

INDEX NO.	600
UNIT	PCR / PBP
PN.	4-1/2" / 30"
DATE	4-Nov-2011
Revision	12.0

# *PCR Cement Retainer*

The PCR Cast Iron Drillable Cement Retainer's modular, field proven design makes it a versatile tool in a variety of applications. The PCR may be set mechanically or on a wireline setting tool by changing the top slips. The PCR also converts to a PBP bridge plug by replacing the sleeve valve with a solid plug.

## *Features*

- Cast iron drillable design
- Simple, surface-controlled valve automatically closes when the stinger is removed
- Converts between mechanical or wireline set by changing top slips
- Components rotationally locked for easy drill out
- Converts to a PBP Bridge Plug
- Temperature rating to 400 ° Fahrenheit
- Differential pressure rating to 10,000 psi thru 8-5/8"

## *Benefits*

- Allows pressure-testing before squeeze
- Valve protects sensitive zones in low-fluid wells
- Convertibility reduces inventory requirements
- Fast drill out saves rig time

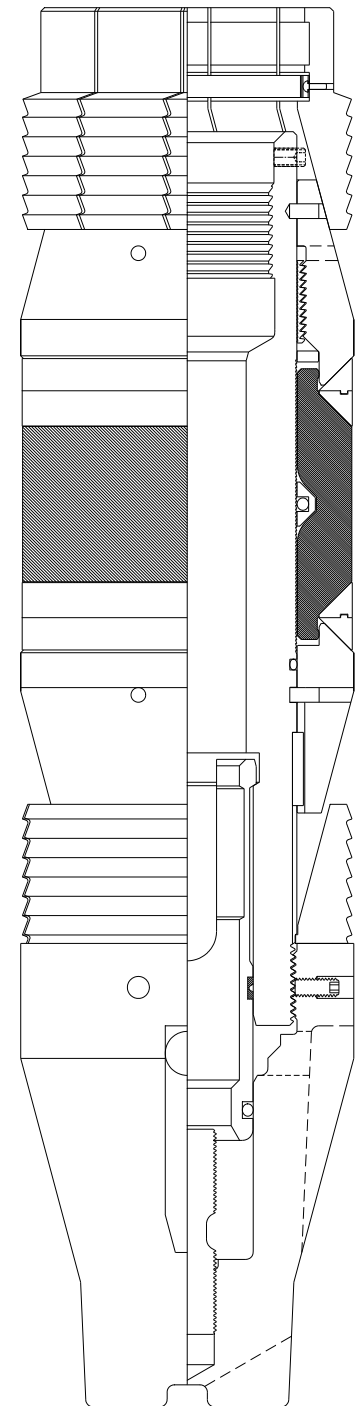
## *Applications*

- Cementing
- Stimulation
- Well abandonment
- Temporary or permanent zone isolation

## *Related Products*

- SSA Stinger Seal Assembly\*
- JSA Latch Seal Assembly\*
- TC Drag Spring Tubing Centralizer\*
- Finned Centralizing Coupling\*
- Finned Centralizer Assembly\*
- MST Mechanical Setting Tool
- HST Hydraulic Setting Tool

\*included in this technical document



INDEX NO.	600
UNIT	PCR / PBP
PN.	4-1/2" / 30"
DATE	4-Nov-2011
Revision	12.0

## SPECIFICATION GUIDE PCR CEMENT RETAINER

CASING				TOOL	JDE Number	
O.D. (IN./mm)	WEIGHT (LB/FT.-kg/m)	MIN. I.D. (IN/mm)	MAX. I.D. (IN/mm)	MAX. O.D. (IN./mm)	PCR Wireline Set	PCR Mechanical Set
4-1/2 114,30	9.5 - 15.1 14,14 - 22,47	3.826 97,18	4.090 103,89	3.593 91,26	00171142	00171836
5.000 127,00	11.5 - 18.0 17,11 - 26,78	4.276 108,61	4.560 115,82	3.937 100,00	00164119	00164126
5-1/2 139,70	13.0 - 23.0 19,34 - 34,22	4.670 118,62	5.118 129,00	4.312 109,52	00164780	00170743
5-3/4 146,05	14.0 - 25.2 20,83 - 37,50	4.890 124,21	5.290 134,37	4.700 119,38	00172246	00172245
6-5/8 168,28	17.0 - 34.5 25,30 - 51,34	5.575 144,61	6.135 155,83	5.375 136,53	00170412	00170431
7.000 177,80	17.0 - 35.0 25,30 - 52,08	6.004 152,50	6.538 166,07	5.688 144,48	00171283	00154360
7.000 177,80	38.0 56,44	5.920 150,37	5.920 150,37	5.375 136,53	00170412	00170431
7-5/8 193,68	20.0 - 39.0 29,76 - 58,03	6.625 168,28	7.125 180,98	6.312 160,32	00174732	00165014
8-5/8 224,48	24.0 - 49.0 35,71 - 72,90	7.511 190,77	8.097 205,66	7.125 180,98	00170422	00169910
9-5/8 224,48	29.3 - 61.1 43,60 - 90,92	8.375 212,73	9.063 230,22	8.125 206,38	00170122	00170961
10-3/4 273,05	32.75 - 60.7 48,73 - 90,32	9.660 245,36	10.192 258,88	9.440 239,78	00170263	00170302
11-3/4 298,45	60.0 - 83.0 89,28 - 123,50	10.192 258,88	10.772 273,61	9.937 252,40	00175207	00175378
11-3/4 298,45	38.0 - 60.0 56,54 - 89,28	10.772 273,61	11.150 283,21	10.440 265,18	00164854	00164853
13-3/8 339,73	48.0 - 72.0 71,42 - 107,14	12.347 313,61	12.715 322,96	12.000 304,80	00164943	00165224
16.000 406,40	65.0 - 128.0 96,72 - 190,46	14.438 366,73	15.250 387,35	14.125 358,78	00807566	00175313
18.000 457,20	70.58 - 87.5 105,02 - 130,20	17.088 434,04	17.250 438,15	16.650 422,91	00175224	—
18-5/8 473,08	87.5 130,20	17.480 443,99	18.000 457,20	17.125 434,98	00172010	—
20.000 508,00	94.0 - 133.0 139,87 - 197,90	18.730 475,74	19.124 485,74	18.375 166,72	00175209	—
30.000 762,00	157.73 - 310.0 234,70 - 461,28	28.000 711,20	29.000 736,60	27.500 698,50	00172116*	—

\*Must be set using HST Hydraulic Setting Tool Only

Assemblies listed are the standard configuration – **70 Durometer Packing Element, Cast Iron construction.** Alternative elastomers and construction may be available upon special request. Ratings posted in this document refer to the standard configuration.

INDEX NO.	600
UNIT	MST -DB Style
PN.	43MST - 57MST
DATE	21-May-2012
Revision	3.0

# *MST Mechanical Setting Tool*

The Weatherford Mechanical Setting Tool is designed to run and mechanically set the Weatherford PCR Cement Retainer or the Weatherford Cast Iron Bridge Plug at any depth on tubing or drill pipe.

## *Features*

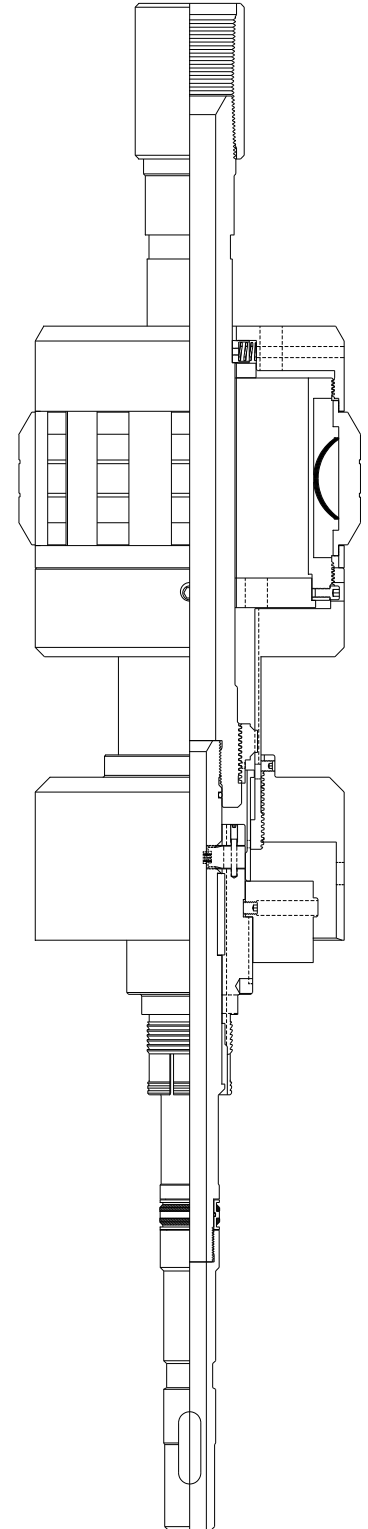
- Allows single run for squeeze cementing
- Locked to cement retainer or bridge plug to avoid premature setting or loss
- Top slips partially covered to protect from accidental damage and pre-set
- Will set other manufactures cement retainer or bridge plug

## *Benefits*

- Shear pinned to cement retainer or bridge for safety
- Allows user to set, pressure test tubing and squeeze in single trip
- Can quickly be configured to set cement retainers or bridge plugs
- Drag blocks field proven design for long life

## *Applications*

- Setting cement retainers or bridge plugs on tubing or drill pipe
- Squeeze cementing
- Well abandonment
- Temporary and permanent zone isolation



INDEX NO.	600
UNIT	MST -DB Style
PN.	43MST - 57MST
DATE	21-May-2012
Revision	3.0

## SPECIFICATION GUIDE

CASING		DRAG BLOCK		MST SETTING TOOL		
SIZE (IN./mm)	WEIGHT (LB/FT - kg/m)	EXPANDED (IN./mm)	COLLAPSED (IN./mm)	MIN. I.D. (IN./mm)	THREAD CONNECTION BOX UP	PRODUCT NUMBER
4-1/2 114,30	9.5 - 13.5 14,14 - 20,09	4.283 108,79	3.750 95,25	.75 19,05	2-3/8" EU 8 RD	00164145
5.000 3.94	18.0 - 21.0 26,78 - 31,25	4.375 111,13	3.815 96,90	.75 19,05	2-3/8" EU 8 RD	00164142
5.000 3.94	15.0 - 18.0 22,32 - 26,78	4.490 114,05	4.015 101,98	.75 19,05	2-3/8" EU 8 RD	00164230
5.000 3.94	11.5 - 15.0 17,11 - 22,32	4.660 118,36	4.230 107,44	.75 19,05	2-3/8" EU 8 RD	00175351
5-1/2 139,70	17.0 - 234.0 25,30 - 34,22	5.150 130,81	4.500 114,30	.75 19,05	2-3/8" EU 8 RD	00170426
5-1/2 139,70	13.0 - 17.0 19,34 - 25,30	5.250 133,35	4.600 116,84	.75 19,05	2-3/8" EU 8 RD	00170327
6-5/8 168,28	24.0 - 32.0 35,71 - 47,62	6.355 161,42	5.500 139,70	1.250 31,75	2-7/8" EU 8 RD	00164692
7.000 177,80	29.0 - 38.0 43,15 - 56,54	6.355 161,42	5.500 139,70	1.250 31,75	2-7/8" EU 8 RD	00164692
7.000 177,80	17.0 - 32.0 25,30 - 47,62	6.930 176,02	5.920 150,37	1.250 31,75	2-7/8" EU 8 RD	00164666
7-5/8 193,68	24.0 - 45.3 35,71 - 67,41	7.325 186,06	6.370 161,80	1.250 31,75	2-7/8" EU 8 RD	00164769
8-5/8 219,08	28.0 - 52.0 41,66 - 77,38	8.190 208,03	7.235 183,77	1.250 31,75	2-7/8" EU 8 RD	00170103
9-5/8 244,48	32.0 - 61.0 47,62 - 90,77	9.190 233,43	8.235 209,17	1.250 31,75	2-7/8" EU 8 RD	00164976
10-3/4 273,05	51.0 - 81.0 75,89 - 120,53	10.065 255,65	9.110 231,39	1.250 31,75	2-7/8" EU 8 RD	00170602
10-3/4 273,05	32.75 - 60.7 48,73 - 90,32	10.425 264,80	9.470 240,54	1.250 31,75	2-7/8" EU 8 RD	00170339
11-3/4 298,45	38.0 - 65.0 56,54 - 96,72	11.500 292,10	10.545 267,84	1.250 31,75	2-7/8" EU 8 RD	00130484
13-3/8 339,73	48.0 - 72.0 71,42 - 107,14	13.090 332,49	12.110 307,59	1.250 31,75	2-7/8" EU 8 RD	00164999
16.000 406,40	84.0 - 118.0 124,99 - 175,58	15.190 385,83	14.000 355,60	1.250 31,75	4-1/2" IF	00172249