Hydraulic Cylinder Lift Systems Functions & Features

- Proportional or Directional Valve control
- Rod load measurement using load cell or cylinder pressure transducer
- Rod position & direction control with prox. switch input or linear position input
- Actual surface and pump dyna graph generator
- Stop & Fault dynamometer graphs stored
- Predicted surface and pump dynamometer graph generator
- Pump fill monitor and POC - Pump off Control
- Pump fill Optimizer – Pump Fill Control with proportional valve (*optional*)
- Rod speed boost and separation control
- Monitor option to generate local/remote well report for existing controller
- Rod position input health check
- Lift system power estimation
- Hydraulic power estimation
- Pump intake and discharge pressure monitors
- Fluid level monitor
- Down hole pump position, velocity and load monitors
- Rod position and velocity monitors
- Rod load monitor and protection
- Pumping unit, rod string and down hole pump models
- Tubing, casing, fluid and reservoir models
- Rod string weight and resonance calculator
- Density and flow loss calculation from fluid and gas property
- Deviated well compensation
- Counter-balance compensation
- Auto rod friction modeling for more reliable pump fill calculation
- Soft Landing (with position feedback)
- Rod float separation detection (with position feedback)
- Pump flow monitor and production accumulator
- Casing and tubing pressure compensation
- Gas Flow AGA model supported
- Time-stamped event, warning and fault logging
- Remote sensor support via Modbus RTU
- SCADA communication via Modbus RTU
- User-programmable MS Excel spreadsheet Well Report generator software
- Bluetooth (BLE) local communications (*optional*)
- WIFI wireless local communications (*optional*)
- GMC® system support