

M-10 Horizontal Dryer

THE ORIGINAL MUD RECOVERY EQUIPMENT



M-10 Horizontal Dryer



VFD Control Pan

The mud recovery system transfers drill cuttings discharged from the primary shakers to the inlet pipe of the unit. Drill cuttings fall into the inlet pipe and are accelerated by gravity to the distribution cone. The cuttings are then evenly spread and retained on the inner circumference of the wedge wire screen by centrifugal force. Linear motion is induced axially onto the screen which conveys the drill cuttings to the discharge end of the wedge wire screen. The M-10 horizontal dryer can reduce the oil content on drill cuttings to less than 4% (w/w).

Synthetic or oil based mud moves through the apertures in the wedge wire screen by centrifugal force. The recovered mud then flows from the discharge point to be collected for secondary treatment. Secondary treatment is accomplished with a decanting centrifuge, which separates solids from liquids. The mud viscosity being processed by the decanter should be monitored to ensure efficient mud recovery.

The M-10 horizontal dryer reduces drilling mud costs and reduces mud discharge which lessens the environmental impact.

The VFD offers increased efficiency and flexibility of operations by allowing the rpm of the mud dryer screen motor to be varied from zero to a maximum rpm. Run parameters are displayed on a touch screen also referred as Human Machine Interface (HMI). The touch screen is programmed to help the operator control and monitor the screen at all times. It is programmed to operate safely without opening the control cabinet to check the VFD. The HMI has built in safety interlocks that communicate with the VFD to protect the centrifuge, VFD and operating personnel.

Nominal Specifications and Dimensions

MUD CONDITIONERS	M-10
Weight	8,488 lbs (Dry) (3,850 kg Dry)
Dimensions (L x W x H)	89 in x 74 in x 67 in (2261 mm x 1880 mm x 1702 mm)
Capacity	88 US Tons per Hour (80 Metric Tons per hour)
Hazardous Locations	Class 1, Div. 1 and Class 2, Div. 1 Zone 1 and 2 EExdIIC, DNV Certified
VFD (M-10)	
Weight	500 lbs (227 kg)
Dimensions (L x W x H)	36 in x 27 in x 57 in (914 mm x 686 mm x 1448 mm)
HMI (M-10)	
Weight	300 lbs (136 kg)
Dimensions (L x W x H)	62 in x 22 in x 34 in (1575 mm x 559 mm x 864 mm)