



Enclosed slips \*

#### The Classic Oilfield Drag Block Mechanical Tubing Anchor / Catcher (or DB Anchor) is a retrievable positive-action tubing anchor designed to hold the tubing string in tension or compression. It has drag blocks to allow the anchor to be run deeper than conventional drag spring anchors. The anchor prevents movement of the tubing during pumping strokes; and holds it stationary if it should part. The use of a tension tubing anchor increases pump efficiency, reduces rod and tubing wear, and keeps tubing and rods from falling into the well in case of a part.

#### SPECIAL FEATURES

- Rotational release or shear release
- Shear release value easily adjusted

CASING SIZE WEIGHT (inches) (Ibs/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	
	13 - 20	. ===	4.500	2.00	2 3/8 EUE	
5 1/2		4.778 - 5.044		2.44	2 7/8 EUE	
7	17 - 32	6.094 - 6.538	5.750	2.50	2 7/8 EUE	
				3.00	3 1/2 EUE	
7 5/8	24 - 39	6.625 - 7.025	6.400	2.50	2 7/8 EUE	
8 5/8	24 - 40	7.725 - 8.097	7.500	4.00	4 1/2 EUE	
9 5/8	32.3 - 53.5	8.535 - 9.001	8.250	4.00	4 1/2 EUE	

#### **PRODUCT SPECIFICATIONS**

\* Other sizes and connections available upon request



# TM Anchor / Catcher



The Classic Oilfield TM Anchor / Catcher is a retrievable positive-action anchor tool to hold tubing strings in tension or compression during pump strokes to prevent tubing buckling. This increases pumping efficiency while reducing rod and tubing wear. This tool also catches the tubing should it part. Stainless steel drag springs employ low stress value to minimize failure under corrosive conditions. If the TM Anchor / Catcher cannot be released with right-hand rotation, it is equipped with a shear release activated by an upward pull.

#### SPECIAL FEATURES

- \* Stainless steel drag springs
- \* Enclosed slips
- \* Rotation or shear release
- \* Safety release value easily adjusted

CASING SIZE WEIGHT (inches) (Ibs/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	2.00	2 3/8 EUE	
=	13 - 23	4.070 5.044	4.500	2.00	2 3/8 EUE	
5 1/2		4.670 - 5.044		2.38	2 7/8 EUE	
6 5/8	20 - 32	5.675 - 6.049	5.500	2.50	2 7/8 EUE	
			5.875	2.00	2 3/8 EUE	
7	17 - 32	6.094- 6.538		2.50	2 7/8 EUE	
				3.00	3 1/2 EUE	
7 5/8	24 - 39	6.625 - 7.025	6.400	2.50	2 7/8 EUE	
9 5/8	32.3 - 53.5	8.535 - 9.001	8.250	4.00	4 1/2 EUE	

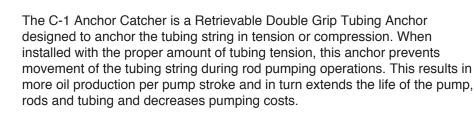
#### **PRODUCT SPECIFICATIONS**

\* Other sizes and connections available upon request

#### **Anchors**



## C-1 Anchor Catcher



This Anchor Catcher incorporates an emergency shear release system which is easily adjustable in the field. Unless otherwise specified, anchors are furnished with a total of 22,000 daN (50,000 lbs.) secondary release shears.

The C-1 Anchor utilizes drag pads backed up by Inconel Leaf Springs which results in more positive drag, thus reducing repair costs by at least 50% of the cost for repairing older drag spring designs.

#### OPERATION

Install the Anchor Catcher in the tubing string just below or above the pump for best results, although it may be installed at any point. Run to desired depth and rotate the tubing to the right to set the Anchor Catcher. The number of turns required will depend on the casing weight. When the slips have set, the tubing will torque up.

To ensure the Anchor Slips are solidly engaged with the casing, hold left hand torque on the tubing and set down 4,500 - 6,500 daN (10,000 - 14,500 lbs.) of tubing weight. Pick up and set down several times to be sure the anchor slips are properly set in the casing. Pick up to install the dognut and land the tubing, making sure the tubing is in sufficient tension when landed.

To pull the C-1 Anchor Catcher, lower the tubing to release the tension and rotate to the right while working the tubing up and down slightly. When pulling, care should be taken to ensure the tubing is not rotated with right hand torque or it may cause the anchor to reset.

Should the Anchor Catcher fail to release with normal procedures, an upward pull of the tubing string weight, plus the total value of the shear pins will release the anchor.





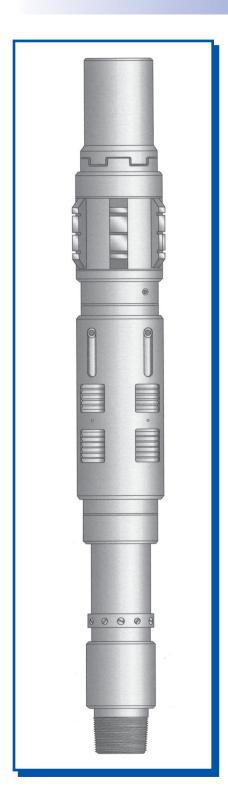
### **C-1 ANCHOR CATCHER**

### **SPECIFICATIONS**

CASING				ANCHOR O.D.		ANCHOR I.D.		EUE	
O.D. WEIGHT		GHT	I.D.		- ANCHOR O.D.		ANCHOR I.D.		THREAD
(in./mm)	(lb/ft)	(kg/m)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in./mm)
4 1/2 114.3	13.50	20.1	3.920	99.6	3.75				
	11.60	17.3	4.000	101.6		95.25			
	10.50	15.6	4.052	102.9		00.20			2 3/8 60.3
	9.50	14.1	4.090	103.9			1.933	49.0	
	18.00	26.8	4.276	108.6	4.12	104.6	1.500		
5	15.00	22.3	4.408	112.0					
127.0	13.00	19.3	4.494	114.1					
	11.50	17.1	4.560	115.8					
	26.00	38.7	4.548	115.5					
	23.00	34.2	4.670	118.6	4.50	114.3			
	20.00	29.8	4.778	121.4					
5 1/2 139.7	17.00	25.3	4.892	124.3					2 7/8 73.0
100.7	15.50	13.1	4.950	125.7	4.62	117.3	2.44	62.0	
	14.00	20.8	5.012	127.3		111.0	-		
	13.00	19.3	5.044	128.1					
	32.00	47.6	5.675	144.1	- 5.50	139.7			
6 5/8	28.00	41.7	5.791	147.1					
168.3	24.00	35.7	5.921	150.4					
	20.00	29.8	6.049	153.6					
	38.00	56.6	5.920	150.4		149.4	2.44 2.99	62.0 76.0	
	35.00	52.1	6.004	152.5	5.88				2 7/8 73.0
-	32.00	47.6	6.094	154.8					
7	29.00	43.2	6.184	157.1					
177.8	26.00	38.7	6.276	159.4					
-	23.00	34.2	6.366	161.7					
-	20.00	29.8	6.456	164.0					
	17.00	25.3	6.538	166.1	6.25				3 1/2 88.9
-	39.00	58.0	6.625	168.3					88.9
7 5/8	33.70	50.2	6.765	171.9					
193.7	29.70	44.2	6.875	174.6					
-	26.40	39.3	6.969	177.0	_				
	24.00	35.7	7.025	178.4					
	49.00	72.9	7.511	190.8	_	177.8	3.00	76.2	
-	44.00	65.5	7.625	193.7					3 1/2
0 E /0	40.00	59.5	7.725	196.2	_				
8 5/8 219.1	36.00	53.6	7.825	198.8	7.00				
	32.00	47.6	7.921	201.2					
	28.00	41.7	8.017	203.6					
	24.00	35.7	8.097	205.7					88.19
	47.00	69.9	8.681	220.5					
0.5/0	43.50	64.7	8.755	222.4					
9 5/8 244.5	40.00	59.5	8.835	224.4	8.25	209.6			
211.0	36.00	53.6	8.921	226.6					
l l	32.30	48.1	9.001	228.6					



### **R** Anchor Catcher



The R Anchor Catcher is an elaboration on the design of the C-1 Anchor Catcher, in that instead of anchoring the tubing vertically, it anchors the tubing in all directions, including rotationally. It will also prevent parted tubing from falling.

The R Anchor is the only anchor to allow any torsion force that may be encountered to be transmitted through the cones and slips of the anchor and ultimately to the casing rather than through the shear screws. This prevents these forces from prematurely shear releasing the anchor, as would be the case with conventional tubing anchors.

This anchor utilizes an emergency release system which is easily field adjustable and is furnished with a total of 22,000 daN (50,000 lbs) secondary release shears unless otherwise specified.

If used in conjunction with progressive cavity pumps, the R Anchor may be run with an S.L. On-Off Tool, which eliminates the need to pull the pump body to retrieve the tubing and rods. It also allows testing of the pump or tubing, in the event a leak has occurred. This can also prevent swelling of the elastomer in the stator, caused by a pressure drop and resulting in costly repairs.

#### OPERATION

Setting procedures for the R Anchor Catcher are identical to those of the C-1 Anchor, except that the tubing is rotated to the right to set as opposed to left hand rotation for the C-1.

The anchor is released by rotating the tubing to the left (opposite direction from setting). Alternately the R Anchor may be released by an upward pull in excess of the preset shear value.



#### **R ANCHOR CATCHER**

### **SPECIFICATIONS**

CASING				ANCHOR O.D.		ANCHOR I.D.		EUE	
		IGHT I.D.		D.	Anonon o.b.		Anonomie		THREAD
(in./mm)	(lb/ft)	(kg/m)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in./mm)
4 1/2 114.3	13.50	20.1	3.920	99.6	3.75				
	11.60	17.3	4.000	101.6		95.25			
	10.50	15.6	4.052	102.9				49.0	2 3/8 60.3
	9.50	14.1	4.090	103.9			1.933		
-	18.00	26.8	4.276	108.6	4.12	104.6			
5 127.0	15.00	22.3	4.408	112.0					
127.0	13.00	19.3	4.494	114.1					
	11.50	17.1	4.560	115.8					
-	26.00	38.7	4.548	115.5	4.50	114.3		62.0	2 7/8 73.0
-	23.00	34.2 29.8	4.670 4.778	118.6 121.4	4.50				
5 1/2	20.00	29.8	4.778	121.4					
139.7	17.00	13.1	4.892	124.3	-	117.3	2.44		
-	14.00	20.8	5.012	127.3	4.62				
-	13.00	19.3	5.044	127.0	-				
	32.00	47.6	5.675	144.1					
6 5/8	28.00	41.7	5.791	147.1	-	139.7			
168.3	24.00	35.7	5.921	150.4	5.50				
-	20.00	29.8	6.049	153.6	-				
	38.00	56.6	5.920	150.4	_	149.4	2.44 2.99	62.0 76.0	2 7/8 73.0
-	35.00	52.1	6.004	152.5					
-	32.00	47.6	6.094	154.8	5.88				
7	29.00	43.2	6.184	157.1	-				
177.8	26.00	38.7	6.276	159.4					
	23.00	34.2	6.366	161.7					
	20.00	29.8	6.456	164.0	-	158.7			
	17.00	25.3	6.538	166.1					3 1/2
-	39.00	58.0	6.625	168.3					88.9
7 5/8	33.70	50.2	6.765	171.9	6.25				
193.7	29.70	44.2	6.875	174.6	_				
-	26.40	39.3	6.969	177.0	_				
	24.00	35.7	7.025	178.4					
F	49.00	72.9	7.511	190.8	_	177.8	3.00	76.2	3 1/2 88.19
F	44.00	65.5	7.625	193.7	_				
8 5/8	40.00	59.5	7.725	196.2					
219.1	36.00	53.6	7.825	198.8	7.00				
-	32.00	47.6	7.921	201.2					
	28.00	41.7	8.017	203.6					
	24.00	35.7	8.097	205.7					00.10
F	47.00	69.9	8.681	220.5	-	209.6			
9 5/8	43.50	64.7 50.5	8.755	222.4	8.25				
244.5	40.00	59.5	8.835	224.4	- 0.20				
F	36.00	53.6	8.921	226.6	-				
	32.30	48.1	9.001	228.6					