



# VMI Horizontal Dredge Specifications

**MD-415****MD-615****MD-815**

<b>GENERAL</b>			
Length	33' 6" (10.21 m) O.A.	37' 6" (11.43 m) O.A.	38' 6" (11.73 m) O.A.
Height (without A/C)	8' (2.44 m)	8' 6" (2.59 m)	8' 10" (2.69 m)
Width	8' 6" (2.59 m) (transport)	9' (2.74 m) (transport)	9' 11" (3.02 m)
Weight (Approx.)	20,000 lbs (9,100 kg)	23,000 lbs (10,400 kg)	26,500 lbs (11,800 kg)
Draft	22" (55.88 cm)	22" (55.88 cm)	25" (63.5 cm)
Fuel Capacity	160 U.S. gallons (606 L)	244 U.S. gallons (923 L)	325 U.S. gallons (1230 L)
<b>ENGINE</b>			
Type	Cummins	Cummins	Cummins
Model	QSB 6.7	QSB 8.3	QSL 9
Power	173 BHP (129 kW) @ 2500 RPM	260 BHP (194 kW) @ 2200 RPM	350 BHP (261kW) @ 2100 RPM
<b>PUMP</b>			
Type	Hi-chrome cast iron, centrifugal, recessed impeller		
Impeller	18" (45.72 cm)	22" (55.88 cm)	25" (63.5 cm)
Suction	4" (10.16 cm)	6" (15.24 cm)	8" (20.32 cm)
Discharge	4" (10.16 cm)	6" (15.24 cm)	8" (20.32 cm)
Capacity (water @ 68°F)	3.75" (95mm) Sphere - Variable to 1,000 GPM (3,785 L/min) @ 130' (39.6 m) head @ 1400 RPM	5.75" (146mm) Sphere - Variable to 2,000 GPM (7,570 L/min) @ 140' (42.7 m) head @ 1140 RPM	7.75" (196mm) Sphere - Variable to 3,000 GPM (11,355 L/min) @ 140' (42.7 m) head @ 1030 RPM
<b>CUTTER ASSEMBLY</b>			
Type	Horizontal with full-width, flow-through suction (Paddle and cutting teeth available)		
Size	8' 6" (2.59 m) wide x 21" (53.34 cm) diameter	9' (2.74 m) wide x 21" (53.34 cm) diameter	9' 11" (3.02 m) wide x 21" (53.34 cm) diameter
Speed	Variable 0-80 RPM (forward and reverse)		
Torque	30,348 in-lbs. (3,429 N·m)		
Operating Depth	Variable to 15' (4.57 m) maximum (optional depths available upon request)		
<b>PONTOONS</b>			
Dimensions	Two - 32" (81.28 cm) x 34" (86.36 cm) x 30' 6" (9.30 m)	Two - 32" (81.28 cm) x 36" (91.44 cm) x 33' 6" (10.21 m)	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		
<b>PROPULSION</b>			
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)		
<b>HYDRAULIC SYSTEM</b>			
Pumps	Three - variable displacement, axial piston / One - fixed displacement		
Motors	Fixed displacement		
Capacity	Total, 80 GPM (302.8 L/min) @ 2200 RPM	Total, 130 GPM (492.1 L/min) @ 2200 RPM	Total, 170 GPM (681.3 L/min) @ 2200 RPM
Reservoir	100 U.S. gallons (378.5 L)		
<b>DRIVE</b>			
Description	Hydraulic pump drive, direct from engine		
<b>FILTERS</b>			
Description	Protected hydrostatic loop, high pressure suction & return		
<b>RELIEF SETTINGS</b>			
Centrifugal Pump	4000 psi (276 bar)		
Cutter Head	3000 psi (207 bar)		
Accessories	3000 psi (207 bar)		
Boom	1500 psi (103 bar)		
<b>ELECTRICAL SYSTEM</b>			
Alternator	Output - 100 amp		
Battery	Heavy Duty - 12 volt		
<b>PRIME FINISH</b>			
Lower Structure	Shear Tar Epoxy Paint		
Upper Structure	Blue and White Epoxy Paint		