

IRON-GATE™ Cast Iron Cement Retainer & Bridge Plug

Key Benefits and Features

- Innovative slip retention device eliminates the risk of partial setting and losing slips downhole to provide a more debris tolerant product that eliminates additional trips in the wellbore and costly drill-out operations
- MULTI-Setting Tool and M-WLAK are field convertible and compatible with the IRON-GATE™ and BIG EASY® Composite Cement Retainer for a cost-effective inventory and space management solution
- Large bore tool design provides more efficient pump times by increasing the flow area by over 60%
- Reliable sliding valve design increases seal integrity by reducing the risk of valve erosion
- Enhanced elastomer element design prevents costly and time-consuming remedial operations by increasing pressure capabilities up to 6,000 psi
- Field convertible to a top-venting bridge plug that can be conveyed via wireline, drill pipe, tubing, or coiled tubing with mechanical and hydraulic options available
- Body-lock ring eliminates timely complex operations of closing the blow out preventer or hydril by locking the mandrel in position when opening the sliding valve without requiring annulus pressure
- Top ring rotational lock design allows for faster drill out by preventing the top ring from spinning freely
- Convertible to a hydro-mechanical bridge plug for single-trip negative testing, single-trip permanent and temporary abandonment, and cementing operations



Use in the following applications:

Deepwater and ultra-deepwater

Shelf

Land

The Frank's International IRON-GATE™ Cast Iron Cement Retainer & Bridge Plug uses a revolutionary adaptation of cast iron material designed to eliminate the difficulties commonly associated with remedial cementing and qualified short to long-term barrier systems including long drill out times. The IRON-GATE™ is API 11D1/ISO 14310 V3 qualified and provides reliable downhole integrity, facilitates efficient remedial cement placement, and eliminates the need for additional equipment by utilizing our MULTI-Setting Tool and MULTI-Wireline Adaptor Kit (M-WLAK).

Cast Iron Cement Retainer & Bridge Plug

Casing Size (IN)	Weight (LBS/FT)	Casing ID Range (IN)	OD (IN)	Maximum Temperature (°F)	Maximum Pressure (PSI)	Setting Tool Options
4-1/2"	9.5 - 16.6	3.826 - 4.090	3.500 / 3.593	325	10,000	
5"	11.5 - 18	4.154 - 4.560	3.710 / 3.937	325	10,000	
5-1/2"	13 - 23	4.580 - 5.047	4.240 / 4.312	325	10,000	
6"	14 - 26	5.140 - 5.595	4.750	325	10,000	
6-5/8"	14					
6"	10.5 - 12					
6-5/8"	17 - 34	5.595 - 6.366	5.340 - 5.375	325	10,000	
7"	32 - 38					
7"	17 - 35	5.989 - 6.655	5.610 / 5.687	325	10,000	
7-5/8"	20 - 39	6.560 - 7.263	6.090 / 6.312	325	10,000	
8-5/8"	24 - 49	7.511 - 8.248	6.960 / 7.125	300	8,000	
9-5/8"	Multi-Weights	7.875 - 8.968	7.680	250	8,500	
9-5/8"	29.3 - 53.5	8.435 - 9.063	7.710 / 8.125	300	8,000	
10-3/4"	85.3	8.979 - 9.342	8.690	300	8,000	
10-3/4"	54 - 81	9.250 - 9.784	8.710 / 9.000	300	5,000	
10-3/4"	32.75 - 60.7	9.660 - 10.192	9.437	300	5,000	
11-3/4"	38 - 60	9.850 - 11.150	9.500	300	5,000	
11-3/4"	60 - 70	10.192 - 10.772	9.937	300	5,000	
13-3/8"	77 - 102	11.633 - 12.464	11.562	300	5,000	
13-3/8"	48 - 72	12.175 - 12.175	12.000	300	5,000	
16"	65 - 118	14.438 - 15.250	14.250	200	2,000	
18-5/8"	76 - 96.5	17.655 - 18.750	17.250	200	2,000	
20"	133 - 169					
20"	94 - 133	18.730 - 19.124	18.250 / 18.375	200	2,000	

WL Setting Tool
Standard and Heavy Wall

Hydraulic Setting Tool
Hydro-Mechanical, Fury 5-20,
and Full Hydraulic Options

Mechanical Setting Tool
Drag Spring and Drag Block Styles

Operational temperature range can be adjusted based on elastomeric material compound

Poppet Valve and Ball Check Cement Retainers

Casing Size (IN)	Weight (LBS/FT)	Casing ID Range (IN)	OD (IN)	Maximum Temperature (°F)	Maximum Pressure (PSI)	Setting Tool Options
2-3/8"	4.0 - 5.8	1.780 - 2.074	1.750	300	7,500	Baker #5 & 1-11/16 - 1.75 L/S
2-7/8"	6.4 - 6.5	2.340 - 2.525	2.220	300	7,500	Baker #5 & 1-11/16 - 1.75 L/S
3-1/2"	5.75 - 10.3	2.867 - 3.258	2.750	300	7,500	Baker #10 & 2-1/8 Multi-Stage
4"	5-6 - 14.0	3.340 - 3.732	3.140	300	7,500	Baker #10 & 2-1/8 Multi-Stage

Operational temperature range can be adjusted based on elastomeric material compound

Large-Bore Hydro-Mechanical Cast Iron Bridge Plug

Casing Size (IN)	Weight (LBS/FT)	Casing ID Range (IN)	OD (IN)	Maximum Temperature (°F)	Maximum Pressure (PSI)	Setting Tool Options
4-1/2"	9.5 - 16.6	3.826 - 4.090	3.500	325	10,000	
			3.593			
4-1/2"	9.5 - 13.5	3.920 - 4.560	3.710	325	10,000	
5"	11.5 - 21	4.154 - 4.560	3.937	325	10,000	
5-1/2"	13 - 25	4.580 - 5.047	4.240	325	10,000	
			4.312			
6"	14 - 26	5.140 - 5.595	4.750	325	10,000	
6-5/8"	14					
6" - 6-5/8"	10.5 - 12	5.595 - 6.366	5.340	325	10,000	
7"	32 - 38	5.595 - 6.135	5.375	325	10,000	
7"	17 - 35	5.989 - 6.655	5.610	325	10,000	
			6.004 - 6.560			
7-5/8"	20 - 39	6.560 - 7.263	6.090	325	10,000	
			6.312			
8-5/8"	24 - 49	7.511 - 8.248	6.090	300	8,000	
			6.312			
9-5/8"	29.3 - 53.5	8.435 - 9.063	7.710	300	8,000	
			8.125			
10-3/4"	85.3	8.979 - 9.342	8.690	300	8,000	
10-3/4"	54 - 81	9.250 - 9.784	8.710	300	5,000	
			9.000			
10-3/4"	32.75 - 60.7	6.660 - 10.192	9.437	300	5,000	
11-3/4"	38 - 60	9.850 - 11.190	9.500	300	5,000	
			9.850 - 11.150			
11-3/4"	60 - 70	10.192 - 10.772	9.937	300	5,000	
13-3/8"	77 - 102	11.633 - 12.464	11.562	300	5,000	
13-3/8"	48 - 72	12.175 - 12.715	12.000	300	5,000	
16"	65 - 118	14.438 - 15.250	14.250	200	2,000	
18-5/8"	76 - 96.5	17.655 - 18.750	17.250	200	2,000	
20"	133 - 169					
20" - 22"	Multi-Weights	18.750 - 20.250	18.000	150	1,500	

No Setting Tool Required

Hydraulic Head Included w/ Assembly
Ball-Activated (1.25" - 2.50")

Operational temperature range can be adjusted based on elastomeric material compound

Standard Cast Iron Bridge Plug

Casing Size (IN)	Weight (LBS/FT)	Casing ID Range (IN)	OD (IN)	Maximum Temperature (°F)	Maximum Pressure (PSI)	Setting Tool Options	
2-3/8"	3.3 - 5.9	1.867 - 2.107	1.710	325	10,000	Baker 5	GO: 1 11/16 - 1.75 L/S
2-7/8"	6.4 - 7.9	2.280 - 2.563	2.100	325	10,000	Baker 5	GO: 1 11/16 - 1.75 L/S
3-1/2"	12.7 - 12.95	2.625 - 2.750	2.500	325	10,000	Baker 5	GO: 1 11/16 - 1.75 L/S
3-1/2"	5.7 - 10.2	2.867 - 3.258	2.750	325	10,000	Baker 5 or Baker 10	GO: 1 11/16 - 1.75 L/S or 2-1/8 Multi-Stage
4"	5.6 - 14	3.340 - 3.732	3.120	325	10,000	Baker 10	GO: 2 1/8 Multi-Stage
4-1/2"	9.5 - 16.6	3.826 - 4.090	3.500	325	10,000	Baker 10	GO: 3-1/2
4-1/2"	9.5 - 13.5	3.920 - 4.560	3.710	325	10,000	Baker 10	GO: 3-1/2
5"	11.5 - 21						
5-1/2"	13 - 25	4.580 - 5.047	4.240	325	10,000	Baker 20	GO: 3-1/2
5-3/4"	22.5 - 25.2						
6"	14 - 26	5.140 - 5.595	4.750	325	10,000	Baker 20	GO: 3-1/2
6-5/8"	34						
6"	10.5 - 12						
6-5/8"	17 - 34	5.595 - 6.366	5.340	325	10,000	Baker 20	GO: 3-1/2
7"	23 - 40						
6-5/8"	17 - 22	5.989 - 6.655	5.610	325	10,000	Baker 20	GO: 3-1/2
7"	17 - 35						
7-5/8"	20 - 39	6.625 - 7.263	6.090	325	10,000	Baker 20	GO: 3-1/2
8-5/8"	24 - 49	7.511 - 8.248	6.960	300	8,000	Baker 20	GO: 3-1/2
9-5/8"	29.3 - 53.5	8.435 - 9.063	7.710	300	8,000	Baker 20	GO: 3-1/2
10-3/4"	54 - 81	9.250 - 9.784	8.710	300	5,000	Baker 20	GO: 3-1/2
10-3/4"	32.7 - 51	9.850 - 11.150	9.500	300	5,000	Baker 20	GO: 3-1/2
11-3/4"	38 - 60						
13-3/8"	77 - 102	11.633 - 12.454	11.560	300	5,000	Baker 20	GO: 3-1/2
13-3/8"	48 - 72	12.347 - 12.715	12.000	300	5,000	Baker 20	GO: 3-1/2
16"	65 - 109	14.688 - 15.250	14.250	200	2,000	Baker 20	GO: 3-1/2
18-5/8"	76 - 96.5	17.655 - 18.750	17.250	200	2,000	Baker 20	GO: 3-1/2
20"	133 - 169						

Operational temperature range can be adjusted based on elastomeric material compound

Full-Hydraulic Cement Retainer & Bridge Plug

Casing Size (IN)	Weight (LBS/FT)	Casing ID Range (IN)	OD (IN)	Maximum Temperature (°F)	Maximum Pressure (PSI)	Setting Tool Options
2-3/8"	4.6 - 4.7	1.937 - 2.041	1.75	325	3,500	Full-Hydraulic Setting Tool
2-7/8"	6.4 - 6.5	2.375 - 2.500	2.187	325	5,000	
3-1/2"	9.2 - 9.3	2.992 - 3.068	2.75	325	5,000	
7"	17 - 35	6.004 - 6.538	5.687	325	10,000	
7-5/8"	20 - 39	6.625 - 7.263	6.312	325	10,000	
9-5/8"	29.3 - 53.5	8.435 - 9.063	8.125	300	8,000	
10-3/4"	32.7 - 51	9.850 - 11.150	9.50	300	5,000	
11-3/4"	38 - 60	9.850 - 11.150	9.50	300	5,000	
13-3/8"	48 - 72	12.347 - 12.715	12.00	300	3,000	
16"	65 - 109	14.688 - 15.250	14.25	300	2,000	

Operational temperature range can be adjusted based on elastomeric material compound