

## Lufkin hydraulic pumping unit

Smart cylinder technology delivers precise rod string readings



The Lufkin" hydraulic pumping unit (HPU), from Baker Hughes, a GE company (BHGE), is a rod pump system that uses smart cylinder technology to deliver precise readings on rod string positioning. Proprietary rod string management technology controls and optimizes production of wells and reduces overall costs by extending the life of rod strings.

Using the BHGE HPU, hydraulics lift rod strings and downhole sucker rod pumps with precision, reducing the stress on rod strings. The HPU unit consists of three modules: the tower, the prime mover, and the hydraulic power unit.

The Lufkin Well Manager" Rod Pump Controller (LWM)—BHGE's proprietary technology—then takes over, allowing for pump-off automation, pausing capability, and real-time production reports. In addition, the LWM uses rod string management algorithms for stroke control. Linear position sensors are integrated into the tower to monitor movement of rod strings. Operators are able to reach long, slow, and controlled strokes to preserve strings. Each HPU unit can be adjusted as needed for slower or faster stroke length. The unit also provides 30 days of operational data.

The HPU unit can deliver a stroke length of up to 300 in. (7620 mm) and achieve up to 40,000 lb (18,144 kg) of peak polished rod load

The BHGE HPU can be installed in a few hours, as opposed to several days, and can be powered by either electric motor or natural gas engines.

## bhge.com

Copyright 2019 Baker Hughes, a GE company, LLC ("BHGE"). All rights reserved.

The information contained in this document is company confidential and proprietary property of BHGE and its affiliates. It is to be used only for the benefit of BHGE and may not be distributed, transmitted, reproduced, altered, or used for any purpose without the express written consent of BHGE.

Baker Hughes reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your BHGE representative for the most current information. The Baker Hughes logo, Lufkin, and Lufkin Well Manager are trademarks of Baker Hughes, a GE company, LLC. GE and the GE Monogram are trademarks of the General Electric Company.

## Applications

- Deviated wellbores
- Low flow rate applications
- Inland waterLow-profile or limited
- footprint applications
- Locations with limited powerResidential areas where height
- might be a concern

## **Benefits**

- Uses natural gas from field when power is low
- Extends rod life
- Pauses at top of stroke for better gas handling and more efficiency
- Decreases lift costs by decreasing premature rod failure workovers
- Provides pumpoff control capability with natural gas,
- electric, or diesel power • Allows for quick,
- one-day installation

80241