

## Big Advantage Remote-Control Top-Drive Cementing Head

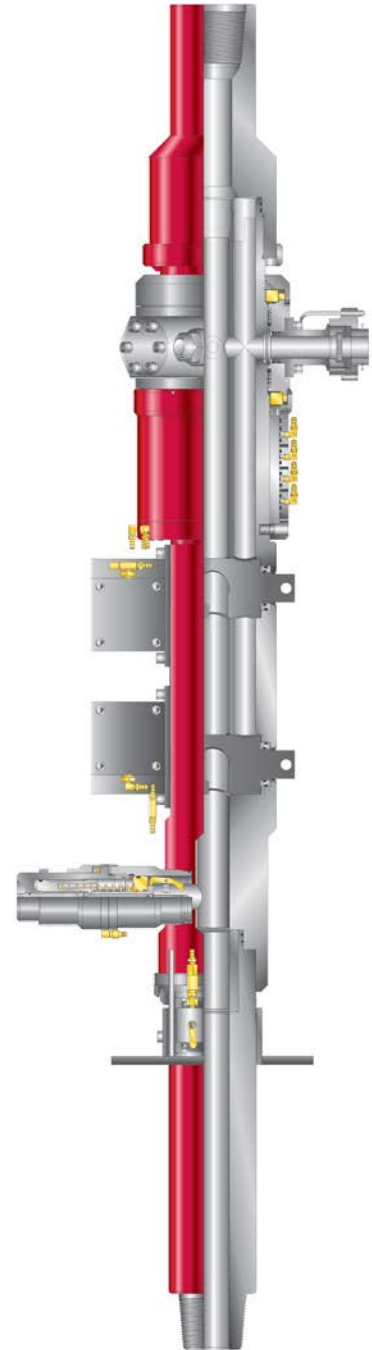
Provides remote-control capabilities to sequentially release setting balls and drillpipe darts without breaking connections or pausing cementing operations

### Applications

- Cementing any liner or subsurface casing string, with or without a top drive
- Launching darts and balls to activate subsurface-release cementing plugs
- Releasing balls for hydraulically activated liner-system components

### Features and Benefits

- The Big Advantage remote-control top-drive cementing head (BA-RCTDH) is powered by rig air. Remote-control release of ball and darts from a console on the rig floor eliminates the need for personnel in a riding belt to operate the cementing head when it is placed above the drill-floor level. This capability significantly reduces the risk to personal safety.
- High-tensile, torque, and pressure capacities enable the BA-RCTDH to withstand conditions that other heads cannot. The BA-RCTDH performs up to a tensile strength of 4 million lbf (17,792,886 N), torque of 80,000 ft-lb (3,371 N•m), and pressure of 10,000 psi (69 MPa).
- The BA-RCTDH enables circulation through the top drive, the cement line, or both—even when fully loaded. This advantage simplifies operations and saves rig time when the cementing head is used.
- The BA-RCTDH enables the release of the ball and darts while rotating and reciprocating the drillstring and eliminates the need to break any connections, which saves rig time and enhances the efficiency of the cementing job.
- The integral swivel facilitates rotation of the drillstring while cementing, which results in a better cement bond.
- The flag indicator sub gives a positive indication after the ball and dart have successfully launched from the head.
- Large, 4 1/4-in. dart chambers enhance dart performance by preventing flower-petaling and permanent dart-fin deformation.
- The remote-control system releases the setting ball and darts in the correct sequential order.



The BA-RCTDH provides remote-control, sequential release of balls and drillpipe darts with top-drive cementing head systems.

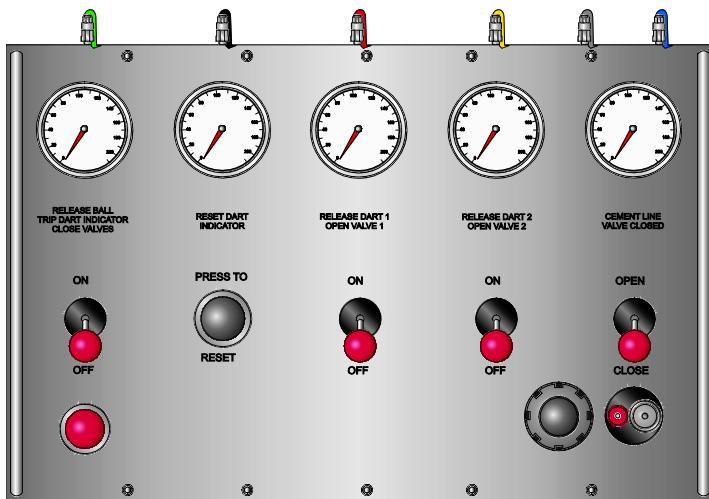


# Big Advantage Remote-Control Top-Drive Cementing Head

## Tool Description

The BA-RCTDH is a remotely controlled, pneumatically activated, top-drive cementing head that enables the release of setting balls and drillpipe darts without breaking connections or pausing cementing, rotating, or displacement operations. Designed specifically for use with a top-drive system, the BA-RCTDH has a 4-million-lb tensile capacity and improves on the design of the reliable, field-proven Weatherford top-drive cementing head.

The challenge for high-load-capacity cementing heads is not straight tensile strength; it is the combined loading generated from both tensile and internal pressure. Weatherford has performed extensive finite element analysis on the BA-RCTDH to validate its extreme combined-loading envelope.



The BA-RCTDH remotely controlled cementing head releases balls and darts through a console on the rig floor.

