

Service and Maintenance for Solids Control Equipment

About the Course

Proper installation, care, and repair are all vital components to maintaining a productive solids control system. This course is designed for the tradesperson with both mechanical and electrical responsibilities on solids control equipment. Students will have the opportunity to participate in a hands-on course related to all aspects of service for each piece of solids control equipment manufactured by Derrick (service overview of competitive equipment by request).

Main Areas of Focus

- Equipment identification, parts, preventative maintenance, and troubleshooting.
- Disassembly and reassembly of the following solids control equipment: Shale shakers, Degasser, Hydrocyclones, Pumps, Agitators, and Centrifuge.
- Related electrical components, troubleshooting, and electrical maintenance.
- Operating manual referencing.

Course Specifics

Instructor: Roberto Revelo

Course Length: 5 days*

Time: 8:30 AM - 4:00 PM*

*Breakfast and lunch are provided

Price: \$1,500.00

Class Limit: 5

Attire:

Jeans or pants

Shirt

Closed-toed shoes

Safety equipment/tools provided

Schedule subject to change based on enrollment

Who Should Attend

The course is designed for new hires, rig personnel, civil and underground operators, mud engineers, service technicians, and any other rig personnel who directly with solids control processing equipment.

Derrick Equipment Company

	Course Name	Learning Targets	Solids Control Key Outcomes	Engagement
Monday	Derrick Equipment Company Overview	✓ History✓ Locations✓ Services	Derrick key contacts & information	
	Electrical Overview	 Basics of voltage, amperage, ohms, and horsepower Wire stripping, identification, multimeter use, and troubleshooting 	Understanding Derrick starters, motors, and wiring	Starter box labeling and identification Motor cord assembly Troubleshooting inside the starter box Troubleshooting motors
	Operating Manual Overview	✓ How to access manuals✓ How to locate parts✓ Wiring schematics	Proper equipment installation methods Locating and ordering parts	Classroom overview of operating manual locations, access, and utilization.
	500 Series Shale Shaker	✓ Design and overview✓ Technical specifications✓ Mechanical specifications	Service & preventative maintenance	 Shaker disassembly Parts identification and troubleshooting Shaker reassembly Hydraulic overview if applicable
Tuesday	Primer & Flo-Divider	 ✓ Design and overview ✓ Technical specifications ✓ Mechanical specifications for primer 	Service & maintenance on primer Flo-divider recommendations & troubleshooting	Primer walk-around and parts identification Flo-divider installation overview
	Hyperpool Shale Shaker	✓ Design and overview✓ Technical specifications✓ Mechanical specifications	Service & preventative maintenance	Shaker disassembly Parts identification and troubleshooting Shaker reassembly
	Screen Technology	 ✓ Brief history ✓ API RP 13 C ✓ Screen comparisons ✓ Screen performance 	Screen sizingCut pointsIssuesCare	Screen change on Derrick and competitive shakers Screen microscope Cost per foot/well tracking program Screen animation
Wednesday	600 Series Shale Shaker	 ✓ Design and overview ✓ Technical specifications ✓ Mechanical specifications 	Service & preventative maintenance	 Shaker disassembly Parts identification and troubleshooting Shaker reassembly Starter box troubleshooting Hydraulic overview
	Degasser	 ✓ Design and overview ✓ Technical specifications ✓ Mechanical specifications 	Proper connection & operation Service & preventative maintenance	Safety overview Degasser disassembly Parts identification and troubleshooting Degasser reassembly

	Hydrocyclones	✓ Design and overview✓ Technical specifications	Proper connection & operation Service & preventative maintenance	Degasser disassemblyParts identification and troubleshootingDegasser reassembly
Thursday	Pumps	✓ Design and overview✓ Technical specifications✓ Mechanical specifications	 Proper connection & operation Service & preventative maintenance 	Pump disassemblyParts identification and troubleshootingPump reassembly
	Mud Agitators	✓ Design and overview✓ Technical specifications✓ Mechanical specifications	Proper installation Service & preventative maintenance	Agitator disassemblyParts identificationAgitator reassembly
ay	Centrifuge	✓ Design and overview✓ Technical specifications✓ Mechanical specifications	 Proper installation Service & preventative maintenance 	 Parts identification Fundamental mechanical troubleshooting Troubleshooting basic faults and alarms
Friday	Solids Control Service Review	✓ Quick quiz✓ References✓ Zip drive✓ Course evaluation	Assessment for learning	Recap & discussion