

CAD-1 Single Tension Set Packer



The Classic Oilfield CAD-1 is a tension set, single-grip, retrievable production packer. The CAD-1 packer is compact, inexpensive and can be utilized for most low pressure production, water injection and pressure work applications. The CAD-1 incorporates three release methods to insure retrievability.

The CAD-1L tension set packer has the same features as the CAD-1 with the added benefit of a larger bore.

FEATURES

- * Compact
- * Rocker type slips
- * Right-hand safety joint emergency release
- * One piece field proven packing element
- * J-slot control for normal set and release

BENEFITS

- * Cost effective
- * Three release methods
- * Full opening design
- * Large bore design available

APPLICATIONS

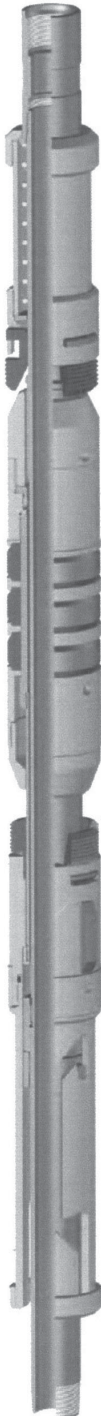
- * Low pressure production shallow applications
- * Injection wells
- * It can be used for well stimulation, testing and other pressuring operations and then left in the well as a production packer

CAD-1 SINGLE TENSION SET PACKER

TECHNICAL DATA

CASING				PACKER	
O.D. (in./mm)	WEIGHT (lb/ft)	MINIMUM I.D. (in./mm)	MAXIMUM I.D. (in./mm)	MAXIMUM O.D. (in./mm)	STANDARD THREAD CONNECTIONS BOX / PIN (in.)
4 101.6	9.5 - 11.6	3.428 87.07	3.548 90.12	3.285 83.44	2 3/8 EU 8RD
4 1/2 114.30	9.5 - 13.5	3.920 99.57	4.090 103.89	3.771 95.78	2 3/8 EU 8RD
5 127.0	15 - 18	4.276 108.61	4.408 111.96	4.125 104.78	2 3/8 EU 8RD
	11.5 - 15	4.408 111.96	4.560 115.82	4.250 107.95	2 3/8 EU 8RD
5 1/2 139.70	20 - 23	4.670 118.62	4.778 121.36	4.500 114.30	2 3/8 EU 8RD
	15.5 - 20	4.778 121.36	4.950 125.73	4.641 117.88	2 3/8 EU 8RD
	13 - 17	4.892 124.26	5.044 128.12	4.750 120.65	3 1/2 EU 8RD
	13 - 15.5	4.950 125.73	5.044 128.12	4.781 121.44	2 3/8 EU 8RD
5 3/4 146.05	22.5	4.950 125.73	5.190 131.83	4.781 121.44	2 3/8 EU 8RD
6 152.40	26	4.950 125.73	5.190 131.83	4.781 121.44	2 3/8 EU 8RD
6 5/8 168.28	24	5.830 148.08	5.921 150.39	5.656 143.66	2 7/8 EU 8RD
	17 - 20	6.049 153.64	6.135 155.83	5.812 147.62	2 7/8 EU 8RD
7 177.80	38	5.830 148.08	5.921 150.39	5.656 143.66	2 7/8 EU 8RD
	32 - 35	6.044 153.52	6.094 154.79	5.812 147.62	2 7/8 EU 8RD
	26 - 29	6.184 157.07	6.276 159.41	5.968 151.59	2 7/8 EU 8RD
	23 - 29	6.184 157.07	6.366 161.70	5.968 151.59	3 1/2 EU 8RD
	23 - 29	6.184 157.07	6.366 161.70	5.968 151.59	4 1/2 LTC x 4 1/2 STC
	20 - 26	6.276 159.41	6.456 163.98	6.078 154.38	2 7/8 EU 8RD
	17 - 20	6.456 163.98	6.538 166.07	6.266 159.16	2 7/8 EU 8RD
	17 - 20	6.456 163.98	6.538 166.07	6.266 159.16	3 1/2 EU 8RD
	17 - 20	6.456 163.98	6.538 166.07	6.266 159.16	4 1/2 LTC x 4 1/2 STC
7 5/8 193.68	33.7 - 39	6.625 168.28	6.765 171.83	6.453 163.91	2 7/8 EU 8RD
	24 - 29.7	6.875 174.63	7.025 178.44	6.672 169.47	2 7/8 EU 8RD
	20 - 24	7.025 178.44	7.125 180.98	6.812 173.02	2 7/8 EU 8RD
9 5/8 244.48	47 - 53.5	8.535 216.79	8.681 220.50	8.218 208.74	3 1/2 EU 8RD
	47 - 53.5	8.535 216.79	8.681 220.50	8.218 208.74	4 1/2 LTC 8RD
	40 - 47	8.681 220.50	8.825 224.16	8.437 214.30	3 1/2 EU 8RD
	29.3 - 36	8.921 226.59	9.063 230.20	8.593 218.26	3 1/2 EU 8RD

CS1-X Double Grip Production Packer



The CS1-X Packer is the most versatile of the mechanically set retrievable packers and may be used in any production application. The CS1-X Packer is suited for treating, testing, or injection applications, in pumping or flowing wells, either deep or shallow. The packer can be left in tension or compression, depending on well conditions and the required application. A large internal by-pass reduces swabbing when running and retrieving. The by-pass closes when the packer is set and opens prior to releasing the upper slips when retrieving to allow pressure equalization. The J-Slot design allows easy setting and releasing - 1/4 turn right-hand set, right-hand release.

The CS1-X Packer is also available in an HT version which can withstand differential pressures up to 10,000 psi. This feature allows the packer to be utilized in completions where high pressure treating operations are performed and it is desirable to leave the tool in the well for production.

SPECIAL FEATURES

- * By-pass below upper slips to wash debris when valve is opened
- * By-pass is opened before upper slips are released
- * Can be set with tension for shallow well applications
- * Can be left in tension, compression or neutral
- * 1/4 turn right-hand set, right hand release
- * Additional J-Slot arrangements available

PRODUCT SPECIFICATIONS

Casing Size (inches)	Weight (lbs/ft)	Recommended Hole Size (inches)	Tool OD (inches)	Tool ID (inches)	Thread Connection Box Up / Pin Down
2 7/8	6.4 - 6.5	2.441	2.250	0.63	1.050 EUE
	8.6	2.259	2.125	0.63	1.050 EUE
3 1/2	7.5 - 7.7	3.068	2.937	1.25	1.900 NUE
	7.7 - 10.2	2.922 - 3.068	2.781	1.25	1.900 NUE
	12.95	2.750	2.562	1.00	1.315 NUE / 1.660 EUE
4	9.5 - 11	3.476 - 3.548	3.250	1.50	1.900 EUE
	10.46 - 12.95	3.340 - 3.476	3.187	1.50	1.900 EUE
4 1/2	9.5 - 13.5	3.920 - 4.090	3.750	1.94	2 3/8 EUE
	13.5 - 15.1	3.826 - 3.920	3.656	1.94	2 3/8 EUE

CS1-X DOUBLE GRIP PRODUCTION PACKER

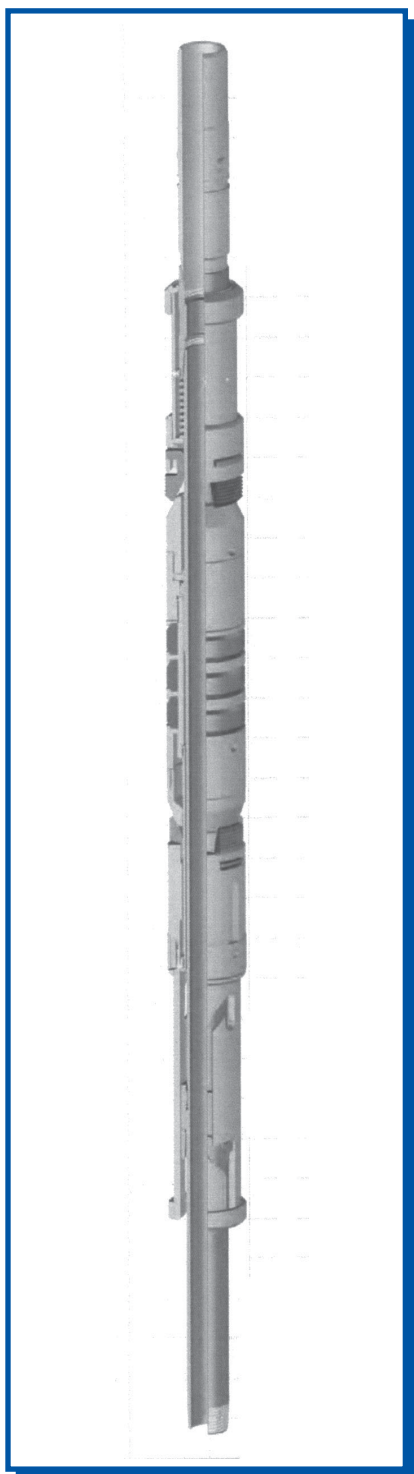
PRODUCT SPECIFICATIONS (continued)

CASING		RECOMMENDED HOLE SIZE (inches)	TOOL OD (inches)	TOOL ID (inches)	THREAD CONNECTION BOX UP / PIN DOWN
SIZE (inches)	WEIGHT (lbs/ft)				
4 1/2	15.1	3.826	3.641	1.94	2 3/8 EUE
	15.1 - 16.6	3.754 - 3.826	3.594	1.50	1.900 EUE
	18.8	3.640	3.437	1.50	1.900 EUE
5	11.5 - 15	4.408 - 4.560	4.125	1.94	2 3/8 EUE
	18 - 20.8	4.156 - 4.276	4.000	1.94	2 3/8 EUE
	21.4	4.126	3.938	1.94	2 3/8 EUE
5 1/2	14	5.012	4.813	2.38	2 7/8 EUE
	14 - 20	4.778 - 5.012	4.625	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
	20 - 23	4.670 - 4.778	4.500	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
6	12 - 20	5.352 - 5.620	5.188	2.38	2 7/8 EUE
6 5/8	17-24	5.921 - 6.135	5.750	2.50	2 7/8 EUE
	20 - 24	5.921 - 6.049	5.750	3.00	3 1/2 EUE
	24 - 32	5.675 - 5.921	5.500	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	32 - 34.5	5.595 - 5.675	5.312	2.50	2 7/8 EUE
7	17 - 26	6.276 - 6.538	6.062**	2.50	2 7/8 EUE
			6.125**	3.00	3 1/2 EUE
	26 - 32	6.094 - 6.276	5.875	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	29 - 35	6.004 - 6.184	5.812	2.50	2 7/8 EUE
7 5/8	24 - 29.7	6.875 - 7.025	6.672	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	33.7 - 39	6.625 - 6.765	6.453	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
8 5/8	24 - 40	7.725 - 8.097	7.500	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	32 - 40	7.725 - 7.921	7.500	4.00	4 1/2 EUE
	44 - 49	7.511 - 7.625	7.312	2.50	2 7/8 EUE
9 5/8	32.3 - 43.5	8.755 - 9.001	8.500	4.00	4 1/2 EUE
	43.5 - 53.5	8.535 - 8.755	8.250	4.00	4 1/2 EUE
10 3/4	32.75 - 51	9.850 - 10.192	9.625	4.00	4 1/2 EUE
	51 - 65.7	9.560 - 9.850	9.312	4.00	4 1/2 EUE
11 3/4	42 - 65	10.682 - 11.084	10.438	4.00	4 1/2 EUE
13 3/8	54.5 - 77	12.275 - 12.615	12.000	4.00	4 1/2 EUE

* Other sizes and connections available upon request

** Maximum OD is across retracted drag blocks

VSI-X Packer



The Classic Oilfield VSI-X Single String Double-Grip Production Packer is one of the most versatile packers on the market. It is a modification of the ASI-X Packer with the advantage of being able to set on electric line or hydraulically.

An On-Off Tool Stinger with Wireline Plug installed can be attached to the top of the VSI-X Packer which can then be lubricated in the hole and set under pressure. Once set, casing pressure can be bled off and the tubing with an On-Off Tool Overshot can be run and latched onto the packer. The Wireline Plug can then be removed.

The VSI-X Packer converts to a mechanically set ASI-X by removing the shear screws and installing drag blocks. This packer sets with 1/4 right-hand rotation; and releases with 1/4 right-hand rotation and can be left in tension, compression or neutral.

SPECIAL FEATURES

- * Wireline or Tubing set
- * Sequentially released upper slip system
- * By-pass valve opens before upper slips are released
- * 1/4 turn to set, 1/4 turn to release (ASI-X version)
- * Available in shear release

PRODUCT SPECIFICATIONS

CASING		RECOMMENDED HOLE SIZE (inches)	TOOL OD (inches)	TOOL ID (inches)	THREAD CONNECTION BOX UP / PIN DOWN
SIZE (inches)	WEIGHT (lbs/ft)				
2 7/8	6.4 - 6.5	2.441	2.250	0.63	1.050 EUE
3 1/2	7.5 - 7.7	3.068	2.938	1.25	1.900 NUE
	7.7 - 10.2	2.922 - 3.068	2.781	1.25	1.900 NUE
	12.95	2.750	2.562	1.12	1.315 NUE / 1.660 EUE
4	9.5 - 11	3.476 - 3.548	3.250	1.50	1.900 EUE
	10.46 - 12.95	3.340 - 3.476	3.187	1.50	1.900 EUE
4 1/2	9.5 - 13.5	3.920 - 4.090	3.750	1.94	2 3/8 EUE
	13.5 - 15.1	3.826 - 3.920	3.656	1.94	2 3/8 EUE
	15.1	3.826	3.641	1.94	2 3/8 EUE
	15.1 - 16.6	3.754 - 3.826	3.594	1.50	1.900 EUE
	18.8	3.640	3.437	1.50	1.900 EUE

* Other sizes and connections available upon request

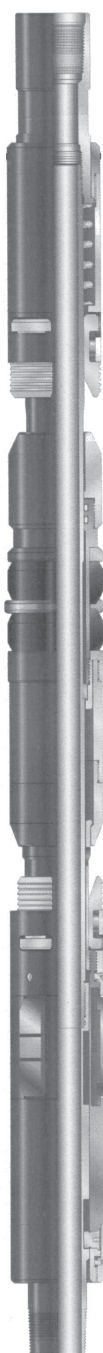
VSI-X PACKER

PRODUCT SPECIFICATIONS (continued)

CASING		RECOMMENDED HOLE SIZE (inches)	TOOL OD (inches)	TOOL ID (inches)	THREAD CONNECTION BOX UP / PIN DOWN
SIZE (inches)	WEIGHT (lbs/ft)				
5	11.5 - 15	4.408 - 4.560	4.125	1.94	2 3/8 EUE
	18 - 20.8	4.156 - 4.276	4.000	1.94	2 3/8 EUE
5 1/2	13 - 14	5.012 - 5.044	4.813	2.38	2 7/8 EUE
	14 - 20	4.778 - 5.012	4.625	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
	20 - 23	4.670 - 4.778	4.500	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
6	12 - 20	5.352 - 5.620	5.188	2.38	2 7/8 EUE
6 5/8	17 - 24	5.921 - 6.135	5.750	2.50	2 7/8 EUE
	20 - 24	5.921 - 6.049	5.750	3.00	3 1/2 EUE
	24 - 32	5.675 - 5.921	5.500	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
7	17-26	6.276 - 6.538	6.000	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	26 - 32	6.094 - 6.276	5.87	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
7 5/8	24 - 29.7	6.875 - 7.025	6.672	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	33.7 - 39	6.625 - 6.765	6.453	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
8 5/8	24 - 40	7.725 - 8.097	7.500	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	32 - 40	7.725 - 7.921	7.500	4.00	4 1/2 EUE
9 5/8	44 - 49	7.511 - 7.625	7.312	2.50	2 7/8 EUE
	32.3 - 43.5	8.755 - 9.001	8.500	4.00	4 1/2 EUE
10 3/4	43.5 - 53.5	8.535 - 8.755	8.250	4.00	4 1/2 EUE
	32.75 - 51	9.850 - 10.192	9.625	4.00	4 1/2 EUE
11 3/4	45.5 - 51	9.850 - 9.950	9.400	4.00	4 1/2 EUE
	42 - 65	10.682 - 11.084	10.438	4.00	4 1/2 EUE
13 3/8	54.5 - 77	12.275 - 12.615	12.000	4.00	4 1/2 EUE

* Other sizes and connections available upon request

C1-XS Double Grip Injection Packer



The Classic Oilfield C1-XS Double Grip Mechanically Set Injection Packer is designed specifically for injection wells and maintains many of the features of the Classic Oilfield C1-XS Packer. The C1-XS Packer is a retrievable, double-grip, compression or tension-set injection packer that can be left in tension, compression, or in a neutral position to hold pressure from above or below. A patented upper-slip release system reduces the force required for releasing the packer. A non-directional slip is released first, facilitating release of the other slips.

FEATURES

- * Holds pressure differentials from above or below
- * Can be set using tension or compression
- * Only one-quarter right rotation required for setting or releasing
- * Field-proven release system
- * Straight-pull safety-release feature
- * Elastomer options available for hostile environments

BENEFITS

- * Field-proven design is versatile; meets most production, stimulation, and injection needs
- * Can be run with a Model T-2 on-off tool
- * Can be left in tension, compression or neutral position
- * Ideal for use with fibreglass tubing

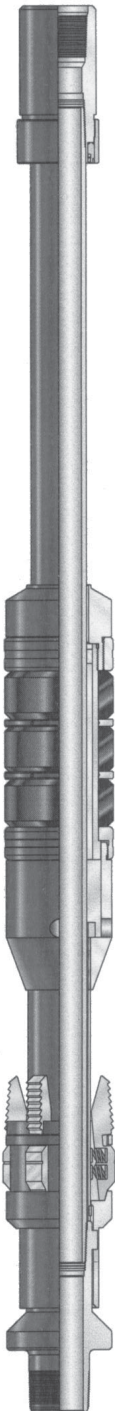
APPLICATIONS

The C1-XS Double Grip Injection Packer effectively meets several requirements for zonal isolation, injection, pumping and production. It is ideal for completions that require periodic casing integrity tests.

SPECIFICATIONS

CASING				PACKER		
O.D. (in./mm)	WEIGHT (lb/ft)	MINIMUM I.D. (in./mm)	MAXIMUM I.D. (in./mm)	MAXIMUM O.D. (in./mm)	MINIMUM I.D. (in./mm)	STANDARD THREAD CONNECTION (in.)
4 1/2 114.30	9.5 - 13.5	3.920 99.57	4.090 103.89	3.750 95.25	1.938 49.23	2 3/8 EU 8RD
5 1/2 139.70	14.0 - 17.0	4.892 124.26	5.012 127.30	4.625 117.47	1.938 49.23	2 3/8 EU 8RD
	20.0 - 23.0	4.670 118.62	4.778 121.36	4.500 114.30		
	15.5 - 17.0	4.892 124.26	5.012 127.31	4.625 117.47	2.375 60.33	2 7/8 EU 8RD
6 5/8 168.38	24.0 - 32.0	5.675 144.15	5.921 150.39	5.500 139.70	2.500 63.50	2 7/8 EU 8RD
	17.0 - 24.0	5.921 150.39	6.135 155.83	5.750 146.05		
7 177.80	17.0 - 26.0	6.276 159.41	6.538 166.07	6.000 152.40	2.500 63.50	2 7/8 EU 8RD
					3.000 76.20	3 1/2 EU 8RD

COS-3 Single Grip Compression Packer



The Classic Oilfield COS-3 Single Grip Compression Packer is a retrievable packer set by compression that isolates the annulus from the production conduit in most production, stimulation and testing operations. The field-proven design includes rocker slips and a three-element packing system that helps to ensure correct setting and packoff. A hydraulic holddown controls differential pressure from below.

APPLICATION

- * Cementing
- * Fracture stimulation
- * Testing and production
- * Zonal isolation

FEATURES, ADVANTAGES AND BENEFITS

- * The packer parts are interchangeable with equipment from other manufacturers, reducing costs and inventory.
- * The large by-pass enables fluids to equalize quickly and reduces the swabbing effect during run-in and retrieval for faster running.
- * The standard one-quarter right turn for packer setting provides simple operation on the rig.
- * A differential lock helps to keep the by-pass to the mandrel closed and locked during high-pressure operations to maintain integrity and prevent production loss and the need for a workover to pull out of the hole and redress the packer.
- * The long-stroke mandrel simplifies fluid circulation without packer release.
- * The packer automatically returns to the run-in position when moved up the hole to enable circulation through and around it.

COS-3 SINGLE GRIP COMPRESSION PACKER

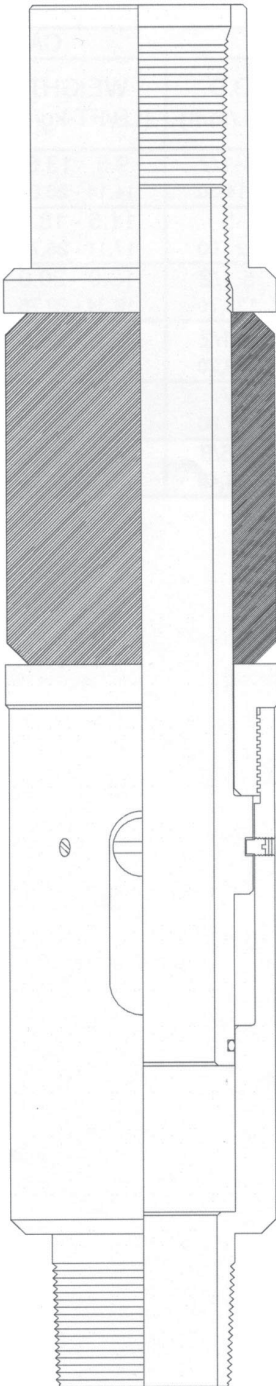
SPECIFICATIONS

CASING				PACKER		
OD (in./mm)	WEIGHT (lb/ft - kg/m)	MIN. I.D. (in./mm)	MAX. O.D. (in./mm)	MIN. I.D. (in./mm)	MAX. O.D. (in./mm)	THREAD CONNECTION BOX UP / PIN DOWN (in.)
4 1/2 114.30	9.5 - 13.5 14.1 - 20.1	3.920 99.57	4.090 103.89	1.92 48.8	3.771 95.78	2 3/8 EU ¹ 8RD ²
5 127.0	11.5 - 15.0 17.1 - 22.3	4.408 111.96	4.560 115.82	1.92 48.8	4.250 107.95	2 3/8 EU 8RD
	15.0 - 18.0 22.3 - 26.8	4.276 108.61	4.408 111.96		4.125 104.78	
5 1/2 139.70	13.0 - 15.5 19.3 - 23.1	4.950 125.73	5.044 128.12	1.93 49.0	4.781 121.44	2 3/8 EU 8RD
				2.37 60.2		2 7/8 EU 8RD
	17.0 - 20.0 25.3 - 29.8	4.778 121.36	4.892 124.26	1.93 49.0	4.641 117.88	2 3/8 EU 8RD
				2.37 60.2		2 7/8 EU 8RD
	20.0 - 23.0 29.8 - 34.2	4.670 118.62	4.778 121.36	1.93 49.0	4.500 114.30	2 3/8 EU 8RD
5 3/4 146.1	22.5 33.5	4.990 126.75		1.93 49.0	4.781 121.44	2 3/8 EU 8RD
				2.37 60.2		2 7/8 EU 8RD
6 152.4	26.0 38.7	5.132 130.35		1.93 49.0	4.781 121.44	2 3/8 EU 8RD
				2.37 60.2		2 7/8 EU 8RD
6 5/8 168.3	17.0 - 20.0 25.3 - 29.8	6.049 153.64	6.135 155.83	2.37 60.2	5.812 147.62	2 7/8 EU 8RD
	24.0 35.7	5.921 150.39			5.656 143.66	

1 - EXTERNAL UPSET

2 - ROUND

COS Assit Packer



The Classic Oilfield COS Assit Packer is a compression-set retrievable packer that is run above another retrievable packer or permanent seal bore packer to isolate a zone between the tools. The packer is compact, cost-effective and can be utilized for most low-pressure production where set-down weight is desirable.

FEATURES

- * Compact
- * Shear value easily changed in the field
- * Straight pull release
- * Standard tubing sizes

BENEFITS

- * Cost effective
- * Can be set without tubing rotation
- * Full opening design

APPLICATIONS

- * Multiple-zone, single-string low pressure installations
- * Wells where set down weight is desirable
- * Isolating casing leaks
- * Run in tandem above any packer against which set down weight can be applied

COS Assit Packer

SPECIFICATIONS

CASING				PACKER		
OD (in./mm)	WEIGHT (lb/ft - kg/m)	MIN. I.D. (in./mm)	MAX. I.D. (in./mm)	MAX. O.D. (in./mm)	MIN. I.D. (in./mm)	THREAD CONNECTION BOX UP / PIN DOWN (in.)
4 1/2 114.30	9.5 - 13.5 14.14 - 20.09	3.920 99.57	4.090 103.89	3.766 95.66	1.922 48.82	2 3/8 EU 8RD
5 127.0	11.5 - 18.0 17.11 - 26.78	4.276 108.61	4.560 115.82	4.141 105.18	1.984 50.39	2 3/8 NU 10RD
5 1/2 139.70	13.0 - 20.0 19.34 - 29.76	4.778 121.36	5.044 128.12	4.656 118.26	2.422 61.52	2 7/8 EU 8RD
5 1/2 139.70	13.0 - 20.0 19.34 - 29.76	4.778 121.36	5.044 128.12	4.630 117.60	2.984 75.79	3 1/2 NU 10RD BOX 3 1/2 EU 8RD PIN
7 177.80	17.0 - 29.0 25.30 - 43.15	6.184 157.07	6.538 166.07	6.016 152.81	2.422 61.52	2 7/8 EU 8RD
9 5/8 244.48	32.3 - 43.5 48.06 - 64.73	8.755 222.38	9.001 228.63	8.516 216.31	6.484 164.69	7" 8RD LTC

COH Packer



The Classic Oilfield COH Packer is a hydraulic set single-string retrievable packer and may be used in virtually any production application. Tubing pump pressure is used to set the packer and the setting force is locked into the packer by a body lock ring. A large internal by-pass reduces swabbing when running and retrieving. The by-pass closes when the packer is set, and opens during the releasing process to allow pressure equalization. Shear screws are used to control the packer release. The standard COH Packers are designed for differential pressures up to 7,500 psi.

SPECIAL FEATURES

- * Adjustable setting initiation pressure
- * Adjustable shear release
- * Straight pull release

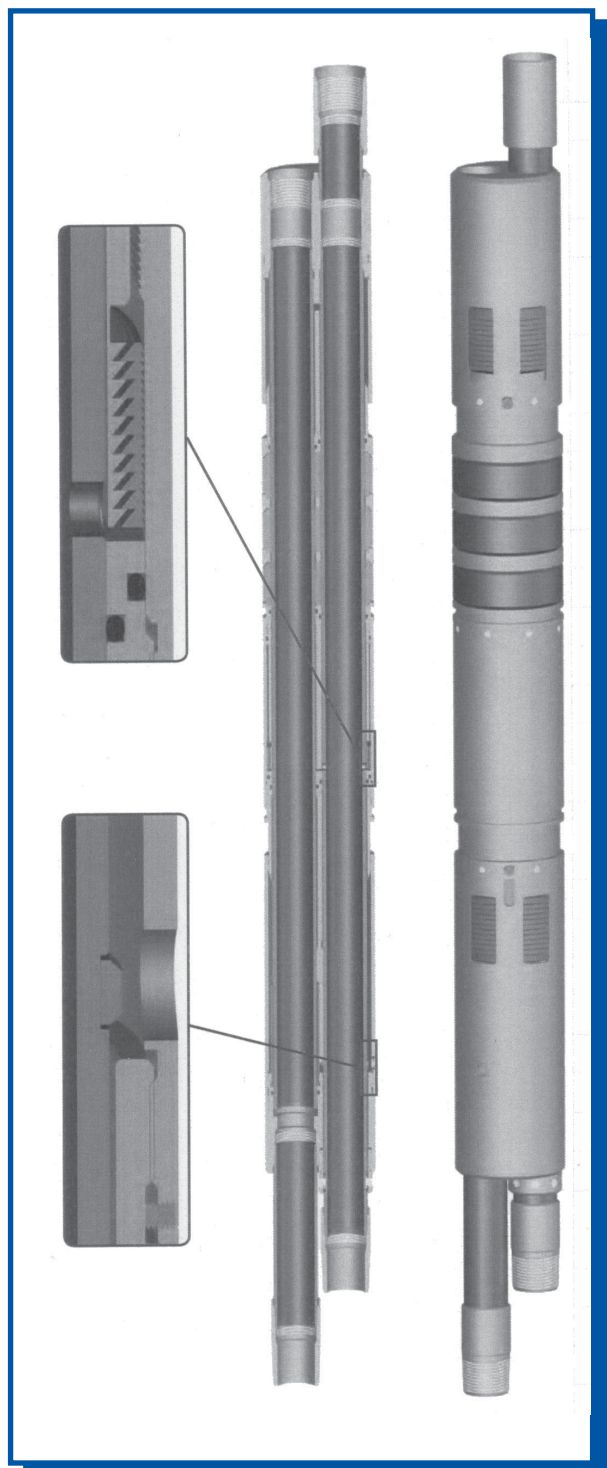
COH PACKER

PRODUCT SPECIFICATIONS

Casing Size (inches)	Weight (lbs/ft)	Recommended Hole Size (inches)	Tool OD (inches)	Tool ID (inches)	Thread Connection Box Up / Pin Down
4 1/2	9.5 - 13.5	3.920 - 4.090	3.750	1.94	2 3/8 EUE
	15.1	3.826	3.656	1.94	2 3/8 EUE
5	11.5 - 15	4.408 - 4.560	4.125	1.94	2 3/8 EUE
	18 - 21	4.154 - 4.276	4.000	1.94	2 3/8 EUE
5 1/2	14 - 20	4.778 - 5.012	4.625	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
	20 - 23	4.670 - 4.778	4.500	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
6	17-23	5.240 - 5.450	5.063	2.38	2 7/8 EUE
6 5/8	17 - 24	5.921 - 6.135	5.750	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	24 - 32	5.675 - 5.921	5.500	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
7	17 - 26	6.276 - 6.538	6.000	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	26 - 32	6.094 - 6.276	5.875	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
7 5/8	24 - 29.7	6.875 - 7.025	6.672	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	33.7 - 39	6.625 - 6.765	6.453	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
8 5/8	32 - 40	7.725 - 7.921	7.500	4.00	4 1/2 EUE
9 5/8	32.3 - 43.5	8.755 - 9.001	8.500	4.00	4 1/2 EUE
	43.5 - 53.5	8.535 - 8.755	8.250	4.00	4 1/2 EUE

* Other sizes and connections available upon request

COH II Packer



The Classic Oilfield COH II Packer is a hydraulic set, mechanically held dual string production packer run above a single string hydraulic set or wireline set seal bore packer. Its short length makes it ideal for deviated wells or doglegs. Because no tubing manipulation is required to set this packer, the well head can be installed and flanged up before setting. It is available with short string or long string setting capabilities and a variety of tubing connections. It is also adaptable for submersible pump applications. The COH II Packer features a sequential upper slip release system designed to release each slip individually reducing the pull required to release the packer. Due to the angles on the upper slips and upper slip cage, slips release smoothly from the casing.

DESIGN OPTIONS

- * Several short string options available:
 - Solid connection (flat top)
 - J-Latch (complete with Scoop Head)
 - Snap Latch (complete with Scoop Head)
- * Feed-Through tubes can be added to most designs
- * Cable Pack-off Subs
- * Adjustable unions
- * Telescoping unions

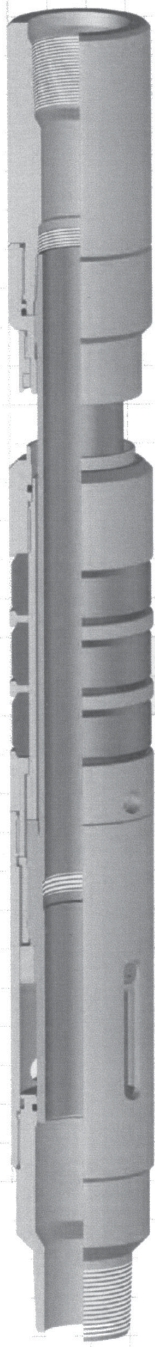
COH II PACKER

PRODUCT SPECIFICATIONS

CASING		RECOMMENDED HOLE SIZE (inches)	TOOL OD (inches)	LONG STRING CONNECTIONS		SHORT STRING CONNECTIONS	
SIZE (inches)	WEIGHT (lbs/ft)			BOX UP / PIN DOWN	MANDREL ID (inches)	BOX UP / PIN DOWN	MANDREL ID (inches)
5 1/2	14 - 20	4.778 - 5.012	4.63	1.900 EUE	1.61	1.660 EUE	1.38
7	17 - 26	6.276 - 6.538	6.026	2 3/8 EUE	1.94	2 3/8 EUE	1.94
				2 7/8 EUE	2.44	1.900 EUE	1.61
	26 - 32	6.094 - 6.276	5.938	2 3/8 EUE	1.94	2 3/8 EUE	1.94
				2 7/8 EUE	2.44	1.900 EUE	1.61
	29 - 35	6.004 - 6.184	5.875	2 3/8 EUE	1.94	2 3/8 EUE	1.94
				2 7/8 EUE	2.44	2 7/8 EUE	2.44
8 5/8	24 - 32	7.921 - 8.097	7.69	3 1/2 EUE	2.99	2 3/8 EUE	1.94
				2 7/8 EUE	2.44	2 3/8 EUE	1.94
	36 - 40	7.725 - 7.825	7.44	2 7/8 EUE	2.44	2 3/8 EUE	1.94
9 5/8	32.3 - 40	8.835 - 9.001	8.615	3 1/2 EUE	2.99	1.900 EUE	1.61
						2 3/8 EUE	1.94
				3 1/2 EUE	2.99	2 7/8 EUE	2.44
						3 1/2 EUE	2.99
	36 - 43.5	8.755 - 8.921	8.500	4 1/2 EUE	3.96	1.900 EUE	1.61
						2 3/8 EUE	1.94
						2 7/8 EUE	2.44
				3 1/2 EUE	2.99	3 1/2 EUE	2.99
						1.900 EUE	1.61
	47 - 53.5	8.535 - 8.681	8.312	3 1/2 EUE	2.99	1.900 EUE	1.61
						2 3/8 EUE	1.94
						2 7/8 EUE	2.44
						3 1/2 EUE	2.99
						1.900 EUE	1.61

* Other sizes and connections available upon request

COS Snapset



The Classic Oilfield COS Snapset Packer is a compression set tool requiring only straight set down weight to pack-off. It is run above other packers such as the ASI-X, AS-II or AS-III for selective production to isolate casing holes and perforations.

This packer has no upper or lower slips and should be used only where intermediate differential pressures from below are expected. The COS Snapset Packer has an internal latch to prevent the packer from pre-setting when running down the hole. When releasing, the latch re-engages to allow movement down hole.

SPECIAL FEATURES

- * Large internal by-pass
- * Set down to pack off, pick up to release
- * Compact design

PRODUCT SPECIFICATIONS

CASING		RECOMMENDED HOLE SIZE (inches)	TOOL OD (inches)	TOOL ID (inches)	THREAD CONNECTION BOX UP / PIN DOWN
SIZE (inches)	WEIGHT (lbs/ft)				
3 1/2	7.7 - 10.2	2.922 - 3.068	2.781	1.25	1.900 NUE
4 1/2	9.5 - 13.5	3.920 - 4.090	3.750	1.94	2 3/8 EUE
5 1/2	14 - 20	4.778 - 5.012	4.625	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
	20 - 23	4.670 - 4.778	4.500	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
7	17 - 26	6.276 - 6.538	6.000	2.50	2 7/8 EUE
	26 - 32	6.094 - 6.276	5.875	2.50	2 7/8 EUE
7 5/8	24 - 29.7	6.875 - 7.025	6.672	2.50	2 7/8 EUE
9 5/8	43.5 - 53.5	8.535 - 8.755	8.250	3.00	3 1/2 EUE

* Other sizes and connections available upon request

COS Hydroset IV Packer



The Classic Oilfield COS Hydroset IV is a hydraulic set single string retrievable packer. Tubing pump pressure is used to set the packer and the setting force is locked into the packer by a body lock ring. Its design allows for multiple zone completions. It can be run with other hydraulic packers or mechanical set packers.

SPECIAL FEATURES

- * Simple operation
- * Compact
- * Field adjustable setting pressure
- * Field adjustable releasing force

PRODUCT SPECIFICATIONS

CASING		RECOMMENDED HOLE SIZE (inches)	TOOL OD (inches)	TOOL ID (inches)	THREAD CONNECTION BOX UP / PIN DOWN
SIZE (inches)	WEIGHT (lbs/ft)				
3 1/2	7.7 - 10.2	2.922 - 3.068	2.781	1.25	1.900 NUE
4	9.5 - 11	3.476 - 3.548	3.250	1.75	2 3/8 EUE
	12.95	3.340	3.188	1.75	2 3/8 EUE
4 1/2	9.5 - 13.5	3.920 - 4.090	3.750	2.00	2 3/8 EUE
5 1/2	14 - 20	4.778 - 5.012	4.625	2.00	2 3/8 EUE
				2.38	2 7/8 EUE
6 5/8	17 - 24	5.921 - 6.135	5.750	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	24 - 32	5.675 - 5.921	5.500	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
7	17 - 26	6.276 - 6.538	6.000	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	20 - 29	6.184 - 6.456	5.938	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
7 5/8	24 - 29.7	6.875 - 7.025	6.672	2.50	2 7/8 EUE
				3.00	3 1/2 EUE
	33.7 - 39	6.625 - 6.765	6.453	2.50	2 7/8 EUE
				3.00	3 1/2 EUE

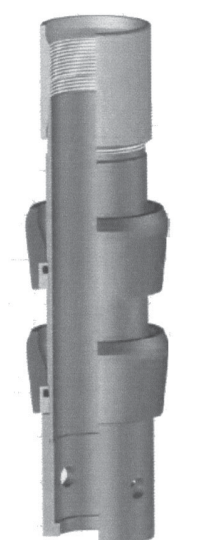
* Other sizes and connections available upon request

COS Gas Vent Packer / Patch

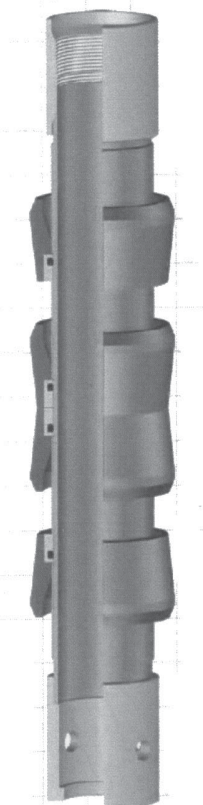
The Classic Oilfield Gas Vent Packer / Patch offers an inexpensive option for isolating casing leaks or depleted perforations in pumping wells. This tool prevents gas lock by allowing gas to vent to the surface past damaged zones. The interval between top and bottom cups can be any length. Available with double or multiple cups.

SPECIAL FEATURES

- * Inexpensive alternative to squeeze job
- * Variable intervals easily adjusted
- * Optional double to multiple cups



STANDARD



4 CUP VERSION

PRODUCT SPECIFICATIONS

CASING		TUBING SIZE (inches)	LINER SIZE (inches)	TOOL OD (inches)	TOOL ID (inches)
SIZE (inches)	WEIGHT (lbs/ft)				
4 1/2	9.5 - 13.5	2 3/8	3" LINE PIPE	3.813	2.69
5 1/2	13 - 20	2 3/8	3" LINE PIPE	4.000	2.75
		2 7/8	3 1/2" LINE PIPE	4.625	3.13
7	20 - 29	2 7/8	4 1/2" LTC	5.000	3.13

* Other sizes and connections available upon request