

VMI, INC.



MD-822-SP SELF PROPELLED

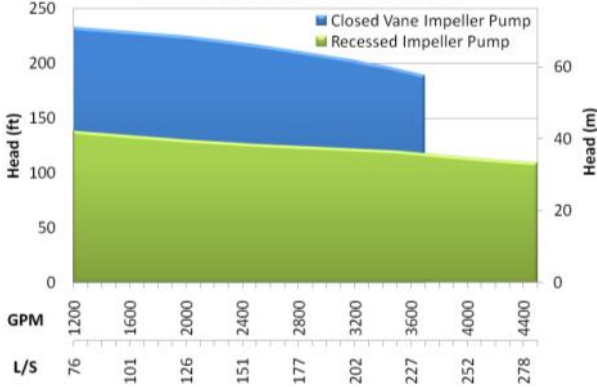
The MD-822-SP offers the ability to switch between the twin auger drive system and cable propulsion with the flip of a switch and one lever. The auger high/low speeds can be shifted on the fly at any time. The twin auger system is fully removable allowing the ability to shorten the dredge and operate with cable if needed.

2-SPEED TWIN AUGER DRIVE / CABLE DRIVE



8" x 8" Pump Performance Curves

Performance based on water at 68°F (20°C)



**Paddle
Teeth**



**Cutting
Teeth**



**(Optional)
Closed Vane Impeller Pump**



**(Standard)
Recessed Impeller Pump**



Color Display

A color display screen inside the operator's cab allows the ability to log data, choose among different layouts, and display video from a camera.

Removable Auger Drive



Steerable Rear Thruster



GENERAL	
Length	47' 6" (14.48 m) O.A.
Height (without exhaust)	8' 10" (2.69 m)
Width	9' 11" (3.02 m)
Weight (Approx.)	30,500 lbs (13,832 kg)
Draft	26" (66 cm)
Fuel Capacity	325 U.S. gallons (1230 L)
ENGINE	
Type	Cummins
Model	QSL 9
Power	325 BHP (242kW) @ 2100 RPM
PUMP	
Type	Hi-chrome cast iron, centrifugal
Impeller	Recessed - 25" (63.5 cm) diameter Closed Vane - 19.5" (49.5cm) diameter
Suction	8" (20.32 cm)
Discharge	8" (20.32 cm)
Capacity - Recessed (water @ 68°F / 20°C)	7.75" (196mm) Sphere - Variable to 3,000 GPM (11,355 L/min) @ 140' (42.7 m) head @1030 RPM
Capacity - Closed Vane (water @ 68°F / 20°C)	3.625" (92mm) Sphere - Variable to 3,000 GPM (11,355 L/min) @ 137' (41.8 m) head @1100 RPM
CUTTER ASSEMBLY	
Type	Horizontal with full-width, flow-through suction (Paddle and cutting teeth available)
Size	9' 11" (3.02 m) wide x 21" (53.34 cm) dia.
Speed	Variable 0-80 RPM (forward and reverse)
Torque	30,348 in.-lbs. (3,429 N·m)
Operating Depth	Variable to 22' (6.7 m) with auger drive Variable to 15' (4.57 m) without auger drive
PONTOONS	
Dimensions	Two - 34" (86.36 cm) x 40" (101.6 cm) x 34' 6" (10.52 m)
Description	10 gauge steel, integral bulkheads and stiffeners, formed for rigidity, cora-foam filled
SELF PROPULSION SYSTEM	
Description	Two independent auger drives with variable speed
CABLE PROPULSION	
Type	Treble sheave hydraulic winch
Traverse Speed	Variable 0-50 ft/min (0-15.2 m/min)
Cutting Speed	0-15 ft/min (0-4.57 m/min)
HYDRAULIC SYSTEM	
Drive	Direct from engine
Pumps	Variable displacement, axial piston
Motors	Fixed displacement
Filters	Protected hydrostatic loop, high pressure suction & return with indicators
Capacity	Total, 190 GPM (761.5 L/min) @ 2200 RPM
Reservoir	100 U.S. gallons (378.5 L)
RELIEF SETTINGS	
Centrifugal Pump	4000 psi (276 bar)
Cutter Head	3000 psi (207 bar)
Accessories	3000 psi (207 bar)
Boom	1500 psi (103 bar)
ELECTRICAL SYSTEM	
Alternator	Output - 100 amp
Battery	Heavy Duty - 12 volt
PRIME FINISH	
Lower Structure	Shear Tar Epoxy Paint
Upper Structure	Blue and White Epoxy Paint