

6-5/8" WIRELESS TOP DRIVE CEMENT HEAD

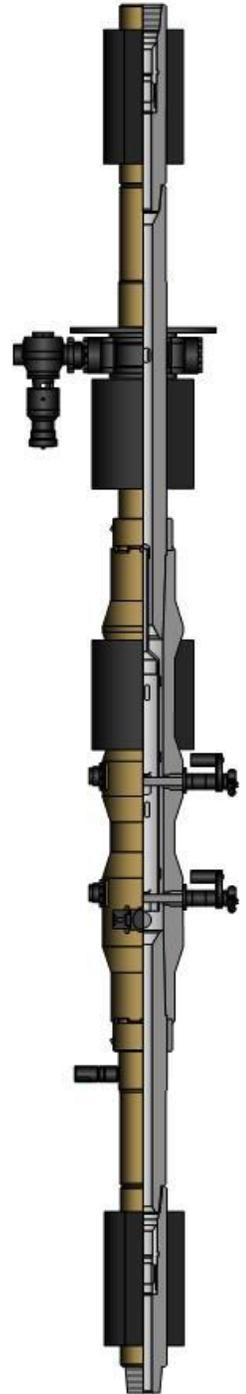
Blackhawk's 6-5/8" Top Drive Cement Head, the industry leader in GoM deepwater primary cementing operations, now features the most advanced wireless automation system available. Incorporating a vast-array of industry-exclusive technologies and features focused on safety, speed, and efficiency, Blackhawk continues to refine what is the most versatile cement head currently on the market. Blackhawk's Top Drive Cement Head is covered by US and foreign patents, including, but not limited to numbers: 5,950,724, 9,212,531, 8,636,067, and 8,887,799.

FEATURES

- Fully-wireless automation system eliminates hydraulic umbilical line and operating console.
- Industry-exclusive, interchangeable cage design (6.625" maximum ID) prevents "wadding" deformation of dart fins, mitigating fluid bypass and displacement volume discrepancies.
- Wireless, remote-operated pin pullers enable fast and accurate launching of wiper plugs, darts, and rubber/nerf balls.
- Wireless, remote-operated plug and safety valves quickly actuate during cementing operations.
- Industry-exclusive LED tattle-tale, effective in all weather conditions, enables confirmation of plug/dart/ball release from tool; automatically resets between launches.
- Quik-LockSM connections allows for the fastest plug/dart/ball reloads in the industry.
- Manual backup on all remote-operated features ensures redundancy and risk-free operation.
- Quad head available

VALUE

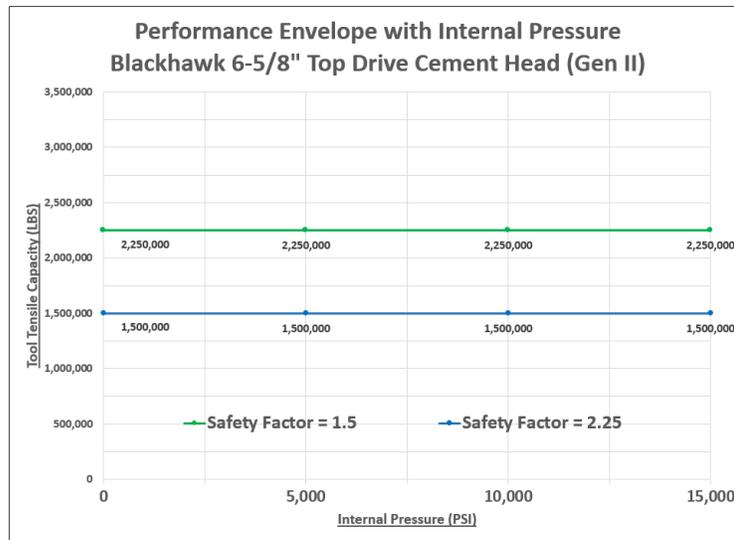
- Continuous wireless link monitoring; radio signal filtering blocks Wi-Fi and Bluetooth interference for increased reliability.
- Wireless, remote-operated, "on-the-fly" plug/dart/ball launching, eliminates the need to stop pumping, reciprocating, and/or rotating.
- Wireless, remote-operated features eliminate the number of riding belt trips above the rig floor, improving safety.
- Reduced likelihood of plug/dart/ball damage improves cementing efficiency.
- Quick reloads on the rig floor reduce downtime.
- LED and observation ports leave no doubt that the plugs/darts/balls launched from the head as intended.
- Rotating ability further facilitates effective cementing.
- Adaptable to essentially any primary cementing application.
- Liner setting balls are loaded in ball droppers on the rig, allowing verification of ball size by all critical personnel.



SPECIFICATIONS

6-5/8" Wireless Top Drive Cement Head (Gen II)	
Maximum Hookload	See Performance Envelope
Maximum Working Pressure	10,000 psi
Maximum Combined Loading	See Performance Envelope
Torque-thru Tool Rating	100K ft-lbs
Maximum Pump Rates	35 bpm through top drive
	15 bpm through 2" 1502
	20 bpm through 3" 1502
Maximum Wireless Operating Distance	650 ft
Wireless Operating Temperature	-4°F to 122°F

- Notes:
- A) Hookload ratings do not include drill pipe connections, handling pups or full-open safety valves.
 - B) Blackhawk Specialty Tools recommends using a 1.5 SF for maximum working hookload, unless reviewed and approved by Blackhawk Engineering and Operations.
 - C) Blackhawk's Gen II, Quik-LockSM Top Drive Cement Head has been proof tested to 3,375,000 lbf.



WIRELESS REMOTE CONTROL

