IMS Model 5012 LP Versi-Dredge



OPERATING DIMENSIONS

 Length
 42 ft. 5 in. (12.9 m)

 Width
 11 ft. 3 in. (3.4 m)

 Height
 10 ft.5 in. (3.2 m)

 Weight (less fuel)
 28,000 lbs. (12,700 kg)

FLOTATION

Pontoons Two (2) pontoons, 39 in. x 38 in. x 360 in. (990 mm x 960 mm x 9,150 mm); 10 ga.

steel sides, bottom and 1/4" plate tops, internal bulkheads and stiffeners, and painted w/ a marine grade

epoxy paint

Displacement 37,000 lbs. (16,780 kg)
Draft 30 in. (760 mm)

WORKING CAPACITY

Cut 108 in. (2,740 mm) wide x 22 in. (560 mm) deep

Working Depth 22 ft. (6.7 m)

ENGINE

Type John Deere Diesel Model 6090AFM85; 6-cylinder 9.0 L,

375 HP (280 kW) @ 2,300 rpm

Fuel Capacity 300 gal. (1,135 liters)

HYDRAULIC SYSTEMS

Circuit #1 Slurry Pump

6.4 in³/rev.

60 gpm (3.78 liter/sec.) @ 4,500 psi

Circuit #2 Cutterhead, Boom, Winches and STARWHEELs®

7.9 in³/rev. load sense

75 gpm (4.73 liter/sec.) @ 2,500 psi

Reservoir 120 gal. (454 liters)

Filtration 1 reservoir mounted return filter with a 10-micron

(min.) rating with an indicator and cab warning light. Slurry pump circuit remote charge filter 6-micron (min.) rating with an indicator and cab warning light. Filter with

water removal capability are optional.

SOLIDSMASTER CUTTERHEAD

Cutterbar Diameter 22 in. (560 mm)

Cutterbar Length 108 in. (2,740 mm)

Drive Recessed dual hydraulic motor; direct drive with no

gear reduction

Speed (variable) 0 to 60 rpm @ 2,500 psi

Torque 23,885 in.-lbs. (2,969 N-m) @ 2,500 psi (peak)

Cutterhead Tip Force 2,171 lbs. (9,657 N)

Cutterhead Teeth Replaceable hardened steel excavator blades; available

with paddlebar for materials that are easily slurried

DREDGE PUMP

Type IM.

 Discharge Diameter
 12 in. (305 mm)

 Suction Diameter
 9.75 in. (248 mm)

 Impeller Diameter
 19.25 in. (489 mm)

 Sphere Passage
 6 in. (152 mm)

Pump Performance 3,500 gpm (220 liter/sec.) @ 65 ft. (19.8 m)

TDH (water) @ 900 rpm. rubber lined for use in

abrasives.

Speed (variable) 0 to 990 rpm

CONTROLS

Controls Electronic joystick controls are provided in a climate

controlled cab

PROPULSION

Propulsion STARWHEEL® Drive Self-Propulsion system; cable drive

infrastructure in place (cables & anchor plates

sold separately)

Speed (variable) 0 to 15 rpm (STARWHEELS - on surface)

0 to 7 rpm (STARWHEELS) - underwater)

0 to 55 fpm (cable drive)

ELECTRICAL SYSTEM

Voltage 24 volt, negative ground

Alternator Output 200 Amp

CORROSION PROTECTION

Standard Paint Superstructure and hull are sandblasted and

painted with two coats of marine epoxy suitable for saltwater service. Average paint thickness is 12 mils

\$88.55

minimum.

AVAILABLE ACCESSORIES

Estimated Hourly Operating Cost

Accessories Talk with a representative about options and custom

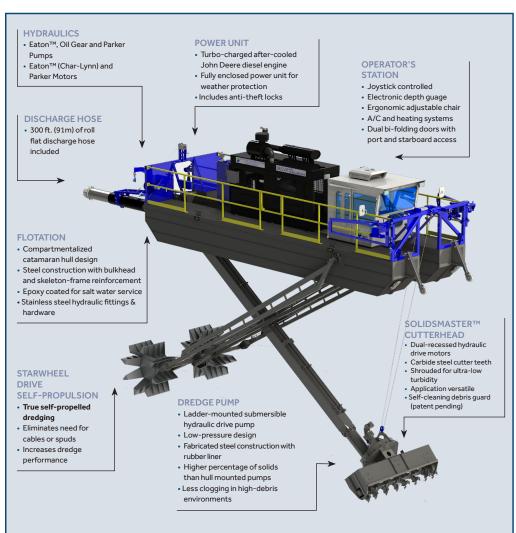
features available.

HOURLY ESTIMATED OPERATING COSTS (\$USD)

Fuel @ \$2.50/gallon	\$39.75
Insurance	2.00
Labor (2 men @ \$16/hr.)	32.00
Maintenance (filters, seats, etc.)	1.20
Accrued Mechanical Overhaul	4.00
Pump & Cutterhead Wear	6.00
Hull Maintenance	3.60

Prices subject to local economics

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FEATURES	BENEFITS
Superior Pump Design	12 in. (305mm) Hardox steel pump with rubber liner for abrasive service. Ladder mounted for higher solids than the competition. Proven worldwide for low downtime and easy maintenance.
High Solids Pump	Standard pump passes 6 inch (152mm) spherical solids.
Self-Propelled	Includes Patented Starwheel Drive self-propulsion system that allows for maximum maneuverability in lakes, canals, and rivers where setting anchors is not ideal. Patent pending Traction Master technology allows for higher speed paddling on surface that automatically switches to high torque mode when operating on the bottom of the water body for maximum traction control.
Powerful Cutterhead	23,885 in-lbs. torque with replaceable hard faced carbide steel trencher teeth.
Fully Enclosed Power Unit	Power unit has locking security doors and full shroud to protect from the elements and potential vandalism.
One Truck Transportable	Ships fully assembled and requires no installation of side tanks, spuds, or separate dredge ladder.
Dredging Depth	22 ft. (6.7m) standard dredging depth allows for greater project versatility. Deepest in its class.
Modern Operator's Cab	Spacious, climate controlled operators cabin with electronic over hydraulic joystick controls, rear back up camera w/ color monitor, 360 degree spot light, digital depth gauge, CANbus system for easy trouble shooting with factory, oversized analog back-lit gauges, sound system, fan, horn, windshield wipers, and dual folding doors for easy access to port and starboard decks
Pump Defender (Patented)	Standard patented Pump Defender 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%.
Vegetation Cutterhead (Patented)	Optional patented WeedMaster cutterhead converts the 5012 LP 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. (1km) away (requires open impeller option).
Clean Dredge Deck	No obstructions on deck and clear pathways from front to back and port and starboard decks. All components are designed for easy access and maintenance.
Complimentary Flexible Discharge Package	Includes 300 ft. (91m) of heavy duty flexible, roll-flat discharge hose and floats to give the dredge maximum maneuverability when connected to the hard discharge line.
Service and Support	12 month warranty with lifetime phone and e-mail support. Warranty site visits anywhere in the world if problem cannot be solved via phone. Largest field service staff in the transportable dredge industry backed by a dedicated Customer Project Coordinator for rapid communication.



A Model 5012 LP removes silt from channels at a resort in the Middle East.



All Versi-Dredge $^\circ$ models come standard with joystick controls and oversized gauges for ease of operation.

STANDARD EQUIPMENT

300 ft. (91 m) of roll flat discharge hose 12 saddle type hose floats Fully enclosed engine compartment Rock guard Windlass system for cable drive Climate-controlled operator cabin Pump/cutterhead view window Cathodic protection Joystick controls

Ergonomic adjustable chair Digital depth gauge Horn

360 degree lighting Two (2) swivel cranes (800 lb. capacity, 363 Kg)

U.S. hand tool kit and tool box

U.S. hand tool kit and tool box Sound system

360 Degree spotlight with toggle switch in cab Closed loop video monitor for discharge

OPTIONAL EQUIPMENT

WeedMaster® Cutterhead Weed Rake Broadcaster Discharge Attachment GPS System (w/sub-meter accuracy) Slurry thickness tattle tail Pipe, hose, saddle floats Navigation lights





