

Dynamic Pattern Recognition

Conventional Plunger Lift

The Tally Conventional Plunger DPR system offers an economical, safe, and efficient way to drive down LOE while operating plunger lift wells. Providing cutting edge data, the DPR system will improve operational efficiency by reducing well test frequency, eliminating the need to mic plungers, and providing the ability to operate by exception, driving bottom line profitability and increasing operational and personnel safety.

The instrument uses a dynamic pressure sensor to listen to acoustic activity within the well and transmits the high frequency data to a local processor where the data is used in a physics-based multiphase flow model. The instrument outputs real-time performance and production data to the existing RTU and SCADA, giving the operator the tools needed to make informed operational decisions.

Data Outputs

- Plunger on bottom detection
- Liquid production volumes and dry arrival detection
- Rise velocity
- Fall velocity
- Slip coefficient

Benefits

- Increase flowing time and eliminate unnecessary off time
- Use real-time liquid production volumes to make informed performance decisions and reduce well testing frequency
- Determine optimum rise velocity and protect surface equipment
- Match plunger fall speed to well conditions and protect downhole equipment
- Track plunger wear and remove the need to mic plungers



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Technical Specifications

- ½" NPT, Class I, Division 1 sensor mounted upstream of motor valve
- Class I, Division 1 patent pending externally mounted intrinsic safety barrier to isolate processor and minimize enclosure space required
- 12-24V power input, ~3W consumption at 12-24VDC
- Modbus 485 to integrate into existing RTU and SCADA
- Processor footprint: 4"L x 3"W x 1.5"H



MAKE BETTER WELLS

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