



FINAL TOUCHES: A Cubility technician readies a MudCube unit for delivery to a lengthening client roster.

Stirred not shaken

A new technology is creating some ripples in the shale shaker market, reports Ole Ketil Helgesen.

The technology behind the shale shaker — vibrating sieves that use gravity to separate shale and particles from drilling fluids — has remained essentially the same since 1915. However, in 2004 a couple of clever engineers in Norway asked: Is it possible to make a shaker that doesn't shake?

They came up with the MudCube, a solids control system that uses vacuum conveyor belt technology to separate solid waste from drilling fluids.

Norwegian company Cubility, which brought the technology to market, says the MudCube

provides cost savings for the oil industry through reduced mud, waste and chemicals consumption, and increased automation. The unit also provides significant health, safety and environmental (HSE) improvements, says co-inventor and Cubility chief technology officer Jan Kristian Vasshus.

"A drill crew that has experienced the benefits with the Mudcube will likely refuse to go back to the hellholes that traditional shaker rooms are — hot, noisy and full of oil vapours," he says.

However, an improved working environment "is often

not sufficient for a technological breakthrough in the oil and gas industry", adds Cubility chief executive Even Gjesdal. "It is the cost reduction the MudCube gives that is the main driver for the product's success."

The MudCube does seem to be catching on in the industry. It was designated a Proven Technology by Statoil in 2012. Cubility has secured contracts for the system in all major drilling markets, the company says, with a client list that includes Maersk Drilling, Statoil, Dong, Talisman, Saipem and Chevron. The company opened new offices in North America

and Malaysia this year to keep up with demand.

It is no secret that drilling waste volumes, mud losses and HSE issues represent major costs in today's drilling environment.

"Until now, traditional solids control systems have been deemed sufficient for both onshore and offshore wells, despite being relatively labour intensive and ineffective for fluid and solid separation, and having had no major improvements being made to the technology since 1915," Vasshus says.

"The traditional method has disadvantages, like the mechanical impact of the drill