

## MODEL TI ANCHOR

### PRODUCT 20-302, 20-304, 20-305

The **TechWest Model Ti Anchor** is a Ti Packer that is readily converted for use as a Tubing Anchor by replacing the Element with an Element Spacer.

The Ti Anchor (Tension: Product 20-304 and Compression: Product 20-305) are compact, economical, rugged, resettable packers that are run on jointed or coiled tubing. The packer is set and released with axial (upwards and downwards) motion, making it ideal for coil tubing use, or when rotating conventional tubing is impractical. The indexing Auto-J allows for reseatability without surfacing the tool.

The Ti-5 Anchor (Product 20-302) is similar to the Ti Anchor, except it has a longer Auto-J slot. The longer slotting allows for additional upward tubing travel before the slips are initiated. This feature allows for tubing pick up (up to 24" depending on tool size) while making connections, allowing the tool to be ran comfortably on jointed tubing. The anchor features an adjustable safety shear release allowing for packer retrieval in the event normal unsetting fails.

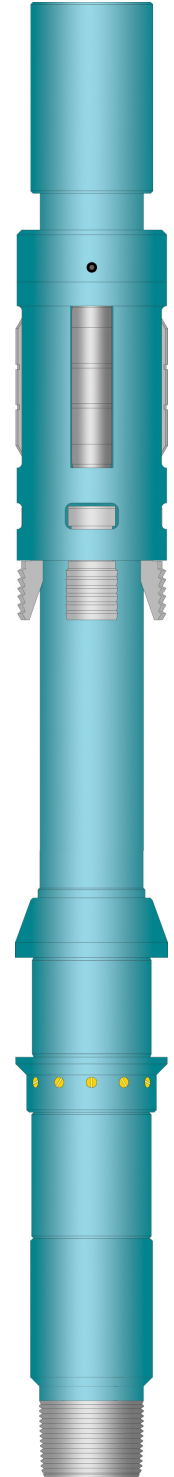
A *High-Flow* variation of the Model Ti Anchor is available with slots machined into the Drag body and Element Cone to increase the cross-sectional flow area past the Packer. This design feature reduces frictional losses when pumping or flowing past the anchor, allowing for flow higher rates.

### FEATURES

- Sets/Unsets with axial (up-down) motion.
- Indexing Auto-J
- Can be configured to run tension or in compression
- Available in a High Flow configuration (reduced x/s area)

### OPERATION

The Anchor operates with a continuous Auto-J indexing mechanism. The Anchor is ran to the desired depth with starting in either the *run-in* (or *pre-set*) position. Pickup engages the slips. If the Anchor does not set, cycle the tubing downward, and then picking up will set as in the above step. To release the anchor, lower the tubing to unset and then freely move up or down. The Anchor may be reset again by the initial procedure. If unable to normally unset, pull tension exceeding the shear force of the pins installed.



SPECIFICATION GUIDE - T Packer Series (20-302, 304, 306, 307)																
CASING					PACKER											
OD	WEIGHT		ID		OD		MIN ID		Connection	Product No						
	lb / ft	kg / m	in	mm	in	mm	in	mm								
2 3/8 50.8	4.7	7.0	1.995	50.7	1.81	46.0	0.378	9.6	1.000 NPT	20-302/4/5/6/7-0200						
2 7/8 73	6.5	9.7	2.441	62.0	2.20	55.9	0.750	19.1	1.500 NPT	20-302/4/5/6/7-0250						
	6.4	9.5	2.441	62.0												
3 1/2 88.9	10.2	15.2	2.992	76.0	2.81	71.4	1.380	35.05	1.500 NPT	20-302/4/5/6/7-0350						
	7.7	11.5	3.068	77.9												
4 1/2 114.3	15.1	22.6	3.826	97.2	3.50	88.9	1.610	40.89	1.900 EUE	20-302/4/5/6/7-0440						
	13.5	20.1	3.920	99.6												
4 1/2 114.3	11.6	17.3	4.000	101.6	3.80	96.5	1.940	49.1	2 3/8 EUE	20-302/4/5/6/7-0450						
	9.5	14.1	4.090	103.9												
	26	38.7	4.548	115.5							4.41	111.9	2.441	62.00	2 7/8 EUE	20-302/4/5/6/7-0530
	23	34.2	4.670	118.6												
5 1/2 139.7	23	34.2	4.670	118.6	4.45	113.0	1.995	50.67	2 3/8 EUE	20-302/4/5/6/7-0540						
	23	34.2	4.670	118.6	4.45	113.0	2.441	62.00	2 7/8 EUE	20-302/4/5/6/7-0550						
	23	34.2	4.670	118.6	4.50	114.3				20-302/4/5/6/7-0560						
	20	29.8	4.778	121.4						4.625	117.3	20-302/4/5/6/7-0580				
	17	25.3	4.892	124.3												
	13	19.3	5.044	128.1												
5 3/4 146.0	24.2	36.0	4.910	124.7	4.728	120.1	2.441	62.00	2 7/8 EUE	20-302/4/5/6/7-0600						
	22.5	33.5	4.990	126.7												
	19.5	29.0	5.090	129.3	4.823	122.5				20-302/4/5/6/7-0610						
	17	25.3	5.190	131.8												
6 5/8 168.3	32	47.6	5.675	144.1	5.44	138.2	2.441	62.00	2 7/8 EUE	20-302/4/5/6/7-0650						
	28	41.7	5.791	147.1												
	24	35.7	5.921	150.4	5.750	146.1				20-302/4/5/6/7-0700						
	20	29.8	6.049	153.6												
7 177.8	32	47.6	6.940	154.8	5.750	146.1	2.441	62.00	2 7/8 EUE	20-302/4/5/6/7-0700						
	29	43.2	6.184	157.1												
	26	38.7	6.276	159.4	6.00	152.4				20-302/4/5/6/7-0710						
	17	25.3	6.538	166.1												
7 5/8 193.7	39	58.0	6.625	168.3	6.45	163.8	2.441	62.84	2 7/8 EUE	20-302/4/5/6/7-0750						
	33.7	50.2	6.765	171.3												
	29.7	44.2	6.875	174.6	6.67	169.5				20-302/4/5/6/7-0760						
	24	35.7	7.025	178.4												
9 5/8 244.4	53.5	79.6	8.535	216.8	8.25	209.6	4.000	101.6	4 1/2 EUE	20-302/4/5/6/7-0950						
	47	69.9	8.681	220.5												
	43.5	64.7	8.755	222.4	8.50	215.9				20-302/4/5/6/7-0960						
	32.3	48.1	9.001	228.6												