

World Oil sees the value of Rigtools solutions. Efficient and safe tools and equipment directly connected to cost saving and maximum operating time. Read the essence of the article here:



## Safety, efficiency and capability gain ground in receding market

In good times and bad, three fundamentals have yielded significant returns for the drilling business: safety, efficiency and capability. These fundamentals have long served as hallmarks for the advancement of rig technology. World Oil's annual Drilling Rig Advances report takes a broad look at these basics, in the context of key technologies entering today's market.

- Mike Slaton, Contributing Editor.

Rig technology makes a hole, and gets you back out. That's as true for the marketplace as it is for the lithology. Advances in rig technology helped fuel the success that dug the industry's current hole; the next round of advances will help dig us out.

As they have in the past, those advances will likely center around several key themes. The safety of personnel, the environment and, ultimately, the asset, inspires a wide swath of risk-reducing innovation. Efficiency, always in demand, has become paramount, as a counterbalance to plunging oil prices. Today, the drilling process is subject to heightened scrutiny, aimed



Fig. 6. RIGTOOLS' Monsoon cleans muck off screens, without exposing personnel or the environment to mud and chemicals.

at squeezing expediency out of every step. And of course, there is capability; with the set of well challenges presenting an ever-moving target, rig advances must constantly match—and anticipate—the job that they will be asked to do.

The solutions include fit-for-purpose land rigs, automation and deepwater pressure control, as well as basic equipment components. In good times, new rigs, added to the industry's onshore and offshore fleets, were a good indicator of technology entering the market. Watching what passed through the gate was a solid way to take stock of trends in specifications, hardware and

processes. In contrast, rig cancellations are a poor indicator.

So this year, our focus is on the technology advances from the perspective of manufacturers and service companies, who are burning the midnight oil to advance rig technology in a tough marketplace. That examination reveals an industry that, while intensely focused on cutting costs, is also fully engaged in seeking and applying a broad scope of advances to improve safety, efficiency and capabilities.

## EFFICIENCY AND SAFETY

Optimization and automation of drilling processes has long been the path to achieving drilling rig efficiency and safety. The two work hand-in-hand, to reduce risk to personnel poised by rig floor operations, and to streamline the drilling process with precise, repeatable operations. These rig advances, described in hardware, software and data, are at the center of modern rig capabilities. They are the keystones that support continued advances in how wellbores are drilled, and how drilling programs are planned.

## TOOLS FOR SAFETY

Not all efficiencies involve a big solution or major change. In a business climate focused on low cost, basic improvements that result in simple, safe handling and lifting solutions continue to play a significant role, as they build on synergies between safety and efficiency.

Adding value, cutting costs, improving efficiency, solving HSE issues, etc. are particularly relevant in the current market, says RIGTOOLS. The company observes that tested, certified tools designed to prevent people from pinching hands and toes help reduce and eliminate the considerable costs of even minor

accidents. These tools, in concert with standardized procedures; consistency in lifting and handling procedures; and other basics; are important elements of a long-term approach to improving safety and efficiency.

Their BHA Wash Tool is a system of high-pressure nozzles mounted on top of the diverter or bell nipple to clean the assembly without exposing personnel to “red zone” rig floor operations.



Fig. 5. RIGTOOLS' clamp tool aids sub lifting and handling.

A clamp tool for lifting subs is designed for safety and certified handling, [Fig. 5](#).

Another innovation is an automatic shaker screen washer. The Monsoon, says RIGTOOLS, can extend screen life by 25% or more by cleaning dirt off the variously sized screens, without exposing personnel, or the environment, to mud and chemicals. Vapors are handled through an exhaust pipe, [Fig. 6](#). **WO**

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