Brief description

Torque Anchor

This centralized torque anchor is a versatile tool that anchors the tubing string against tubing backoff from Progressing Cavity Pump (PCP) rotation forces. Anchoring the downhole assembly also minimizes stator oscillation, which may cause pump efficiency losses. The KUDU XF Anchor is adjustable, enabling concentric and offset configurations, which allow coil tubing past the anchor. Due to this flexibility, the XF Anchor is preferable in heavy oil and high sand concentrations. In horizontal applications the static slips ensure casing standoff thereby minimizing intake plugging. The slim design of the XF Anchor results in alarge cross-sectional flow area for maximum production and minimum pressure drop across the tool.





Applications

Tuning back-off for progressing cavity pump applications . Deep wells and horizontal wells Heavy oil situations

Operation

The XXX Anchor is threaded onto the tubing string above or below the PCP. The anchor is run to the setting depth and torque is applied to the tubing string in a right hand direction.

The anchor is released by rotating the tubing to the left or a straight pull up. The anchor may be reset, move or pulled from the well

Features & Benefits

Robust, reliable design Spring-loaded anchor blocks Simple to use Provides Extra Bypass between the casing and torque anchor Prevents sand bridging around tool Simple anchor design provides strength hand reliability

Running Instructions

Run the XXX Anchor above or below the PCP.

• Consider installing a coupling on the pin end to eliminate potential thread damage to the exposed threads, if the XXX Anchor is on the bottom of the string.

• Use back-ups or tongs only on the box area of the tool, never on the slips.

• Always follow API recommended connection make-up and torque guidelines.

• Prevent unnecessary wear on slips by using back-ups on the tubing string during connection make-up.

• During installation and removal run the anchor and pump slowly through BOP's.

• After setting the anchor in the casing string, familiarize the crew with the setting and unsetting procedures

IMPORTANT

Rotate the tubing to the right and apply 750 to 2000 ft/lbsof torque (can be applied by using tongs or two men and apipe wrench).• Anchor make-up torque is the same as tubing connections.• Hold torque on the tubing string and simultaneously land thetubing hanger

| Casing Size (In) | Anchor body OD (mm) | Actual anchor OD (mm) | Torque anchor ID (mm) | Connections |
|---------------------|------------------------|--------------------------|--------------------------|-------------|
| Size: 4-1/2" | 92.2 | 92.2 | 50.8 | 2-7/8"EU |
| Size: 5" | 101.6 | 107.6 | 62.0 | 2-7/8"EU |
| Size: 5-1/2" | 112.8 | 108.0 | 62.0 | 2-7/8"EU |
| Size: 5-3/4" | 120.6 | 116.6 | 62.0 | 2-7/8"EU |
| Size: 6-5/8" | 138.4 | 133.4 | 62.0 | 2-7/8"EU |
| Size:7" | 148 | 143.0 | 76.0 | 3-1/2"EU |
| Size:9-5/8" | 190 | 209.6 | 100.5 | 4-1/2"EU |





Brief description API 11B Sucker Rod Polished Rods

Polished rod is designed with the same function with sucker rod but used at the top surface of oilwell, it is also called polished sucker rod, as it come accross the stuffing box to join the downside sucker rod and horse head through bridle and clamp.All our polished rods are made of quality alloy steel and machined by advanced equipment and technology, with high strength, smooth surface and long service life. The tensile strength exceeds 1, 000 MPa (145, 000psi).

Applications

Tuning back-off for progressing cavity pump applications . Deep wells and horizontal wells Heavy oil situations

Operation

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The anchor is released by rotating the tubing to the left or a straight pull up. The anchor may be reset, move or pulled from the well

Features & Benefits

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• Use back-ups or tongs only on the box area of the tool, never on the slips.

• Always follow API recommended connection make-up and torque guidelines.

• Prevent unnecessary wear on slips by using back-ups on the tubing string during connection make-up.

• During installation and removal run the anchor and pump slowly through BOP's.

• After setting the anchor in the casing string, familiarize the crew with the setting and unsetting procedures

IMPORTANT

Rotate the tubing to the right and apply 750 to 2000 ft/lbsof torque (can be applied by using tongs or two men and apipe wrench).• Anchor make-up torque is the same as tubing connections.• Hold torque on the tubing string and simultaneously land thetubing hanger

| ominal value | Rod body diameter D +0 127-0 254(+0.005- 0.010)mm(in) | Length Lmm+/- 50mm (Lft +/-2in) | Thread nominal diameter mm(in) | mm (in) Outer thread shoulder outer diameter | Suitable sucker rod size mm (in) |
|-----------------|---|--|-----------------------------------|--|-------------------------------------|
| 29 | 28.6 (11/8) | 2438, 3353, 4877, 6707, 7315, 7925 (8, 11. 16. 22. 24 , 26) | 24 (15/16) PR 27 (1 1/16) PR | | 16 (5/8) 19 (3/4) |
| 29 | 28. 6 (11/8)rod-upset on one end | 2438, 3353, 4877, 6707 , 7315, 7925 (8. 11, 16. 22 , 24 , 26) | 24 (15/16) SR 27 (1 1/16) SR | 31.8+0.127-0.254 (1.250+0.005-0.010) 38.1+0.127-0.254 (1.500+0.005-0.010) | 16 (5/8) 19 (3/4) |
| 32 | 31.8(1 1/4) | 3353, 4877, ,6707,7315, 7925 , 9144, 10973 (11, 16, 22 , 24, 26, 30, 36) | 30 (1 3/16) PR | | 22(7/8) |
| 32 | 31.8(1 1/4)rod-upset on one end | 3353, 4877, ,6707,7315, 7925 , 9144, 10973 (11, 16, 22, 24, 26, 30, 36) | 30 (1 3/16) SR | 41.3+0.127-0.254 (1.625+0.005-0.010) | -22(7/8) |
| 38 | 38. 1 (1 1/2) | 4877, 6707,7315, 7925, 9144, 10973 (16, 22, 24, 26, 30, 36) | 35(1 3/8)PR | | 25(1) |
| 38 | 38. 1 (1 1/2)rod-upset on one end | 4877, 6707,7315, 7925, 9144 10973 (16, 22, 24, 26, 30, 36) | 40(1 9/16)SR | 57.2+0.381-0.381 (2.250+0.015-0.015) | 29(1 1/8) |



