IMS Model 5012 LP Versi-Dredge®

IMS DREDGES®

OPERATING DIMENSIONS

Length	*42 ft. 5 in. (12.9 m)*
Width	*11 ft. 3 in. (3.4 m)*
Height	*9 ft. 11 in. (3 m)*
Weight (less fuel)	*27,400 lbs. (12,400 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 6068AFM85; 6-cylinder 6.8 L, 300 HP (224 kW) @ 2,500 rpm*
Fuel Capacity	*300 gal. (1,135 liters)*
Fuel Consumption	*17 gal./hr. (64 lit./hr.)*

HYDRAULIC SYSTEMS

Circuit #1	*Slurry Pump* *8.24 in^3/rev.* *81.1 gpm (5.11 liter/sec.) @ 4,000 psi*
Circuit #2	*Cutterhead, Boom, Winches and STARWHEELs®* *7.9 in^3/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 mounted charge filter 7-micron (min.) rating.*

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	*IMS*
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	*4,500 gpm (1022 m3/hr) @ 65 ft (19.8m) TDH (water) @ 1000 rpm*
Speed (variable)	*0 to 1000 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), 2 knot sailing speed* *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 minimum. Hull fitted with zinc anodes.*

AVAILABLE ACCESSORIES

Accessories	*Talk with a representative about options and custom features available.*

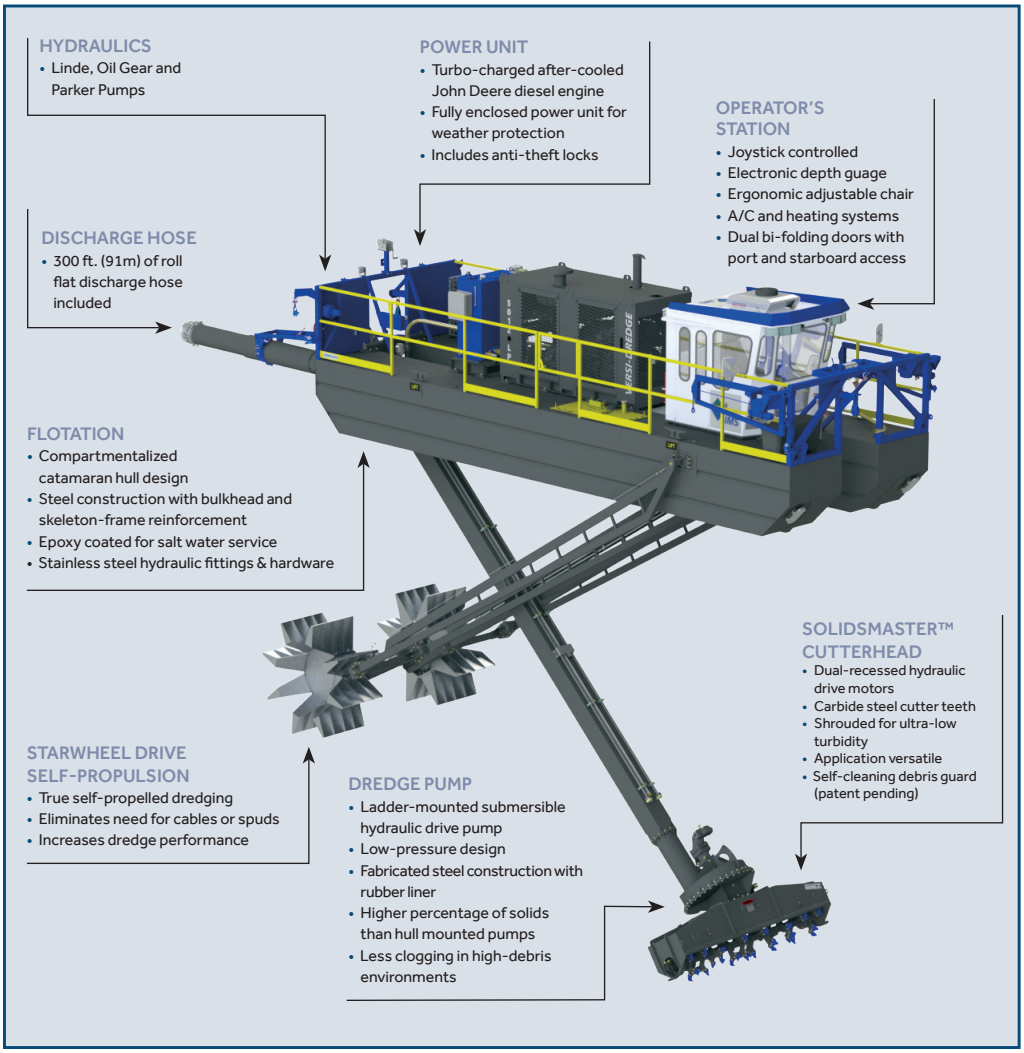
HOURLY ESTIMATED OPERATING COSTS ($USD)

Fuel @ $2.50/gallon	*$42.50*
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*
Estimated Hourly Operating Cost	**$88.55**

Prices subject to local economics

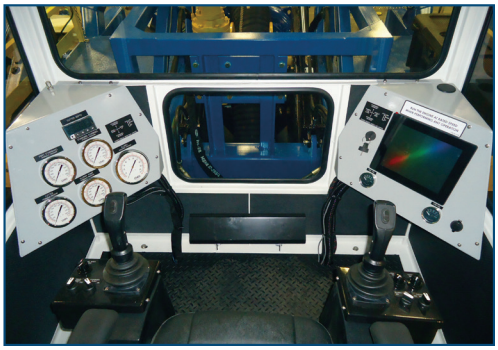
NOTE: Specifications subject to change without notice.

IMS Model 5012 LP Versi-Dredge®



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 phone and e-mail support. Warranty site visits if problem cannot be solved over the phone.

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



All Versi-Dredge® models come standard with joystick controls and oversized gauges for ease of operation.

STANDARD EQUIPMENT

Rubberized discharge hose w/ quick disconnect fittings (6 x 50 ft.)
12 saddle type hose floats
Fully enclosed engine compartment
Patented Pump Defender® self-cleaning debris guard
Patented Starwheel Drive® self-propulsion system
Slurry sample line with toggle switch in cab
Modern climate-controlled operators' cabin (A/C & Heat)
Easy to use joystick controls for all dredge functions
Back up cable drive system for lined ponds, etc.
Rear back up camera w/ color display in cabin
Digital depth gauge
Nighttime operating lights
360-degree spotlight with toggle switch in cab
Marine grade sound system
Safety package (life ring, first aid kit, life vests, and fire extinguisher)
Telematics Ready
Anti-Corrosion package (stainless fittings & hardware)

OPTIONAL EQUIPMENT

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

ISO 9001:2015 BUREAU VERITAS Certification

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IMS DREDGES®
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