochemical, and industrial-gas applications, where realtime measurements can enhance processplant efficiencies, improve diagnostics, and reduce maintenance requirements (Fig. 4). The analyzer is easy to install and use, providing analog and serial outputs for accurate, real-time hydrogen measurement in multicomponent or even varying process streams.

• For additional information, visit www.h2scan.com.

# Fiber-Optic Data-Management Service

Combining fiber-optic distributedtemperature-sensing (DTS) data with other surface and downhole information can provide the insight oil and gas operators need to enhance production and make more-informed operational decisions. But current practices to manage this information are complex, costly, and time-consuming, making it difficult to extract the full value of the data. The Baker Hughes AMBIT fiberoptic data-management service helps operators simplify data integration and improve productivity and performance. The secure, cloud-based AMBIT service is designed to reduce the workload and cost of data management compared with traditional services that require costly and complicated systems, programs, and licenses. Deployed through a softwareas-a-service model, the AMBIT service enables users to access their data in real time through a web interface, to make more-efficient and -effective operational decisions. The management of large volumes of data is simplified by incorporating production mark-up-language DTS standards, enabling easy integration with applications and devices across multiple vendors. This allows transmission of data in a common format, enabling users to share the data quickly and easily with the capability of tracking metadata and saving multiple versions of processed data without compromising any raw data in the process. JPT

• For additional information, visit www.bakerhughes.com.