

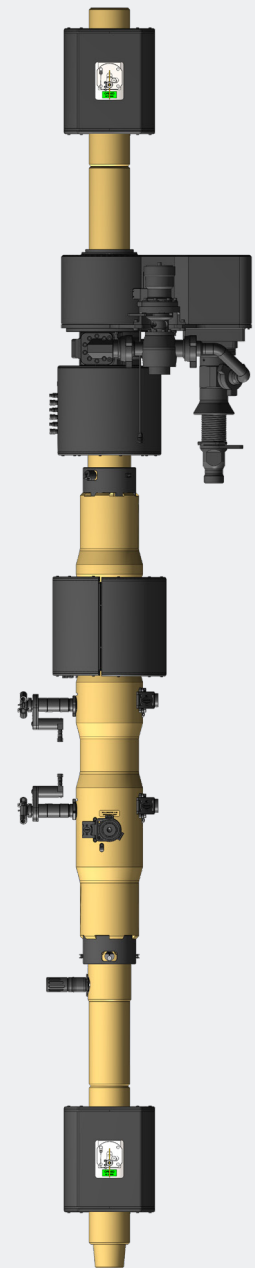
BLACKHAWK® Top-Drive Cement Head

Standard Features and Benefits

- Universal design facilitates the operational flexibility to drop multiple styles of darts or wiper balls
- Large 6.625" cage ID prevents "wadding" or deformation of dart fins and mitigates fluid bypass and displacement volume discrepancies to prevent costly remedial cementing operations
- Industry-exclusive LED tattle-tale enables visual and audible confirmation of dart or wiper ball release to eliminate personnel manually confirming from the rig floor
- Industry-exclusive inspection port on each chamber allows for viewing inside the cement head, improving operational efficiencies by ensuring proper load out and release of darts and wiper balls
- Proprietary Quik-Lock™ connection provides the industry's fastest dart and wiper ball reloads to improve operational efficiency
- High-pressure swivel facilitates high RPMs and long-duration rotation while conditioning and cementing to improve quality of cement job
- Swivel can be removed from assembly when pumping cement through the top-drive to reduce overall length for various applications
- Industry-exclusive ball droppers provide the ability to drop two liner setting balls, up to 3" in diameter, without adding additional chambers to the cement head
- Administrative CE marking available for required environments

Optional Wireless Features and Benefits

- Includes cementing plug valve, pin pullers, ball droppers and wireless isolation valves that eliminate hydraulic umbilical lines to reduce the number of riding belt trips above the rig floor
- Fully-wireless automation system eliminates the requirement to pause pumping, reciprocating, or rotating during cementing operations to enhance operational efficiencies
- Manual backup on all remote-operated features ensures redundancy and risk-free operation
- Continuous wireless link monitoring and radio signal filtering blocks Wi-Fi® and other wireless transmission interference for increased reliability
- ATEX Zone 1, IECEx, and UL Class I, Division 2 safety certifications available for required environments



Use in the following applications:

Deepwater and ultra-deepwater

Shelf

Land

The Frank's International BLACKHAWK® Top-Drive Cement Head is ideal for rotating while cementing drill pipe-deployed casing strings or liners. The BLACKHAWK® Top-Drive Cement Head can be configured with dual or quad chamber bodies to adapt to any primary cementing application and upgraded with an optional wireless automation system and Frank's SKYHOOK® Wireless Cement Line Make-Up Device.

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Specifications

Casing Size (IN.)	Max Hook Load (LBS)	Maximum Working Pressure (PSI)	Maximum Combined Loading	Torque-Thru Tool Rating (FT-LBS)	Maximum Pump Rates (BPM)	Complete Tool Weight (LBS)	Connections
5-1/2	810,000 (SF 1.5)	10,000	Contact Engineering	50,000	35 BPM through top drive 15 BPM through 2" 1502	4,500	API NC50 (4-1/2" IF)
6-5/8	2,250,000 (SF 1.5)	10,000	2,250,000 LBS @ 10,000 PSI (SF 1.5)	100,000	35 BPM through top drive 15 BPM through 2" 1502 20BPM through 3" 1502	5,500	6-5/8" API FH

