



## MILL E-Z CCR™

### INNOVATION REVEALED

The Mill E-Z™ Composite Cement Retainer utilizes a built-in sliding sleeve or “collet” valve assembly for remedial cementing or zone abandonment. The collet valve is opened with a stinger assembly threaded onto the workstring tubing. Because of its low metallic content, the Mill E-Z™ Cement Retainer is quickly milled and circulated back to surface using conventional milling, drilling with a rig and tubing, or with coiled tubing. Once the Mill E-Z™ Cement Retainer is set, a stinger assembly is attached to the workstring and run to retainer depth. The stinger is then inserted into the retainer bore and seals against the mandrel I.D., isolating the workstring from the upper annulus. Once sufficient set down weight has been established, applied pressure (cement) is pumped down the workstring to the squeeze perforations beneath the cement retainer. Once the complete slurry has been pumped, removal of the stinger from the retainer closes the collet valve, once again isolating communication from above and below.

### Features

- Consistent drill times of 30 minutes or less
- Can be set on wireline or coiled tubing using conventional setting tools
- Can be milled or drilled with coiled tubing or a rig
- Positive seal after setting
- Maximum surge potential of formation after perforating
- Millable cast iron slips
- High differential pressure rating
- Low temp and high temp materials conducive to a wide range of environments
- Patented precision shearing device
- Setting is done via a universal setting sleeve and adapter

# 30 MINUTES

OR LESS CONSISTENT DRILL TIMES

Quickly milled and circulated back to surface using conventional milling, drilling with a rig and tubing or with coiled tubing.

CASING SPECS		RETAINER SPECS					OPERATING RANGES													
Casing O.D. inch (mm)	Weight Range lb/ft (kg/m)	O.D. inch (mm)	Stinger Assembly		Length inch (mm)	Setting Tool	Low Temp/ Low PSI	Low Temp/ High PSI	Mid Temp/ High PSI	High Temp/ High PSI										
			Min I.D. inch (mm)	Flow Area inch <sup>2</sup> (mm <sup>2</sup> )																
3-1/2 (88.9)	9.3-10.2 (13.8-15.2)	2.73 (69.2)	0.75 (19.1)	0.44 (285.0)	20.5 (521.6)	Magnum "A-1", Baker #5 or Owen 1-11/16" SHORTY	250°F 8KSI (121°C) (55.2MPa)	250°F 10KSI (121°C) (68.9MPa)	300°F 10KSI (149°C) (68.9MPa)	375°F 10KSI (191°C) (68.9MPa)										
	12.95 (19.3)	2.50 (63.5)			20.8 (527.3)															
4.0 (101.6)	9.5-11.0 (14.1-16.4)	3.19 (81.0)			32.6 (828.0)						Magnum "A-1", Baker #10 or Owen 3-5/8" COMPACT									
4-1/2 (114.3)	9.5-13.5 (14.1-20.1)	3.57 (90.7)			32.4 (822.5)															
5.0 (127.0)	23.2 (15.6)	3.57 (90.7)			32.6 (828.0)	32.8 (834.0)					Magnum "A-1", Baker #20 or Owen 3-5/8" COMPACT	Composite/ NBR Elastomer	Composite/ NBR Elastomer	Composite/ NBR Elastomer	Composite/ FKM Elastomer					
	11.5-18.0 (17.1-26.8)	3.92 (99.6)																		
5-1/2 (139.7)	14.0 (20.8)	4.60 (116.8)			1.23 (31.1)	1.18 (760.4)										35.0 (888.0)	Composite/ NBR Elastomer	Composite/ NBR Elastomer	Composite/ NBR Elastomer	Composite/ FKM Elastomer
	15.5-23.0 (23.1-34.2)	4.30 (109.2)																		
	23.0-26.8 (34.2-39.9)	4.13 (104.8)																		
7.0 (177.8)	17.0-20.0 (25.3-29.8)	5.95 (151.1)														34.1 (867.1)				
	23.00- 35.00 (34.2-52.1)	5.75 (146.1)																		

Casing Specs are according to API Tubing/Casing Dimension Chart Information.

For more information, and to find a representative near you, visit [nineenergyservice.com](http://nineenergyservice.com)