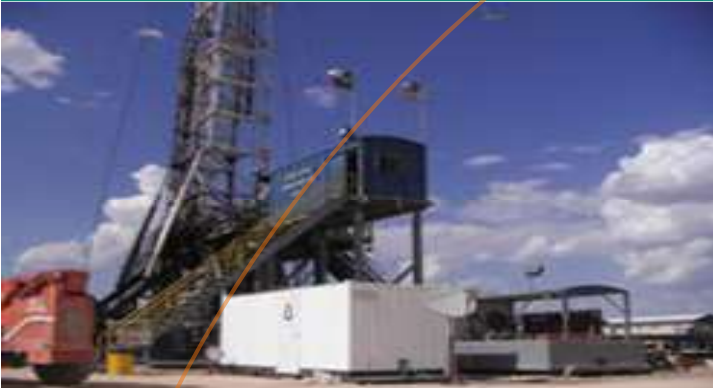


DrillPRO



What is DrillPro?

DrillPro is a ScadaPro extension for the calculation, monitoring and recording of drilling data as it applies to mud logging services+.

DrillPro supports multiple sensor types for the determination of drilling depth and bit position. These include input signals from devices such as Rig Geograph, an encoder mounted on the crown and encoder located on the draw-works.

DrillPro allows the operator to interface a variety of sensor products from third party vendors giving flexibility on product sourcing and selection. Rather than accepting an imposed package solution, the operator has the ability to select the devices available in their market area.

The associated logging and display system allows the drilling process to be displayed in a flexible format, and the service company can tailor displays to their or their customers' preferences.

Mud Logging and Drilling Software Solution

Features

Data acquisition from a variety of hardware including OPC Servers, Alphascan, Datascan, WITS, WITSML and Modbus

Flexible data logger historians which allow data to be recorded and trended by time, depth and event and recorded in files or databases. For example, logger historians can be allocated to time, depth, and gas samples

Client/server architecture to distribute displays around the rig to PCs and monitors such as the company man, toolpusher, driller, geologist and other rig personnel

Site to Office streaming of data to Internet servers over low bandwidth connections. The Internet servers in turn have high speed connections, Facilitating real-time and historical viewing by off site staff and customers located anywhere in the world.

Configurable graphical monitor and playback trends to build your own customised screen formats

Data export to log drawing packages via text file and adjustable reporting to Excel

Configurable Depth Measurement Logic to handle encoders mounted on the draw-works, crown and geograph style hook-ups using switched or level pulse signals.

Depth and bit position drill-string geometry values that can be displayed in meters or feet

Heave compensation monitoring with encoder input being received from the riser and compensator

Drilling operation status detection and determination

Well geometry and real-time hydraulics calculations

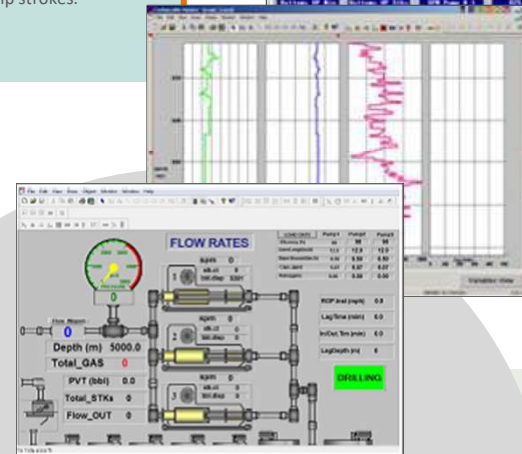
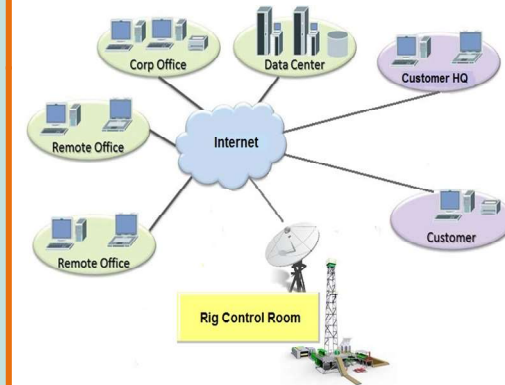
Real-time vertical depth calculation based on entered deviation survey data

Real-time overpressure parameters calculation ("d" exponent, Sigma, pore pressure, fracture gradient, ECD etc.)

Facility to define pump characteristics and to calculate the total pump output for up to 6 mud pumps, with pump type and pump output calculation.

32 Pit Volume sensors with availability of multi totalizers.

Lagged depth calculation and lagged depth database strokes, volume, temperature, density and conductivity values. "Bottoms-Up" and sample times continuously updated in terms of time, volume and total pump strokes.



Key Benefits

Flexibility
Drillpro has the flexibility to allow you to interface with a variety of sensor products.

Tailored Displays
Drillpro allows you to tailor displays based on client preferences and requirements.

Real-time access to data
Real-time access to data anytime and anywhere

Perpetual Licensing Model
Unlike our competitors we provide a perpetual licensing model, allowing you to budget for the software under capital expenditure as opposed to costly and inflexible ongoing rental agreements.

Service Quality
Measuresoft offers exceptional service with guaranteed reliability from our software, including online remote support of your rig PCs.

Proven track record
DrillPro has been successfully deployed throughout North America, South America, the Middle East, and West Africa



measuresoft

While many I/O devices are also supported, Drillpro is optimised to work with Alphascan I/O, providing a data acquisition interface to digital and analog sensors.

A core 634A module is available which can handle encoders, digital status, high speed frequency up to 10Khz, low frequency up to 1KHz, counters and 4 high speed analog inputs.

911 modules can also be added to provide additional analog inputs as required.



- Draw-works, crown and compensator encoders
- Rotary torque
- Hook-load
- Weight on bit
- Stand pipe pressure
- Casing pressure
- Pump strokes
- Mud pit levels
- Mud flow out
- Rotary RPM
- H2S Toxic gas levels
- Ambient CH4 gas levels
- Mud temperature (in and out)
- Mud Weight (in and out)
- Mud Conductivity (in and out)

'Providing Accurate and Reliable Data Acquisition for Mud Logging Services'

Gas Chromatograph Add-On

What is the Gas Chromatograph processor?

The Gas Chromatograph processor is an add-on to ScadaPro which allows sampling directly from the output signals provided by third party gas Chromatograph manufactures. The system continuously analyses peaks from each gas sample and calculates the concentration of each gas represented by each peak. Facilities are provided to calibrate using a sample with known gas concentrations.

Features

Turns your ScadaPro system into a chromatograph data workstation

No programming required

Use third party I/O hardware

Collect signals from one or more detectors

Flexible number of gases supported

Baseline subtraction

Manual and automatic calibration

Supports continuous unattended auto sampling

Each sample stored in a time stamped log file

Flexible peak annotation and trend display using ScadaPro Trends

For each gas peak detected the following channels values are calculated which can be logged and displayed as ScadaPro channels:

- 1.SD, Start Delta Time, Secs
- 2.RT, Retention Time, Secs
- 3.PH, Peak Height
- 4.ED, End Delta Time, Secs
- 5.WI, Width, Secs
- 6.RM, Root Mean Squared
- 7.CP, Calculated Concentration, %
- 8.CC, Calculated Concentration, ppm
- 9.AR, Area, ppm
- 10.AP, Area, %

The above peak values can also be used to automatically annotate the text displayed at the top of each peak on a trend display

