

Simple yet intelligent system for pump or pumping unit control with shutdown annunciation and Scada comms



Due to the widespread availability of various sensors that detect operational problems at wellsites, it is sometimes difficult for lease operating personnel to quickly determine the cause of an equipment shutdown. In many cases, an oilfield electrician has provided a system of relays that do not give an indication as to what caused a shutdown. Perhaps the pumping unit is simply not operating as part of a time cycle, and there is no shutdown. A simple, low cost, yet reliable system has been designed that resolves these issues while providing the ability to communicate with Scada and the more advanced internet based systems of the future. Additional sensors can be added to collect flowline, tubing, and /or casing pressure, or vibrations sensors can detect wear on mechanical components.

Smart ESD from ENCLINE provides a variety of informative shutdown annunciations as well as optional packages to further protect operator equipment:

- Simple annunciation at wellsite HMI and on smartphone webpage hosted by the device
- Provision for standard shutdowns like high / low flowline pressure, high separator level, low / high tank level, low oil level, high enviropot level, etc.
- All values easily polled by most any Scada system
- PLC fluent in multiple Modbus protocols and MQTT

SENSE MECHANICAL WEAR

Vibration transducer options detect premature wear

COLLECT PRESSURE DATA

Use data analytics to detect when flowlines are plugging and when wells aren't pumping

SIMPLE ANNUNCIATION

Quickly receive and translate shutdown announcements

IoT ENABLED

Edge Computing Device with MQTT capability

For more information on Smart ESD technology please visit us on the Web at: www.enclinelift.com

Options for Smart ESD Packages

Option 1: Metrix Vibration Transducer is incorporated to detect mechanical issues before they become severe. Candidates are rotating equipment such as centrifugal pumps and rotary vane or screw compressors. This version incorporates the control of a VFD cooling fan, as improper cooling fan operation is known to cause premature VFD failure. Plugged air filters are detected as is cooling fan failure.

Option 2: Many rod pumped wells are not equipped with tubing, casing, nor flowline pressure sensors. This is a low cost method of collecting that valuable data.

Smartphone monitoring

- View important Smart ESD annunciation information
- Remotely reset the well
- Monitor realtime pertinent data
- Check status of well
- View stored daily statistical information up to thirty days



SMART ESD SERVICE FEE INCLUDES:

- IP address and well name configuration
- Self-installation training
- Technical Support
- Software Maintenance
- Application Upgrades
- Lifetime Hardware Warranty