Schlumberger

RWB API Insert Pumps

RWBC and RWBM standard sucker rod pumps

APPLICATIONS

- Low-sand wells
- Low-fluid-level wells
- Shallow- to moderate-depth wells

ADVANTAGES

- Highly adaptable
- High-fluid-volume insert pump
- Thin-walled barrel
- Bottom hold-down
- Universally accepted design

RWB API insert pumps are thin-walled, stationary-barrel, bottom-hold-down pumps recognized by API as a standard design. These pumps are most often used in shallow to moderate depths where there is little chance of sand accumulation. If sand is an issue, a top-hold-down design may be more suitable. Alternatively, nonstandard accessories such as a top seal may be used to eliminate a stuck-pump scenario. The thin-walled barrel is threaded on the inside, which reduces the number of connections needed on the pump and enables a larger bore.

Seating options on this pump include mechanical (RWBM) or cup (RWBC) types suitable for high temperatures and mechanical types for simplified well maintenance. A mechanical hold-down does not require repair unless major damage has occurred, and cups should be replaced each time the pump is unset. Both hold-down types follow the same procedure of setting and unsetting by placing the weight of the sucker rods down on the pump or by lifting up.

Like all API pumps, RWB API insert pumps can be modified with specialty components to better address pumping issues caused by sand and gas. Because of the exposure to stagnant fluid on the exterior of the pump barrel, a bottom discharge valve is recommended to enable fresh fluid to be moved into the area directly above the pump standing valve.

Enhance operational flexibility and extend the life of your rod system

Schlumberger offers a range of tools and specialty products engineered to address common problems such as rodstring wear and damage due to gas interference, erosion, or insufficient fluid levels. These products provide greater flexibility during operations and can extend the life of the rod lift system.

Sand specialty products

- Prevent a stuck pump scenario caused by solids accumulation around the hold-down with a top seal.
- Direct solids away from the pump barrel, maintain downhole pump integrity, and extend run life with optimized components.
- Keep particulate matter from settling and sticking the pump and greatly reduce the adverse effects of corrosive fluid by using the bottom discharge valve.

Gas specialty products

- Reduce gas breakout and improve pump compression with optimized components.

RWB API Insert Pumps Specifications

Tubing × Pump Bore Size, in [mm]
1 9/10 × 1¼ [48.260 × 31.750]
2⅜ × 1¼ [60.325 × 31.750]
2⅜ × 1½ [60.325 × 38.100]
2⅞ × 2 [73.025 × 50.800]
3½ × 2½ [88.900 × 63.500]

RWB API insert pump.