



6-5/8" AUTOMATED TOP DRIVE CEMENT HEAD

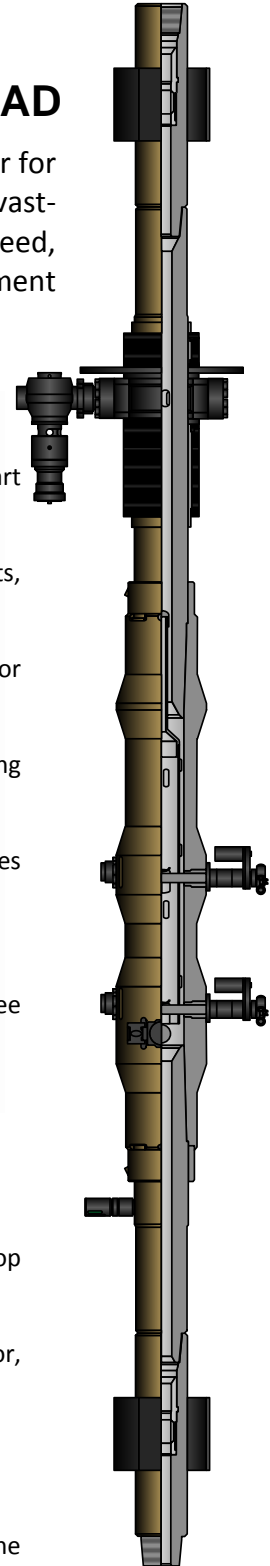
Blackhawk's 6-5/8" Top Drive Cement Head has become the industry leader for deepwater primary cementing operations in the GoM. Incorporating a vast array of industry-exclusive technologies and features focused on safety, speed, and efficiency, Blackhawk continues to refine what is the most versatile cement head currently on the market.

FEATURES

- Industry-exclusive, 6.625" maximum cage ID prevents "wadding" deformation of dart fins, mitigating fluid bypass and displacement volume discrepancies
- Remote-operated pin pullers enable fast and accurate launching of wiper plugs, darts, and rubber/nerf balls
- Remote-operated isolation valves above and below cement head can be quickly open or closed
- Remote-operated cementing plug valve quickly isolates cementing unit during displacement
- Industry-exclusive LED tattle-tale, effective in all weather conditions, enables confirmation of plug/dart/ball release from tool
- 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

- Remote-operated, "on-the-fly" wiper plug launching, eliminates the need to stop pumping, reciprocating, and/or rotating
- 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

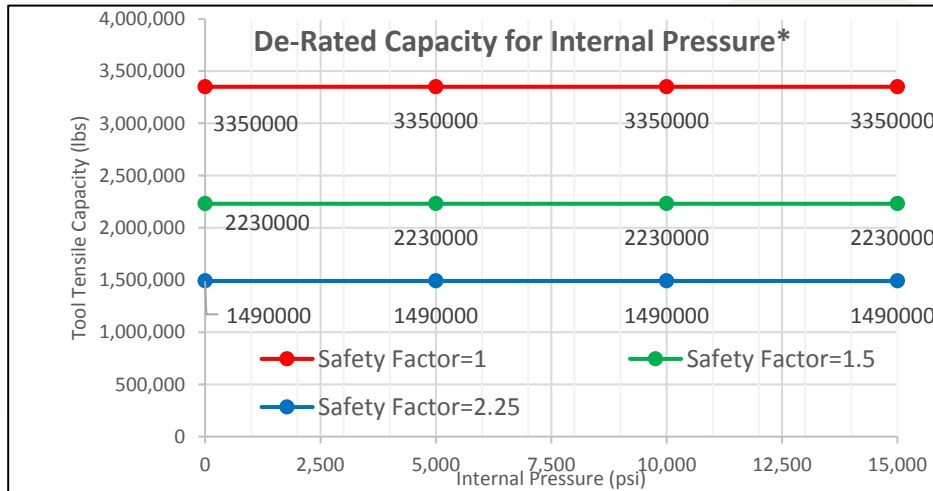




- Rotating ability further facilitates effective cementing
- Adaptable to essentially any deepwater primary cementing application

SPECIFICATIONS

6-5/8" Wireless Top Drive Cement Head (Gen II)	
Maximum Hookload	See Chart Below*
Maximum Working Pressure	See Chart Below*
Maximum Combined Loading	See Chart Below*
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
Complete Tool Weight	Needs to be Verified



*RATINGS DO NOT INCLUDE DRILL PIPE CONNECTIONS OR FULL-OPEN ISOLATION VALVES. RATINGS FOR FULL-OPEN ISOLATION VALVES CAN BE FOUND IN TSB-10012.

CERTIFICATIONS

DNV, API Spec 7, 7G-2, 6A PSL 2.

TH Hill Mechanical Design Review THHA E3-0823

Mohr Stress Engineering –2,750,000 lbs – Report 173878, 08/03/2009

