



PRODUCT INDEX

Retrievable Cementer

DESCRIPTION

Full Bore Retrievable Cementer
Tubing Tester
Up-Strain Unloading Sub
"BEA" Retrievamatic Service Packer
"BP-2" Unloader Sub
"BS" Full Bore Tubing Tester

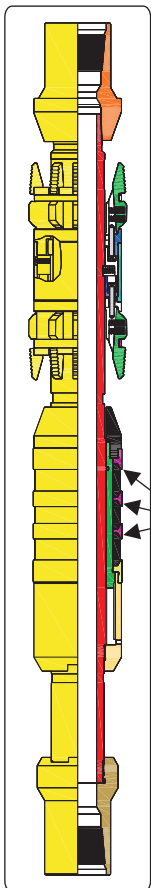


RETRIEVABLE CEMENTERS

MODEL "BC-1" FULL-BORE RETRIEVABLE CEMENTER

Product No. BI 410-01

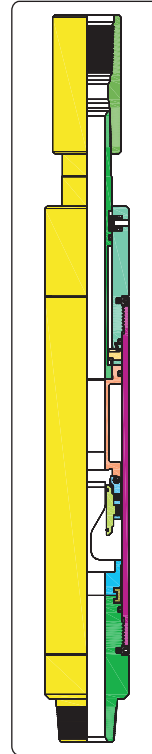
This is a squeeze Packer with a full bore, used for pressurising operations such as casing testing, formation fracturing, squeeze cementing and high-pressure acidising with subsequent testing. It is particularly useful when set-down weight is limited. It is run with the Model BR Up-strain Unloading Sub (Product No. BI 675-05) to allow equalisation of Tubing and annulus pressure. The running-in string may be tested with the Model BN Full Bore Tubing Tester (Product No. BI 672-01).



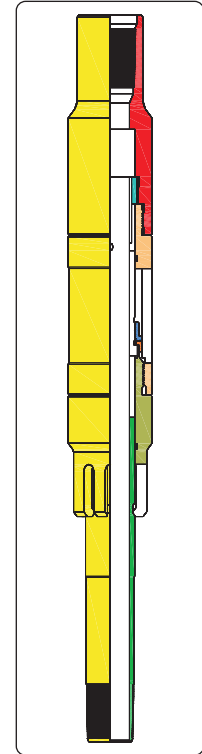
Packing element allows circulation when upper slips are set and pack off when Tubing is raised & up-strain applied.

MODEL "BC-1" FULL-BORE RETRIEVABLE CEMENTER
PRODUCT NO. BI410-01

*ALSO SEE PAGE 66 FOR "BRTF" TEST & TREAT PACKER.



MODEL "BN" FULL-BORE TUBING TESTER
PRODUCT NO. BI 672-01



MODEL "BR" UP-STRAIN UNLOADING SUB
PRODUCT NO. BI 675-05

Model "BC", "BC-1" & "BC-2" Full-Bore Retrievable Cementer
Product No. BI 410-01

Casing		Cementor Size	Gage & Guide Ring O.D.	Slip Range				Packing Element O.D.	Packing Element Spacer O.D.	Threads Box Up & Box Down	Minimum Bore Through Cementer
O.D.	T&C Weight (Lb.)			Preferred		Absolute					
				Min	Max	Min	Max				
5-1/2	20-23	BI 45A	4.500	4.625	4.953	4.610	4.953	4.375	4.500	2-3/8 O. D. E.U. 8 RD.	1.968
	15.5-17		4.641								
	13-15	BI 45B	4.781	4.954	5.190	4.950	5.190	4.688	4.781		
5-3/4	19.5-22.5	BI 45C	5.062	5.191	5.390	5.160	5.424	4.938	5.062		
	14		5.062								
6	17-18	BI 45D	5.156	5.391	5.560	5.248	5.560	5.250	5.406		
	14-16		5.312								
	34	BI 45E	5.406	5.561	5.791	5.561	5.791	5.250	5.406		
6-5/8	28-32	BI 45F	5.484	5.761	5.921	5.695	6.118	5.250	5.406		
	24-29		5.588								
	24-26.5		5.656								
7	38-40	BI 47A	5.656	5.830	6.100	5.830	6.184	5.500	5.656		
6-5/8	20-22		5.812								
7	32-35	BI 47B	5.968	6.101	6.530	6.094	6.538	5.750	5.968		
	17		6.078								
	28-30		6.210								
	23-26		6.281								
9-5/8	20-23	BI 47BC	6.210	6.531	6.700	6.531	6.875	6.125	6.210		
	17		6.281								
	53.5	BI 51A	8.218	8.375	8.781	8.250	8.813	7.938	8.218		
	43.5-47		8.437								
40	BI 51B	8.593	8.718	9.125	8.688	9.125	8.375	8.593			
29.3-36		8.750									

Accessories such as unloader sub & tubing tester, furnished when required.



RETRIEVABLE CEMENTERS

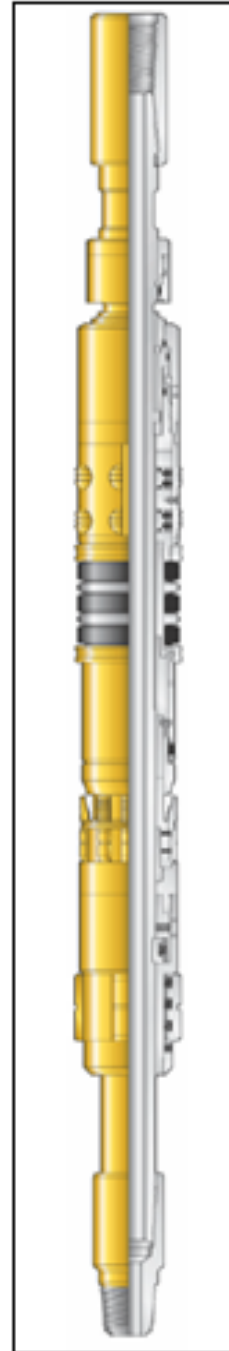
BOTIL MODEL “BEA” RETRIEVAMATIC SERVICE PACKER Product No. BI 410-02

DESCRIPTION & APPLICATION

The BOTIL Model “BEA” Retrievamatic Service Packer is a retrievable stimulation and work over packer. Model “BEA” Retrievamatic is used in all types of squeeze cementing, casing testing, formation fracturing and high-pressure acidizing with subsequent testing. It is a full-opening, set – down packer with piston-type hold down buttons, actuated by pressure from below and a three-section packing element system.

FEATURES/BENEFITS

- Large bypass area permits circulation around and through the tool while running in; straight pickup equalizes pressure across hold-down buttons instantly.
- Proven face seal unloader controls the bypass, eliminating the need for mechanical locks and rotation.
- Bypass running completely through the packer isolates buttons from tubing pressure surges, reducing chance of dulling.
- Hold-down buttons maintain packoff during high-pressure operations from below
- Proven packing element system
- Rocker slips set with only $\frac{3}{4}$ turn, straight pickup to retrieve





RETRIEVABLE CEMENTERS

SPECIFICATION GUIDE

Casing		Packer Size	Gage and Guide Ring OD	Packing Element OD	Packing Element Spacer OD	Slips and Buttons Range			
OD	Weight Range					Preferred		Absolute	
In.	(lb/ft)					Min.	Max.	Min.	Max.
4-1/2"	9.5-13.5	43A	3.771	3.625	3.734	3.910	4.090	3.820	4.090
5"	15-18	43B	4.125	3.937	3.937	4.250	4.408	4.126	4.409
	11.5-15	43C	4.250	4.156	4.125	4.408	4.560	4.274	4.561
5-1/2"	26								
	20-23	45A2	4.500	4.375	4.500	4.778	4.950	4.950	
	20-23	45A4	4.641					4.687	4.781
	13-15.5	45B	4.781	4.687	4.781	4.950	5.190		
5-3/4	22.5							45C	5.062
6"	26	45D	5.156	4.937	5.062	5.391	5.560		
	20-23	45E2	5.406					5.250	5.406
6-5/8"	15-18	45E4	5.484	5.250	5.406	5.610	5.791		
	6-5/8"	34	45F					5.625	5.500
7"		24	47A2	5.656	5.500	5.656	5.830	5.937	
	38	47A4							5.812
6-5/8"	17-20		47B2	5.968	5.750	5.968	6.276	6.456	
	7"	32-35							47B4
7"		26-29	47C2	6.266	6.125	6.250	6.579	6.797	6.297
	7-5/8"	17-20	47C4	6.453					
7-5/8"		33.7-39	47D2	6.672	6.500	6.671	7.025	7.125	6.545
	7-5/8"	24-29.7	47D4	6.812					
8-5/8"		20-24	49A2	7.312	7.000	7.312	7.511	7.687	7.423
	8-5/8"	44-49							
8-5/8"		32-40	49B	7.781	7.500	7.781	7.922	8.191	7.919
	8-5/8"	20-28	51A2	8.218					
9-5/8"		47-53.5			51A4	8.437	7.937	8.218	8.681
	9-5/8"	40-47	51B	8.593	8.375	8.593			
9-5/8"		29.3-36					53A2	9.000	8.875
	10-3/4"	65.7-81	53A4	9.375	9.250	9.375			
10-3/4"		55.5-60.7	53A6	9.625			9.250	9.375	9.850
	10-3/4"	45.5-51	53B		9.625	9.250			
10-3/4"		32.75-40.5		54A			10.125	10.000	10.125
	11-3/4"	65-80.5	54B		10.250	10.000			
11-3/4"		38-60	55A	11.625	11.625		11.625	11.733	12.275
	13-3/8"	77-102				55B			
13-3/8"		48-72	55B	12.125	11.625		11.812	12.191	12.715



RETRIEVABLE CEMENTERS

BOTIL MODEL “BP-2” SET DOWN UNLOADER SUB Product No. BI 675-06

DESCRIPTION & APPLICATION

The BOTIL Model “BP-2” Set Down Unloading Sub is used to equalize tubing annulus pressure when using a set down packer. A face type seal prevents communication between the tubing and annulus when the sub is in closed position; the sub is held open or closed by collet fingers. Since the sub is essentially pressure balanced, normal set down weight required for operation of the tool run below the sub is sufficient to maintain closed position when run with the proper size tubing.



BOTIL MODEL “BS” FULL BORE TUBING TESTER Product No. BI 672-02

DESCRIPTION/APPLICATION

The BOTIL Model “BS” is designed for use with the Retrievmatic Type Service Packer, Model “BS” Full Bore Tubing Tester is used to pressure test the tubing string for leaks.

