Pakistan: M-I SWACO XR mesh technology outlasts competition’s corrugated screen under heavier loads

“We can observe that the M-I SWACO screen consumption is much less than the competitor’s even though the M-I SWACO screens were installed on older shaker technology and existing equipment that has not been well maintained. The M-I SWACO screens also were run with much higher mud weights than the OEM screens and even with the comparatively lower loads, the OEM screen performance was inferior to the M-I SWACO screens.”

Field Information
Location ................................................................................................................................................................................................. Pakistan
Operator ................................................................................................................................................................................................. OMV
Well ................................................................................................................................................................................................. Sofiya 2
Rig ................................................................................................................................................................................................. Saxon Rig 25
Fluid Type ......................................................................................................................................................................................... Water-base mud

The Situation
In an effort to further drive down operating and maintenance costs, a drilling contractor in Pakistan agreed to allow M-I SWACO to evaluate, record and compare the performance and usage efficiencies between M-I SWACO patented XR™ mesh screens in a side by side comparison with a competitor’s corrugated OEM screens. The rig’s solids control package comprised both old and new technology shakers. The new generation shakers were equipped with corrugated screens, while the older units were fitted with the M-I SWACO replacement screens for the FLC 500 shakers. Our objective was to prove our screen technology, even on old shaker technology, offers an advantage over the competitor’s screen.

The Solution
To assess the performance of the replacement screens for the FLC 500 shakers, the on-site M-I SWACO drilling fluid engineer set up a head-to-head comparison with corrugated shaker screens. Our patented XR mesh was recommended to highlight the benefits and extended screen life using calendaring technology. The operational life of the two screens would be compared over 31-day periods. The performance would be evaluated with respect to the mud weights processed and the average solids content.

The Results
Even though they were installed on older shaker technology, the M-I SWACO XR mesh screens effectively processed mud weights up to 19 lb/gal and solids content as high as 48%. The operational life of the M-I SWACO screens were appreciably longer with only 31 replacements during the 31-day period, compared to the 52 corrugated screens that required replacement over an identical time frame. This, despite the OEM screens being installed on a new-generation shakers which operated at much lower loads of no more than 17.5 lb/gal drilling fluid density and solids content that never exceeded 38%. Data shows screen consumption was reduced more than 40% using the patented M-I SWACO XR mesh. Our overall screen technology, featuring a flat panel design, combined with XR mesh proved we can make even our competitor’s shaker technology better.
Summary

- M-I SWACO screens run on older shaker technology compared with competitive screens on new shaker technology
- The replacement screens for the FLC 500 shakers handled higher solids loads than the competitive screen
- Screen consumption reduced 40% using the flat panel design from M-I SWACO in combination with our patented XR mesh

Questions? We’ll be glad to answer them.
If you’d like to know more about M-I SWACO shaker screens and how they’re performing for our other customers, please call the M-I SWACO office nearest you.