

## COMPOSITE CEMENT RETAINER

Blackhawk's Composite Cement Retainer (CCR) is a nonmetallic high-quality tool used primarily for cement squeezes. It has multiple uses, including primary and remedial cementing, well control, and temporary abandonment, thereby eliminating storage requirements if separate tools were required for each operation.

The CCR exhibits dramatically decreased removal times compared to standard cast iron retainers, resulting in longer bit life and decreased casing wear due to removal. This is achieved by the nonmetallic composition of the retainer, which provides faster drillability without sacrificing performance. The high-tech materials that make up the components of the CCR resist corrosion, are lightweight, and ensure a longer life in high-temperature wells. No adhesives are used to connect its components during construction.

The CCR easily converts to a bridge plug. The mating surfaces at the top and bottom of the plug rotationally lock drilled-out remnants, decreasing drill-out time. Designed for use at temperatures up to **350°F**, and differential pressures up to **7,500 psi**. The CCR has minimal ferrous metal content, which allows for easy and quick drill-out using a PDC bit.

## FEATURES & BENEFITS

- Can be drilled out with **PDC**, conventional tricone, or junk-mill bits
- Consists of composites and a packer set with only minimal ferrous metal content
- Unique slip design (tested and field-proven in Q-125 casing)
  - Combines reliable casing bite characteristics with quick drillability
- Packing elements
  - Maintain integrity without the need for adding cement above the plug
  - Provide complete isolation and high drilling performance
- Design reduces drillout time, resulting in shorter rig times and less likelihood of casing damage





## **APPLICATIONS**

- Squeeze cementing
- Temporary well abandonment
- Temporary zonal isolation
- Zonal isolation with option to selectively flow test isolated zones
- Land, Shelf, and Deepwater operations where rapid removal is desired
- High-Pressure/High-Temperature wells

## **SPECIFICATIONS**

COMPOSITE CEMENT RETAINERS							
Casing Details				Tool Details			
Casing Size (in)	Weight (Ibs/ft)	Casing ID Range (in)	OD (in)	Setting Tool	Maximum Temperature (°F)	Maximum Pressure (PSI)	
7	17.0 - 29.0	6.184 - 6.538	5.875	#20 WLAK or Mechanical Setting Tool	350	7,500	
	32.0 - 41.0	5.820 - 6.094	5.505				
7.625	29.7 - 39.0	6.560 - 6.987	6.193	#20 WLAK or Mechanical Setting Tool	350	7,500	
9-5/8"	32.3 - 58.4	8.435 - 9.001	8.125	#20 WLAK or Mechanical Setting Tool	325	6,000	
10-3/4"	65.7 - 80.7	9.238 - 9.560	9.005	#20 WLAK or Mechanical Setting Tool	250	5,000	
	32.7 - 60.7	9.660 - 10.192	9.442				
11-3/4"	65.0 - 83.0	10.343 - 10.682	9.932	#20 WLAK or Mechanical Setting Tool	250	4,000	
	38.0 - 60.0	10.772 - 11.150	10.44				
13-3/8"	80.7 - 100.2	11.889 - 12.215	11.57	#20 WLAK or Mechanical Setting Tool	250	3,000	
	48.0 - 77.2	12.275 - 12.715	12.01				

