Products & Services

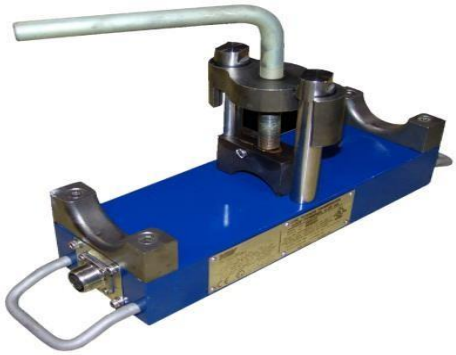
Sensors

Depth and rate of penetration

This sensor is used to detect the kelly position and the direction of the kelly (up or down), PetroServices fabricates draw work sensor uses two inductive sensors detect the moving of the iron gear which installed directly on the draw work shaft. The draw work gear has a specific numbers of teeth and each inductive sensor is able to detect whether the metal of the serrated target is covering the proximity sensor face, or whether one of the gaps in the target is in front of sensing face.

Line tension sensors

The line tension transducer provides a 4-20 mA loop powered electrical output proportional to a wire rope's single line up to 100,000 lbs. (45360 Kg) when loop powered by 13 to 28 Volts DC.



Rotary torque

The current transducer provides a Hall-Effect sensor with an integrated signal conditioner. All units are packaged in a split core configuration for ease of installation. Application flexibility is provided by a wide variety of input current ranges and output signal types.

Applications:

- AC/DC Current Sensing.
- Torque measurements.
- Hazardous Locations such as Offshore Platforms, Petrochemical Plants, Mines, Flour Mills, etc.

Pressure transmitter (SPP,CP)

The Pressure Transmitters are specifically designed for oilfield measurement applications and other duties requiring the highest levels of stability and reliability in rugged operational environments. These transmitters employ the latest developments in ceramic-diaphragm sensor technology. A four-arm strain-gauge bridge circuit, fused into the ceramic at 1000°C, is connected to a 4-20mA 2-wire current amplifier; all housed in a heavy duty stainless steel body. Available in ranges up to 15,000PSIs (1000bar) and with <0.15% accuracy, they can be supplied with a variety of terminations and ports to cover a wide range of connection requirements appropriate to the oilfield equipment user.

The Pressure Transmitters all ATEX certified for use in “All-Zones - All Gases” Hazardous Atmospheres (potentially explosive).

Mud pit level sensors

The mud pit level-measuring device monitors single pit levels and the total pit volume through a non-contact measuring principal for continuous level measurement with ultrasonic pulses. The Probe is an ultrasonic level monitor combining sensor and electronics in a single package. It is designed to measure liquid levels in closed vessels. The sensor houses the ultrasonic transducer and temperature sensing element. The Probe emits a series of ultrasonic pulses from the transducer. Each pulse is reflected as an echo from the material and sensed by the transducer.

The echo is processed by The Probe using Milltronic's proven `Sonic Intelligence' techniques. Filtering is applied to help discriminate between the true echo from the material and false echoes from acoustical and electrical noises and agitator blades in motion. The time for the pulse to travel to the material and back is temperature compensated and then converted into distance for display, mA output and relay actuation.

Temperature sensor with two wire transmitter

The Temperature PT-100 sensor is a Platinum resistance thermometer (PRT) which offers high accuracy over a wide temperature range. Due to the sensor's wide range, it can be used as a thermometer for experiments in Chemistry, Physics, Biology, Earth science, Environmental science and is mostly suitable for water and other chemical solution temperature measurements. The PT-100 sensor is mostly used for industrial applications, where the high precision of the PT-100 is required.

Due to its low temperature measurement response and high accuracy, this is a very powerful sensor for monitoring liquid gases and other materials. The output signal range of 4-20 mA is accepted by the data logger Analog/Digital converter then the temperature is calculated & recorded in the software.

Mud conductivity sensor with two wire transmitter

- This sensor is used to measure the conductivity of the mud during drilling.
- The form of the sensor is a ring. Applied magnetic field and after processing the return effect it can give you the conductivity value.
- This sensor has two parts, one is the sensor that will immerse inside the mud and the other part is the transmitter that can process the value, you can calibrate and adjust the sensor settings on it.
- Clear, easy to read two line display shows commissioning menus and process measurement displays in English.
- Simple to use menu structure.
- Measures conductivity, resistivity, total dissolved solids, or custom curve variable.
- Automatic temperature sensor recognition simplifies start up.
- Automatic compensation for sensor cable resistance improves accuracy of high conductivity/ low resistivity measurements.
- Temperature compensation algorithms.

Mud weight sensor

- This sensor is used to measure the mud weight by measuring the pressure.
- Two Two level sensors dive with different depths into the mud, the upper sensor needs a minimum depth of 5-10 cm, and the distance between the two sensors is about 30 cm.
- The sensors will give via galvanic isolators the difference between two signals to the differential amplifier.
- The differential Amplifier gives at the output a 4-20 mA signal to the A/D converter.
- The sensors and isolators are ATEX certified.