

Mix-Clean-Recover Unit Model MINI MAC-950E





Unit shown with a M2-E922 mixer

Features and Benefits:

MINI MAC-950E

The MINI MAC-950E was designed to mix drilling fluid, clean and recycle used drill fluid, and maintains proper drilling fluid in an active tank for the drilling rig. MINI MAC-950E is built as one unit that includes 3 tanks, a manifold assembly of hydrocyclones, a STS M2 mixer and all the valves and piping to needed to create a smooth and effortless system needed to satisfy the customer's needs.

The unit is designed to be operated on ground level with a tank height of 61 inches, so the operator can over-see the process, and visually inspect inside of the tanks without ever having to climb up or down causing a safety issue. The unit is to be levelled using the removable jacks which are stored at the front of the unit. The jacks can be fitted into the front or rear jack pockets depending on where the tank needs to be leveled.

The mixer located at the rear of the unit is designed around the time proven M series mixers of STS. The MINI MAC-950E is powered by a 10HP Teco/Westinghouse electric motor, driving a 2" centrifugal pump, making effective use of the world renowned 4 point mixing system. With the proper valve selection, this one motor and pump will do all of the functions required to operate the unit effectively and efficiently, thus reducing mechanical and maintenance issues.

With a hopper height of only 38 1/2" from the ground, operator fatigue from loading bags into the hopper is reduced. The mixer blends and shears the new drilling fluid in the rear 250 us. gallon tank. A set of 5-1 injector nozzles in combination with a rolled bottom tank design keeps the fluid agitated and consistent. When the operator has the proper drill fluid made, simply rotate a valve on the mixing unit and route the fluid to the front active tank. The active tank will hold 500 us. gallons of drilling fluid for the drilling rig to draw from. This tank is also designed with a rolled bottom and a set of 5-1 injector nozzles to keep the fluid agitated and consistent.

The tank in the center of the unit has a capacity of 200 us. gallons for storing "dirty, spent" drill fluid from the drill hole. This tank is filled by a customer supplied pit pump usually of the 2" size. When the "dirty" tank is full, the pump on the mixer is used to draw "dirty" fluid from the center tank and route it to the side mounted hydro-cyclones. While routing fluid to the hydro-cyclones the pump also uses the "dirty" tank's rolled bottom and set of 5-1 injector nozzles to keep the dirty fluid agitated and consistent. The hydro-cyclones are 2 1/2" with a capacity of 16 us.gpm each and a D-cut of 5 micron. As the fluid is processed with the hydro-cyclones, the over-flow (clean) fluid is routed into the active tank for reuse. The underflow (solids) are routed out and away for customer disposal or optional secondary treatment.

Each tank is open top and has side clean out access. The tanks are equipped with the required inlet-outlet connections on both sides of the tank to allow for better external hose routing and to eliminate hoses over the top and tied. The frame has many securing and tie-down points located in key spots.

This unit was designed for operator safety, site safety, ease of use, portability, small footprint and maximizing drilling fluid handling efficiency.



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Surface to Surface Inc.



Specifications

Leveling Jacks

Mixing System

Dimensions (Working)
Weight w/o Mixer
Weight including Mixer
Hopper Height & Size
Hydro-cyclones
Piping
Flow Valves
Quick coupling connectors
Tanks
Tank nozzles (4 per tank)
Threaded inlet & outlet ports

Mini MAC- 950E Unit

65 1/2" W x 138" L x 82" H 2420 lbs. 2920 lbs. (M2-E922) 38 3/4" High Holds ½ of a bag 2@ 2 1/2" 16 gpm 2" sched. 40 Pipe Brass and Steel construction 2" cam loc 1@250, 1@200, 1@500 gal us Eductor Nozzles (5-1 fluid output)

2 HD screw jacks 2" Renowned StS Mixing System

Benefits

Small foot print operate from ground level Light weight for easy transportation.

Low hopper height reduces back strain.
D-cut of 5 micron
Built tough for the construction trade.
Withstand the abuse of daily operations
Ease of connections and draining
Rolled bottom with clean out
Fast and effective rolling and mixing action.
Safe Proper connections, no hoses over the top
Allows for easy leveling of unit

Fast & efficient with high shearing ability.

Small space saving footprint.

An Optional Fluid Recovery from the Hydro-cyclone discharge is available.

Specifications

Dimensions

Weight
Hopper Height & Size
Mixing System
Flow Valves
Skid Frame
Motor
Pump
Pump / Motor Connection
Pipe Couplers
Pressure Wand
Mechanical Seal
Replaceable Wear Plate
3-way Valves

M2-E922 Mixer

2" NPT

33" W x 52" L x 26 1/2" H
500 lbs. (227 Kg)
26 1/2" High Holds ½ of a bag
2" renowned StS Mixing System
Brass and Steel construction
1" steel tube with lifting bale
10 HP Teco 230V/460V 60Hz
2" Cast iron centrifugal trash pump
Bearing Block to Lovejoy® Coupler
Bolt & Snap-groove type
Hopper maintenance wand
Self-Pressurizing Grease Seal
Hardened plate ahead of Impeller
2 1/2" NPT Port, 2 position

Benefits

Light weight for easy transportation.

Low hopper height reduces back strain.

Fast & efficient with high shearing ability.

Withstand the abuse of daily operations

Built tough for the construction trade.

Industrial rated for longer service life

Gorman-Rupp 80 series

Large bearings & oversized coupler (service life)

Fast cold weather draining of system.

Removal of build-up caused by additive.

Greasable seal for more rugged working conditions

Less wear on internal pump parts and is replaceable.

Designed for heavy duty slurry use. Large handles.

With a 40 second viscosity, the M2 model produces 90 gpm @ 36psi through the mix nozzle and 52 gpm @ 36psi to the tank nozzles (5-1 mixing equals 260 gpm of mixing / rolling action in tank) and a discharge rate of 80 gpm @ 36psi

Also available in Hydraulic (MINI MAC-950H) or Diesel (MINI MAC-950D) models.

*** All Specifications Subject to Change Without Notice ***

Check our website for the latest products and specifications

www.stsmixers.com

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