



AMERICAN AUGERS®

an Astec company



MPR-6000

Drilling Fluid Mixing, Pumping,
and Recycling System

MPR-6000

Since 1970 American Augers has been a devoted supplier of underground technology equipment that maintains rugged strength, unsurpassed power, and industry leading designs. Never has there been a change in American Augers core value of having products developed by a can-do workforce that focuses on mechanical, technological, and customer based design improvements that from continent to continent meets American Augers goal of always exceeding customer expectations by providing products that are not a cost of doing business, but an **Investment in Success.**

American Augers recognizes the essential part that drilling fluid (mud) plays in successful directional drilling, and knows that jobsite success is dependent upon having equipment that equals the technical benefits of the process, and has designed mud equipment for jobs of every size.

Why American Augers Mud Cleaning Systems?

American Augers mud cleaning systems use linear motion shakers instead of random shakers that are found in competitor models. This “Contractor First” design increases the efficiency the driller has in being able to recycle mud!

The MPR-6000 is pure innovation for self contained drilling fluid technology. The MPR-6000 is a high capacity system that has the ability to Mix, Pump, and Provide large volumes of mud down-hole for use with mud motors or large reamers. Improvements in overall recycling and cleaning capacities makes this unit a must have for all horizontal directional drilling projects.

EXCEPTIONAL FORCE





- MIXES, PUMPS, CLEANS, AND RECYCLES Drilling Fluid at the Same Time
- ON BOARD Diesel Power Train and Electrical Generator Set
- RECLAIMS BENTONITE to Minimize Use
- LARGE FLUID PROCESSING TANKS
- REDUCES VOLUME OF SOLIDS for Disposal by Controlling Moisture Content
- QUINTIPLEX MUD CIRCULATION PUMP
- CENTRIFUGAL MUD CLEANING PUMP
- LINEAR MOTION SHAKER SCREENS
- TANK FLOOR MUD AGITATION SYSTEM
- DESILTING CONES Manifold Mounted
- HIGH PRESSURE Wash Down System
- STANDARD Rock-over Design on a Tri-Axle Suspension
- WORLDWIDE SERVICE AND SUPPORT



PERFORMANCE SPECIFICATIONS

Power Train

Engine:	Caterpillar® C-15 Tier III Diesel
Rating:	475 HP (354 kW)
Noise Rating:	1 Meter Distance 104 dB(A) 3 Meter Distance 95 dB(A)
Transmission:	Eaton FRO-16210B 10 Speed
Clutch:	14 in. (355 mm) Diameter Dual Plate with Air Actuator
Battery:	(2) Deka 908DMF 12V, 1450 CCA
Generator Set:	Caterpillar® D125-6 114 kW Prime Rating - 60 Hz
Generator Set Noise Rating:	97 dB(A) without attenuation
Fuel Capacity:	255 U.S. Gallons (965 L)

Operating Controls

Remote Controls:	Mud Pump Throttle, Mud Pump Start/Stop, Clutch Actuator, Horn
Remote Instruments:	Digital Mud Flow Meter (gallons per minute/liters per minute) Analog Engine Tachometer

Mud Pumping System

Main Pump:	Quintiplex, piston and liner Bore x Stroke – 4.5 in. x 4.5 in. (114 x 114 mm)
Maximum Flow:	500 U.S. Gallons* (1,893 L)/minute

* Note: Pumping Capacities will Vary Depending on the Overall Mud Weight, Drilling Fluid Mixture/Content, and the Working Environment

Maximum Pressure:	1,500 psi (103 bar)
Pump Motors:	(1) 3-Phase Electric 30 HP (22 kW) 480 V for Mixing/Agitation <ul style="list-style-type: none">Inlet Size: 6 in. (152.4 mm)Outlet Size: 5 in. (127 mm)Impeller Size: 10 in. (254 mm) (1) 3-Phase Electric 30 HP (22 kW) 480 V for Charging of Hydro-Cyclones <ul style="list-style-type: none">Inlet Size: 6 in. (152.4 mm)Outlet Size: 5 in. (127 mm)Impeller Size: 10 in. (254 mm) (1) 3-Phase Electric 20 HP (14.9 kW) 480 V for Supercharging of Quintiplex Pump <ul style="list-style-type: none">Inlet Size: 6 in. (152.4 mm)Outlet Size: 5 in. (127 mm)Impeller Size: 9.5 in. (241.3 mm)
Bentonite Mixer:	Polyethylene constructed Dry Bentonite Mix Hopper
Discharge Hose:	(4) 3 in. x 25 ft. (76.2 mm x 7.6 m)
Other Features:	Pulsation Dampeners on inlet and discharge 33 U.S. Gallons (125 L)/minute Liner Wash System with Supply Tank

Cleaning System

Linear Motion Shakers:	1st with 27 ft. ² (2.51 m ²) area 2nd with 18 ft. ² (1.67 m ²) area
Shaker Screens:	(3) 50 mesh included (2) 140 mesh included Various other Mesh Sizes Available
1st Cut Shaker Cleaning Capacity:	Estimated 300 U.S. Gallons* (1,136 L)/ minute

* Note: Cleaning Capacities will Vary Depending on the Overall Mud Weight, Drilling Fluid Mixture/Content, and the Working Environment

Desilting System:	(9) 5 in. (127 mm) Desilter Hydro-Cyclones - manifold mounted
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Cleaning System (continued)

Desilting System Cleaning Capacity:	Estimated 720 U.S. Gallons* (2,725 L)/minute
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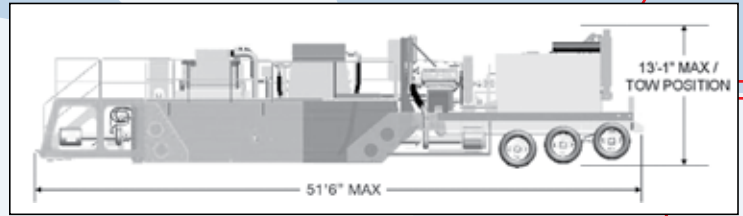
* Note: Cleaning Capacities will Vary Depending on the Overall Mud Weight, Drilling Fluid Mixture/Content, and the Working Environment

Supply Tanks

Screen Tank:	2,000 U.S. Gallons (7,571 L) capacity
Clean Fluid/Mixing Tank:	4,000 U.S. Gallons (15,140 L) capacity
Other Features:	Tanks designed with 18 in. (457 mm) Cleanout Ports

Transport

Mounting:	Rock-over Design on Tri-Axle suspension
Axle Spacing:	4 ft. (1.22 m)
Kingpin Diameter:	2 in. (51 mm)
Lift Jacks:	(2) Hydraulically operated lift jacks raise the front to 52 in. (1,321 mm) clearance at the kingpin
Lift Jack Cylinder:	(2) 5 in. Bore x 42 in. Stroke (127 mm x 1,067 mm)
Lift Jack Motor:	(1) 10 HP (7.5 kW)



Dimensions

Length:	51 ft. 6 in. (15.7 m)
Height:	13 ft. 1 in. (4 m)
Width:	98.4 in. (2.5 m)

Weight

Total Weight:	56,000 lbs. (25,400 kg)
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Safety

Protective Equipment:	<ul style="list-style-type: none">Anti-Slip Walkways with Hand RailsStairway & Ladder with Anti-Slip TreadsEmergency Shutdown Switch on Operators Control PanelElectrical Grounding Stake with Cable(4) 500 Watt Quartz Work Lights
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Wash Down System

Fluid Tank:	110 U.S. Gallons (416 L) Polyethylene Tank
Maximum Pressure:	1,500 psi (103 bar)
Fluid Discharge:	4 U.S. Gallons (15 L)/minute capacity
Hose:	100 ft. (30.5 m)
Misc.:	Hose Reel with Wash Down Sprayer (included)

Product Options

Generator Set:	50 Hz Electrical Operating System
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Environmental Commitment

American Augers is committed to manufacturing equipment that helps to preserve the sanctity of the global environment, and has done so by reducing noise and/or emissions outputs, and emphasizing the fact that our trenchless technology equipment requires little or no open cutting, which has very minimal impacts on natural surfaces, features, or habitats.