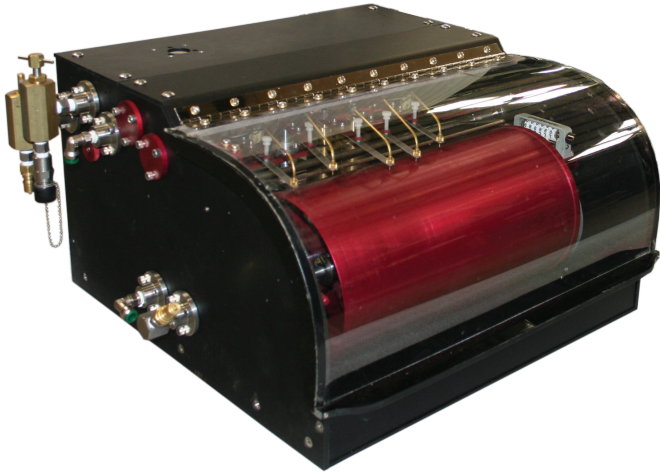


DRILLING RECORDERS



Conventional Drilling Recorder

Matherne Instrumentation's drilling recorder system is designed to monitor up to 7 drilling functions. The system is completely mechanical, needs no electrical power to operate, and is easily connected to existing instrumentation through the use of quick disconnects. The system is portable, durable, and easily operated and maintained by onsite personnel.

The system includes recorder, recorder stand, box of charts, 2 derrick pulleys, dog house pulley, retriever for rate of penetration function, hydraulic and air hoses, air valve, E/P transducers for RPM/SPM function, mounting plate, filter regulator, hook ups for rotary torque, and diaphragm protector for pump pressure function.

FEATURES:

- Duplicate 12-hour or 24-hour strip charts in English, metric, or SI metric measurements.
- Available in 1-, 3-, 5-, or 7-pen configurations.

Recordings include:

- Weight – detects downhole problems such as tight holes or cave-ins as they occur.
- Penetration – indicates each 1 foot and 5 foot depth drilled (or each 1/3 meter and 1 meter).
- Rotary RPM – enables optimum penetration.
- Rotary Torque – alerts operator about problems such as worn bits, formation changes, and out-of-gauge holes.
- Pump Rate SPM – ensures accurate calculations of fluid volume pumped into the system. When used with other records, can help predict kick areas for offset wells.
- Pump Pressure – provides warning of potential downhole problems.
- Pit Level – indicates problems such as kicks or lost circulation.
- Fluid Flow – warns of lost circulation, formation fluid influx, or kicks.

ORDERING SPECIFICATIONS:

- Number of Functions
- Description of Functions
- Type of Rotary Table (Chain Driven or Top Drive)
- Sensors Required
- 12 or 24 Hour Charts
- Units of Measure (English, metric, or SI)