

# Mud Control System



## Drilling fluid management system

**Our mud control system provides full control of the complete drilling fluid process. The system is application based and give our customers the full flexibility to monitor and control specific systems, or to upgrade existing systems.**

In our advanced and well-proven mud control system, we combine decades of mud process experience with top-of-the-line automation technology. The result is a scalable and easy-to-adjust system that can be used for smaller installations, as well as for complete drilling rigs. We can supply all stages, from a manually controlled process, to advanced and automatic applications.

The drilling fluid management system has process pictures in the human-machine interface (HMI), with a strong focus on the operations. By this we ensure fast, safe and easy-to-use actions.

### Available control systems:

#### Drilling fluid management system

- Diagnostics and communication
- Mud process control
- Alarms

#### Mud real time monitoring

- Well in/out instrumentation

#### Bulk storage and transfer system

- Auto transfer
- Content selector and control
- Bulk weight and content reports
- Remote control valves

#### Mud additive system

- Surge tank control
- Sack-cutting unit control
- Liquid additive control
- Machine safety control

#### Mud circulation and storage

- Level and density control
- Pumping and agitation control
- Remote control valves
- Auto mixing circulation

#### Solids control equipment

- Remote control of shakers, degassers
- Remote control valves
- Remote control pumps and screw conveyors

## Benefits

- Integrated in the same platform as our DrillView™ system for drilling control
- Third party equipment integration
- Allows automated processes and remote control of the mud process
- Reduced contamination, spillage and waste generation



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Our application based mud control system allows for flexible customer selections and upgrades.

	Auto purge air transfer lines						Standard applications
Liquid additive volume control	Auto emptying dust collector						Platform architecture
Auto density and batch from surge tank feeder	Auto refill surge tanks	Mud pits density, level, temperature monitoring	Controlled flow to shakers				
Automatic feeding to mixers	Automatic transfer between storage tanks	Automatic mixing circulation	Monitoring and control of valves	Display manifold process data			
Machine control, overflow protection etc.	Valve control, weight, pressure, level etc.	Valve control, motor status, remote start/stop	Motor status, remote start/stop	Display MGS process data	Monitoring and alarming		
Mud additive control system	Bulk storage & transfer control system	Mud circulation and storage control system	Solids control equipment control system	Choke and kill control system	Well control instrumentation		
Mud control system							
Drilling fluid management system							

## Technical Specifications

Hardware	Remote I/O cabinets PLC cabinet VFD cabinet Frequency converters
Network	Profibus DP network (fibre and/or copper) Profinet Profibus PA network
Voltage and power	230Vac/440Vac/690Vac (Can be adjusted to customer requirements on request)
Design temperature	14/122° F (-10/+55° C)
Control system	PLC - Simatic S7 HMI - Simplicity
Operator panels	Multiple client stations (desktop panel PC). Industrial HMI stations
Hazardous area classification (according to IEC 60079-10-1)	Non-hazardous Optional: zone 1, zone 2
EX certification type	Optional: ATEX, IECEx
Alarm system	Based on YA710/711
Options	Integration to other systems. Redundant CPU

Data is subject to confirmation by the manufacturer.