



TopJet delivers long term rig time savings for HPHT drilling campaign

Development Trials Success for Operator

The TopJet™ was originally conceived as an accessory to assist RIH with the Company's Float Activated Valve a specialist product for milling sidetracks.

In 2007 Operators were experiencing messy and slow top-filling on the Ensko 102. Engineer Connor Dunn identified the TopJet as a potential solution and implemented trials to see if the product would help. The trials assessed the best top drive loading, filling interval and pump rates and soon produced significant time savings and also greatly reduced spillage.

Product improvements to the design geometry and sealing rubbers meant that the tool quickly became a standard accessory for the operator when running in closed end assemblies. Up to 2014 regular usage the product generated nett savings in the region of \$2.12 million after rental costs.

All applications successful?

Unlike a downhole tool the product is not plug and play, but requires the correct method of application for it to be of use:

1. The interface with the Top Drive and drill pipe needs to be correct for the fitting to seat properly and seal, this can be assessed by completing the dimension sheet.
2. Occasionally a misaligned Top Drive makes sealing difficult, the offset version of the Top Jet can solve this problem, by providing on-rig adjustment for the error.
3. The correct weight (5-10Klbs) must be applied to create a seal otherwise it will leak. Some users have assumed the seal has failed when in fact they haven't applied enough load to seal.
4. To maximise the benefits the fill rate and the filling interval must be optimised, the crew will need to take guidance from the instructions and optimise their method for their system.

A specific case study

In 2014 a specific analysis of an application on the Transocean Prospect confirmed a \$48K nett saving running in a lower completion. The completion engineer concluded "We use the TopJet™ at every opportunity, the guys on the rig love it"