

Expro Excellence

The new VERSAFLO™ NXT impresses on its inaugural deployments in Guyana

Well Construction | Drilling Technologies



Objectives and background

A major operator in the deepwater operations of Guyana required an externally sealing, remotely operated drill-pipe fill-up and flow-back tool to maximize various operations on their drill-ships. Beyond taking flow-back from the landing string, the operator had a requirement to circulate the landing string, pump-in-hole during complex completion operations, and pump-out of hole to maintain well integrity and maximize efficiency. Various other tools had been used, but each presented their own distinct limitations, and a new tool was needed, urgently

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- Using the experience of our Drilling Technologies Division in our Well Construction Product Group, and new external sealing variant of the VERAFLO™ Timesaver Series of tools was designed. The modern design incorporated several improvements over the available tools on the market including:
 - o Removal of outer-bodystresses during pumping operations, eliminating DROPS potential due to pumping loads
 - o Hydraulically actuated sealing element, eliminating timely rotationally-activated operations or slower, less reliable pneumatically functioning assemblies
 - Hydraulic system completes actuation in less than 8 seconds and has a higher tolerance for misalignment due to additional hydraulic force.
 - o One dressing catches the full range of available 6-5/8" drill pipe without any re-dress
- More compact design than predecessors with a full 24" of stroke to give drillers the maximum air gap
- Optimized bearing assembly permits the highest RPM allowance on the market

Value to the client

- To date the operator has had immense success with the NXT tool and has performed all the following operations with critical efficiencies gained in each operation:
 - o Lower completion Pump-In-Hole & fluid change-out
 - Pump Out of Hole to eliminate bottoms-up events
 - o Landing String tripping
 - o Extended rotational operations (100 RPM for 45 mins) during tight hole conditions to free string and POOH
 - Rotated at 20 rpms, while pumping at 4000+ psi for 3 hours during GEOTAP
- All the enhancements the Expro Drilling Technologies Product Line has incorporated into the new VERSAFLO™ NXT tool has delivered the Operator significant efficiency savings in their Guyanese operations.
- Expro's cross-trained TRS crews ran the tools after competency system roll-out which eliminated the need to mobilize an additional technician to the rig for the operation



