

# Remote Controlled Cement Head

Safe and efficient well cementing

Designed to the highest standards of safety, consistency and reliability, Archer's Remote Controlled Cement Head (RCCH) allows the controlled release of setting balls and drillpipe darts without the need to stop circulation or rotation, or break connections.

Controlled entirely from the rig floor using rig air, the RCCH has the flexibility to operate safely and effectively with both drilling/cementing kelly and top drive systems. Casing cementing, expandable screen deployment, perforating and squeezing, and cement injection operations are completed without the need for manriding above drill floor.

The RCCH is pre-loaded with the drillpipe dart(s) or setting ball(s) and can be stored in the derrick. No redress is required between operations. Utilizing hydraulically controlled valve actuators, the RCCH is able to drop balls and/or drillpipe darts while circulating and/or rotating, saving valuable rig time. Upon completion of the operation, controlled flushing eliminates all cement residues.

The smooth outside diameter eliminates externally mounted manifolds and valves while the unique activating sequence prevents incorrect opening. No welding on the head ensures that components will not fail due to metal fatigue or incomplete weld penetration.

The RCCH has a 1500 klbs load capacity and delivers 50 kft/lbs of torque, exceeding the capacity of most drill pipe and casing connections, whilst its maximum operating pressure of 10 k psi meets the demands of longer, deeper completions.

**Archer** 

## **Remote Controlled Cement Head**

### **Specifications**

Tool size		2 Valve		3 Valve
Nominal OD, in [mm]		13 [330]		13 [330]
Minimal OD, in [mm]		4 [102]		4 [102]
OAL, in [mm]		98.74 [2508]		130.61 [3,317]
Rated torque, ft lbs [N.m]		50,000 [67,791]		50,000 [67,791]
Max. Hook load, lbs [kg]		1,594,000 [723,026]		1,594,000 [723,026]
Max. Hook load at rated torque, lbs [kg]		1,496,000 [678,574]		1,496,000 [678,574]
Working pressure, psi [bar]		10,000 [689]		10,000 [689]
Test pressure, psi [bar]		15,000 [1,034]		15,000 [1034]
Chamber sizes, in [mm]		15 [381]	25 [635]	15 [381] 24 [610] 25 [63
Make-up torque, ft lbs [N.m]	Upper connection	50,000 [67,791]		50,000 [67,791]
	Lower connection	50,000 [67,791]		50,000 [67,791]

#### **Applications**

- Casing and liner cementing
- Expandable screen deployment
- Perforating and squeezing cement
- Cement injection

#### **Features**

- 10 kpsi maximum operating pressure
- 1500 klbs load capacity and 50 kft/lbs torque
- Large 4 in internal diameter

#### Benefits

- Fully compatible with drilling/cementing kelly and top drive systems
- No man riding
- Controlled flushing eliminates any cement residues in all areas
- Multiple operations can be completed without the need for redress
- High pump rate during washing and clean-up
- No externally mounted valves and manifolds
- Large plug holder I.D. minimizes plug wadding
- Can be stored safely in the derrick



