



# Mud Cat™ 275D Dredge

## GENERAL

Length (O.A.):	46 ft-2 in (14.1 m)
Width (O.A.):	10 ft (3.1 m)
Height (O.A.):	9 ft-4 in (2.9 m)
Weight:	31,500 lbs. (14,290 kg)
Draft:	30 in (0.7 m)
Fuel Capacity:	250 gallons (950 liters)

## FLOATATION

Pontoons:	Two 32 in W x 42 in D x 37 ft (0.8 m x 1.1 m x 11.3 m) 10 gauge (3.4 mm) steel with internal bulkheads and stiffeners; formed for rigidity. Polyurethane foam filled.
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## CUTTER ASSEMBLY

Shroud:	Hydraulically adjustable Mud Shield
Drive System:	Two low-speed, high-torque motors
Auger Diameter:	10.8 in (275 mm) without cutter knives 22.5 in (575 mm) with cutter knives
Auger Pitch:	11 in (280 mm)
Auger Flighting:	3/8 in (9.5 mm)
Speed:	Fixed at 60 RPM
Cutter Knives:	Detachable heat-treated blades
Auger Torque:	30,500 in-lbs. (3,450 N-m)

## WORKING CAPACITY

Cut:	9 ft-6 in (2.9 m) wide
Operating Depth:	25 ft (7.6 m) maximum

## ENGINE

Industrial Diesel 275 HP (205 kW) at 2800 RPM with drip pan under engine skid; radiator cooled

## FUEL USAGE

13.6 gallons (51.6 liters) per hour at full HP rating

## SLURRY PUMP

Hydraulic driven submersible slurry pump with high chrome 600 Brinell volute and Hardox 450 impeller. (Other material options available.)

Centrifugal Impeller:	Max solids diameter 4 in (102 mm)
Impeller Diameter:	22 in (560 mm)
Suction Diameter:	8 in (205 mm)
Discharge Diameter:	8 in (205 mm)
Nominal Pump Performance:	3000 GPM (681 m <sup>3</sup> /hr) against 150 ft (45.7 m) head Up to 267 yds <sup>3</sup> /hr (204 m <sup>3</sup> /hr) of production at 30% solids content. Results may vary.

## PROPULSION

Triple sheave hydraulic-driven winch	13 in (330 mm)
Traverse Speed:	0 - 60 FPM (18.3 m/min) maximum forward & reverse
Average Cutting Speed:	8 - 12 FPM (2.4 - 3.7 m/min)
Wire Rope Diameter:	3/8 in (9.5 mm)
Propeller Drive:	Dual propeller, 1,000 lb thrust total

## HYDRAULIC SYSTEM

Dual pumps	
Reservoir:	60 gallons (230 liters) at full mark
Circuit One:	Slurry pump drive - hydrostatic transmission
Circuit Two:	Auger, Traverse, Mud Shield, and Ladder Pressure Compensating Load Sense Pump Proportional Valve System

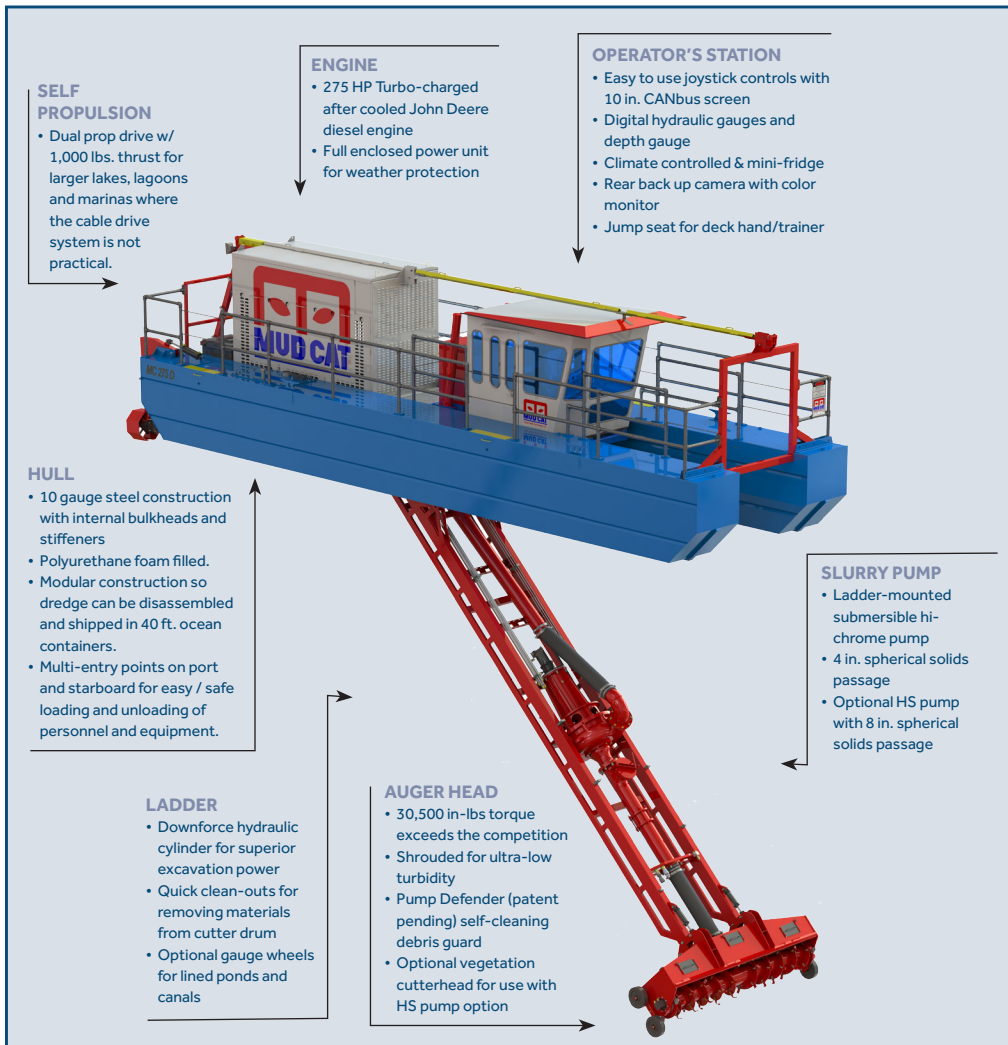
## CONTROL SYSTEM

On-Board Operator	
	<ul style="list-style-type: none"><li>• Engine - Start / Stop / Speed</li><li>• Slurry Pump - On / Speed</li><li>• Auger - Forward / Off / Reverse</li><li>• Travel - Forward / Off / Reverse / Speed</li><li>• Hoist - Up / Off / Down</li></ul>

## ELECTRICAL SYSTEM

Voltage:	12VDC
Alternator Output:	200 Ampere
Batteries:	(2) 12VDC, 205 Ampere Hour, Parallel Wired
Circuits:	2 wire system, full ground

# Mud Cat™ 275D Dredge



MC-275D Operator Cab

## OPTIONAL EQUIPMENT:

- High solids pump (up to 8 in. solids passage)
- WeedMaster vegetation cutterhead
- Depth extensions
- Flow meter
- Density meter
- Liner protection wheels
- Broadcaster Discharge Attachment
- GPS System (w/sub-meter accuracy)
- Slurry thickness tattle tail
- Stainless steel components and / or hull
- Pipe, hose, floats
- Spotlight
- Closed loop video monitor for discharge
- Remote control option for hazardous environments
- Partial and full automation packages

FEATURES	BENEFITS
Superior Pump Design	8 in. (203 mm) x 8 in. (203 mm) hi-chrome pump for minimal ware in abrasive slurries.
High Solids Pump	Standard pump passes 4 in (102 mm) spherical solids. Optional pump handles 8 in (203 mm) spherical solids
Versatile Propulsion	Dual prop drive w/ 1,000 lbs. thrust for large lakes, lagoons, and marinas. Cable drive for lined lagoons.
Powerful Cutterhead	30,500 in-lbs torque exceeds all competitors.
Down Force Ladder Cylinder	Allows operator to keep positive down-force into material so cutter will not walk on top of it.
Dredging Depth	25 ft. (7.6 m) standard dredging depth allows for greater project versatility with options to go up to 30 ft. (9.1 m) depth.
Modern Operator's Cab	Spacious, climate controlled operators cabin with electronic over hydraulic controls, rear back up camera, digital depth gauge, CANbus system for easy trouble shooting with factory, jump seat for deck hand/trainer, and mini-fridge make operations more comfortable and therefore more efficient for the crew.
Pump Defender (patent pending)	Allows for cleaning of the pump inlet after every revolution of the cutterhead to greatly reduce down-time in debris rich environments by up to 80%.
Modular Design	Disassemble the dredge and ship it in 40 ft ocean containers anywhere in the world to reduce transport costs and potentially import duties. Dredge easily disassembles for easier overhauls at maintenance milestones.
Vegetation Cutterhead	Optional WeedMaster cutterhead converts the MC-275D into a hydraulic weed harvesting system that will cut hyacinths, reeds, and other types of vegetation into small pieces and pump them up to 3,280 ft. (1 km) away (requires open impeller pump option).