

DOWNHOLE CLUTCH

PRODUCT 20-129

The **TechWest Downhole Clutch** is designed to utilize a mechanical tubing anchor or packer while operating a Tubing Rotator.

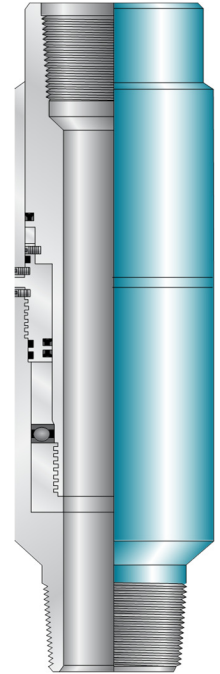
It is primarily used in deviated wells, where a Tubing Anchor is required to straighten out the tubing string, thus avoiding excessive wear caused by the sucker rods.

Rotating the tubing allows the tubing-rod wear to be evenly distributed around the tubing as it turns.

OPERATION

After setting the Tubing Anchor, the Tubing Clutch is pulled into tension in order to shear the shear pins, thus allowing the upper half of the Clutch and tubing string to move up. This disengages the Clutch and allows the Tubing Rotator to turn the tubing while leaving the tubing in tension.

To release the Tubing Anchor simply lower the tubing string, re-engage the Downhole Clutch and release the Tubing Anchor as normal.



DOWNHOLE SWIVEL

PRODUCT 20-027

The **TechWest Downhole Swivel** is designed for use in deviated wells when a Tubing Anchor or Packer is also to be installed and the tail joint extends into the deviated or horizontal section of the well.

The Tubing Swivel is installed between the tubing bottom and the anchor, thus allowing the tubing tail pipe to remain stationary while the tubing above the swivel turns freely. This allows for ease in setting the Tubing Anchor or Packer by eliminating drag caused by the tubing extending into the bend section.

Another application for this swivel is in horizontal re-entry wells where it is desirable to install tail pipe in the bend section.

