Schlumberger

RHB API Insert Pumps

RHBC and RHBM standard sucker rod pumps

APPLICATIONS
- Deep wells
- Low- to high-fluid-level wells

BENEFITS
- Highly adaptable
- Accommodates high fluid volumes

FEATURES
- Heavy-walled barrel
- Bottom hold-down
- Universally accepted design

RHB API insert pumps are heavy-walled, stationary barrel, bottom hold-down pumps recognized by API as a standard design. These pumps are recommended for depths of 8,000 ft [2,438.4 m] or greater when there is little chance of sand accumulation. If sand is an issue, nonstandard accessories such as a top seal can be used to prevent a stuck pump.

These pumps can also be modified for use as a stroke-through pump to release sand and other material. To minimize damage to the plunger and barrel, a grooved-body plunger is often used to catch and carry the sand away from those components.

Seating options on this pump include mechanical (RHBM) or cup (RHBC) 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, whereas cups should be replaced every 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 lifting up.

Enhance operational flexibility and extend the life of your rod lift 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
- Use optimized components to reduce gas breakout and improve pump compression.

RHB API Insert Pumps Specifications
Tubing × Pump Bore Size, in [mm]
1 9/10 × 1 1/16 [48.260 × 26.988]
2 3/8 × 1 1/16 [60.325 × 26.988]
2 3/8 × 1 1/4 [60.325 × 31.750]
2 7/8 × 1 1/2 [73.025 × 38.100]
2 7/8 × 1 3/4 [73.025 × 45.450]
3 1/2 × 2 1/4 [88.900 × 57.150]

RHB API insert pump.