



9-5/8" AUTOMATED TOP DRIVE CEMENT HEAD

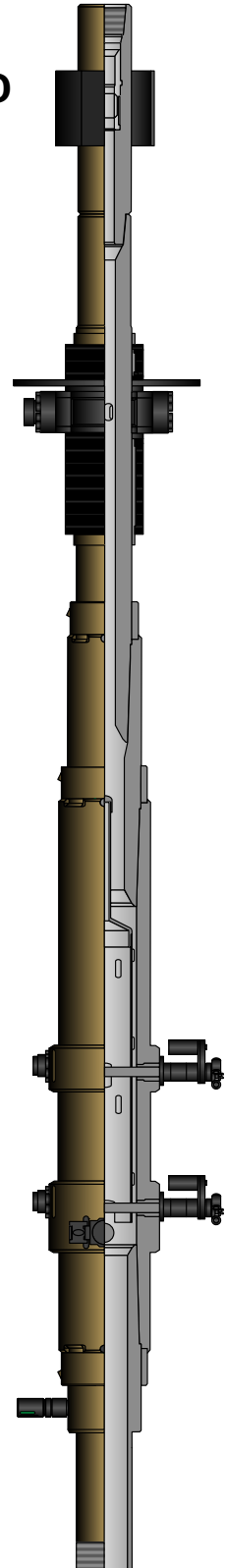
Blackhawk's 9-5/8" Top Drive Cement Head has become the market leader for shelf and inland primary cementing operations in the GoM. Incorporating a vast-array of industry-exclusive technologies and features focused on safety, speed, and efficiency, Blackhawk continues to refine what is the most versatile cement head currently on the market.

FEATURES

- "Flow-around" cage design centralizes and minimizes differential pressure across wiper plugs.
- Remote-operated pin pullers enable fast and accurate launching of casing wiper plugs.
- Remote-operated safety 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 wiper plug release from tool.
- Quik-LockSM connections allows for the fastest wiper plug reloads in the industry.
- Manual backup on all remote-operated features ensures redundancy and risk-free operation

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.

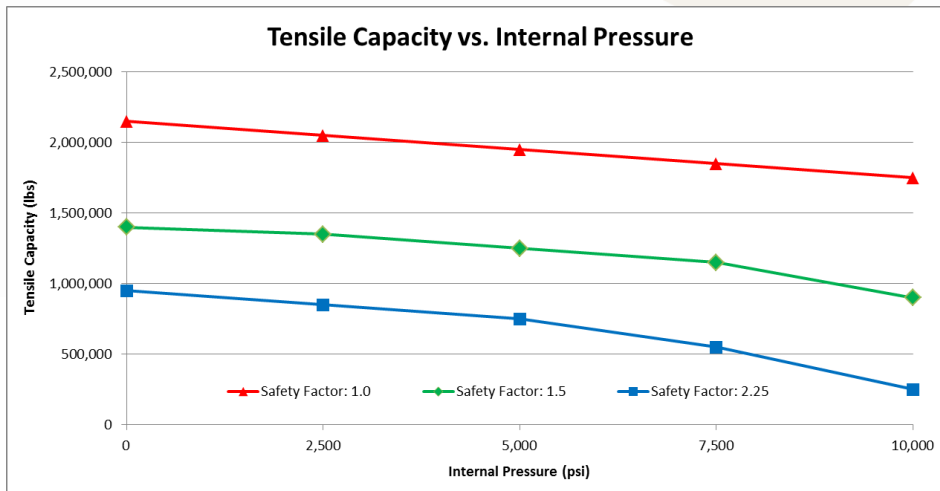




- LED and observation ports leave no doubt that the wiper plugs launched from the head as intended.
- Rotating ability further facilitates effective cementing.
- Adaptable to essentially any deepwater primary cementing application.

SPECIFICATIONS

9-5/8" Top Drive Cement Head	
Maximum Hookload	1,400,000 lbs (SF 1.5)
Maximum Working Pressure	10,000 psi
Maximum Combined Loading	1,000,000 lbs @ 8,000 psi (SF 1.5)
Torque-thru Tool Rating	100 Kft-lbs
Maximum Pump Rates	35 bpm through top drive
	15 bpm through 2" 1502
	20 bpm through 3" 1502
Complete Tool Weight	6,500 lbs
Top Connection	6-5/8" API FH Box
Bottom Connection	9-5/8" 53.5 ppf P-110 GB CDE Pin*



***9-5/8", 53.5ppf, GB CDE, P-110, Connection Ratings:**

Maximum hook load: 1,718,000 lbs; Minimum makeup torque: 10,000 ft-lbs
 Maximum operating torque: 113,620 ft-lb; Yield torque: 119,600 ft-lbs

CERTIFICATIONS

- DNV, API Spec 6A PSL 2.
- TH Hill Mechanical Design Review THHA E3-0722

