



# Derrick V300™ Pyramid™ Replacement Screens vs. MI-SWACO XR Screens

**9% Increase in Solids Removal**  
**145% Increase in Screen Life**  
**38% Oil on Cuttings Reduction**

## Introduction

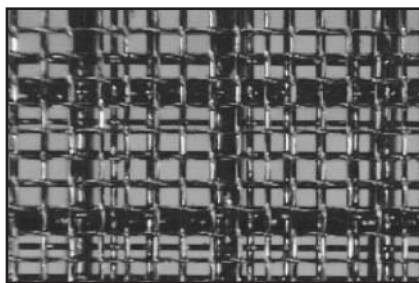
WASCO KMC Oiltools Limited was contracted by a major Nigerian offshore oil operator. Tests were done to perform a screen comparison evaluation to possibly enhance performance on existing VSM 300 shakers.

## Objective

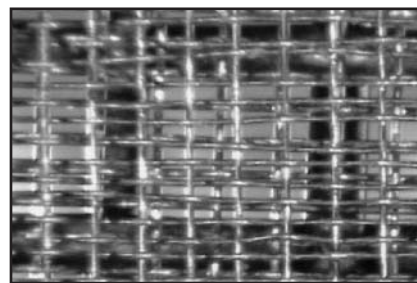
Compare the performance of Derrick's V300 replacement screens to MI-SWACO's XR series screens with respect to cut point (solids removal), durability (screen life), and oil on cuttings.

## Procedure

Shaker #1 and Shaker #2 were selected from a total of four shakers to achieve uniform flow distribution for the screen test. Screens utilized for the test were the Derrick V300 DX™-A140 (previously named DX 175) and the MI-SWACO XR 200 Screen.



Derrick V300 DX-A140



MI SWACO XR 200

## Drilling Parameters

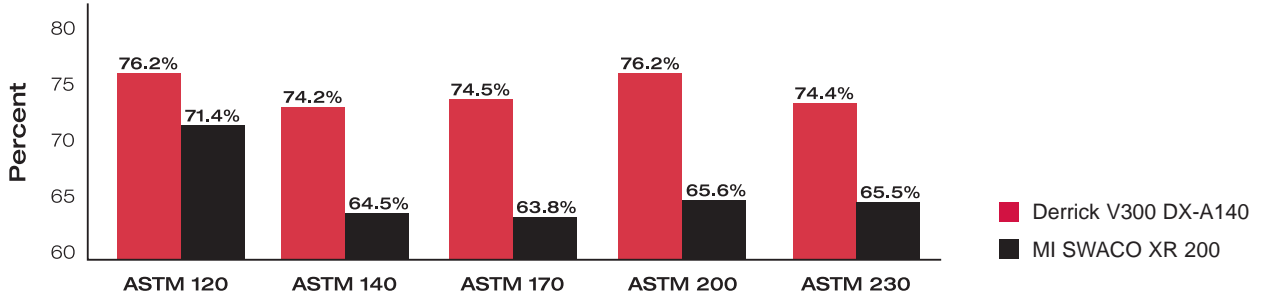
Qty Wells: 1  
Hole Size: 8.5"  
Footage: 9,950' to 13,535'

Hours: 49  
Flow (gpm): 460  
Density (lb/gal): 10.2

## Results

### Drilled Solids Removal Efficiency

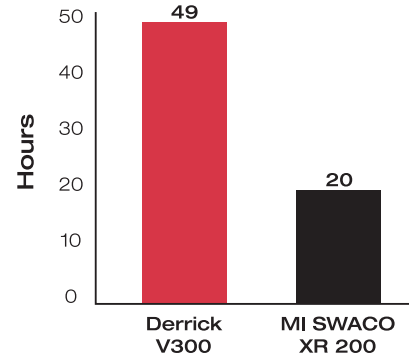
ASTM sieve analysis of the feed and screen underflow slurry was performed on both shakers resulting in a cumulative removal rate of 74.4% with the Derrick V300 DX-A140 screens as opposed to MI SWACO's XR 200 removal rate of less than 65.5% (based on solids larger than 63 microns).



### Screen Durability

The XR 200 experienced screen damage on two panels during the first 20 hours of testing. Derrick's V300 screens lasted for the duration of the test—a total of 49 hours—with no visible damage.

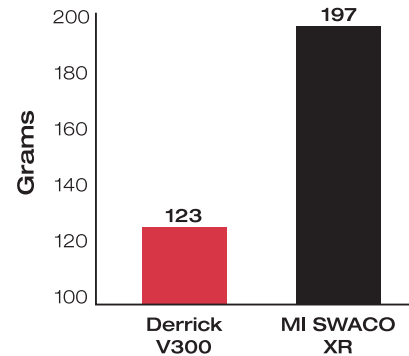
**145% increase in screen life**



### Oil on Cuttings

Oil on cuttings analysis resulted in a lower value on the Derrick V300 screens (123 gms/kg) when compared to the MI SWACO XR 200 screens of 197 gms/kg.

**37.56% reduction of oil on cuttings**



## Conclusion

The Derrick V300 replacement series screen removed more solids and increased screen life while maintaining less oil on cuttings.



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PYRAMID™ SCREEN