RHA API Insert Pumps
RHAC and RHAM standard sucker rod pumps

APPLICATIONS
- Sandy wells
- Low fluid-level wells
- Gassy or foamy wells
- Shallow- to moderate-depth wells

BENEFITS
- Allows full submersion in fluid
- Greater depth capability than RWA API insert pump

FEATURES
- Heavy-walled barrel
- Top anchor hold-down
- Universally accepted design

RHA API insert pumps are heavy-walled, stationary barrel, top anchor pumps recognized by API as a standard design. These pumps are suitable for moderate depths with high sand fallback on well shutdown. Fluid dispersion directly above the seat nipple prevents the pump from becoming stuck in such a situation.

The heavy-walled barrel is less sensitive to pressure and therefore may be run slightly deeper than the otherwise similar thin-walled RWA API insert pumps.

Seating options on this pump include mechanical (RHAM) or cup (RHAC) types suitable for high temperatures and mechanical types to simplify 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 by placing the weight of the sucker rods down on the pump and unsetting by lifting them up.

This pump can be further optimized by selecting the metallurgy and coating of various components to maximize pump life in specific well conditions.

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
- Direct solids away from the pump barrel, maintain downhole pump integrity, and extend run life with optimized components.

Gas specialty products
- Use optimized components to reduce gas breakout and improve pump compression.

RHA API Insert Pumps Specifications

<table>
<thead>
<tr>
<th>Tubing × Pump Bore Size, in [mm]</th>
<th>2 3/8 × 1 1/4</th>
<th>2 7/8 × 1 1/2</th>
<th>2 7/8 × 1 3/4</th>
<th>3 1/2 × 2 1/4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60.325 × 31.750</td>
<td>73.025 × 38.100</td>
<td>73.025 × 44.450</td>
<td>88.900 × 57.150</td>
</tr>
</tbody>
</table>

Copyright © 2021 Schlumberger. All rights reserved. 21-SURPS-862790