Insert Pump Anchor

Pump anchor for setting and resetting pumping depth as needed

APPLICATIONS
- Bottom hold-down insert pumps
- 2½-in, 2¾-in, and 3½-in [60.325-mm, 73.025-mm, and 88.9-mm] tubing strings

BENEFITS
- Enables ease of variability in pumping depth

FEATURES
- High-temperature packing element available
- No seating nipple required
- High-strength alloy retainer ring
- No rotation required

When a seating nipple for an insert pump is not present in the tubing, the Don-Nan insert pump anchor serves the dual purpose of anchoring the pump and packing off the fluid production string. The compression packing element is bonded to threaded steel insert to eliminate damage during anchor setting, releasing, or resetting. The split cone is backed up with an alloy retainer ring for strength comparable to a solid cone.
Don-Nan insert pump anchor operating sequence

1. Record pump stroke and setting stroke (24 in or 48 in [609.6 mm or 1,219.2 mm]) of the anchor. The figure represents the upward movement of the rodstring necessary to transfer the dowel pin from the running slot to the setting slot.

2. Attach anchor to pump and start into tubing with dowel pin in starting position.

3. Run pump to desired depth. Attach polished rod and lower to point established for bottom of stroke. Raise polished rod distance established in Step 1, then lower full weight of rods on the anchor to set and preload the packoff.

4. Reset the anchor by unseating it with a straight pull on the rodstring, then raise or lower it to the desired setting position. Reset as in Step 3.