

# IMS Model 5012 HP Versi-Dredge®

## OPERATING DIMENSIONS

Length	45 ft. 6 in. (13.9 m)
Width	11 ft. 3 in. (3.4 m)
Height	10 ft 5 in.. (3.2 m)
Weight (less fuel)	30,500 lbs. (13,800 kg)

## FLOTATION

Pontoons	Two (2) pontoons, 39 in. x 38 in. x 408 in. (990 mm x 970 mm x 10,370 mm); 10 ga. steel sides, bottom and 1/4" plate tops, internal bulkheads and stiffeners, and painted w/ a marine grade epoxy paint
Displacement	41,500 lbs. (18,800 kg)
Draft	29 in. (790 mm)

## WORKING CAPACITY

Cut	108 in. (2,740 mm) wide x 22 in. (559 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 7.6 in <sup>3</sup> /rev. 72 gpm (4.54 liter/sec.) @ 4,500 psi
Circuit #2	Cutterhead, Boom, Winches and STARWHEELS® 7.9 in <sup>3</sup> /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	GIW cast iron pump
Discharge Diameter	8 in. (203 mm)
Suction Diameter	10 in. (254 mm)
Impeller Diameter	24 in. (610 mm)
Sphere Passage	4 in. (101 mm)
Pump Performance	3,500 gpm (795 m <sup>3</sup> /hr) @ 135 ft. (41.1 m) TDH (water) @ 856 rpm
Speed (variable)	0 to 881 rpm

## CONTROLS

Controls	Electronic joystick controls are provided in a climate controlled cab
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## 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-on bottom) 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.
Cathodic protection	Standard

## AVAILABLE ACCESSORIES

Accessories	Talk with a representative about options and custom features available.
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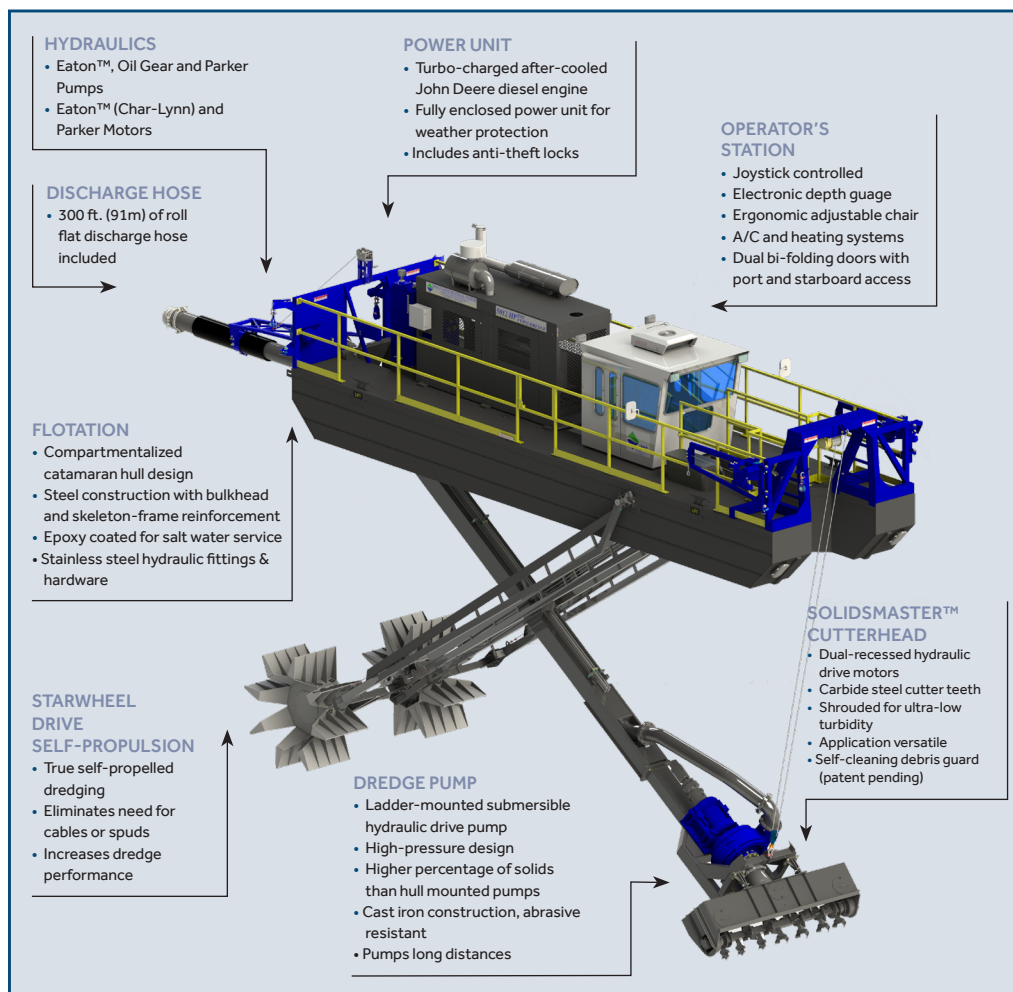
## HOURLY ESTIMATED OPERATING COSTS (\$USD)

Fuel @ \$2.50/gallon	\$39.95
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 \$88.30**

Prices subject to local economics

# IMS Model 5012 HP Versi-Dredge®



A Model 5012 HP removes sand from a large marina in California.



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

## STANDARD EQUIPMENT

- 300 ft. (91m) of roll flat discharge hose
- 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)
- Anti-Corrosion package (stainless fittings & hardware)

## OPTIONAL EQUIPMENT

- Broadcaster Discharge Attachment
- GPS System (w/sub-meter accuracy)
- Slurry thickness tattle tail
- Additional corrosion protection package
- Pipe, hose, saddle floats
- Navigation lights

FEATURES	BENEFITS
<b>Superior Pump Design</b>	8 in. (203mm) x 10 in. (254mm) hi-chrome pump for continuous abrasive service. Ladder mounted for higher solids than the competition. Pump longer distances without a booster pump. 795m <sup>3</sup> /hr. (1,033 yds <sup>3</sup> /hr) nominal pump capacity & 199m <sup>3</sup> /hr. (260 yds <sup>3</sup> /hr.) total solids capacity.
<b>High Solids Pump</b>	Standard pump passes 4 inch (101mm) spherical solids.
<b>Self-Propelled</b>	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.
<b>Powerful Cutterhead</b>	23,885 in.-lbs. torque with replaceable hard faced carbide steel trencher teeth.
<b>Fully Enclosed Power Unit</b>	Power unit has locking security doors and full shroud to protect from the elements and potential vandalism.
<b>One Truck Transportable</b>	Ships fully assembled and requires no installation of side tanks, spuds, or separate dredge ladder.
<b>Dredging Depth</b>	22 ft. (6.7m) standard dredging depth allows for greater project versatility. Deepest in its class.
<b>Modern Operator's Cab</b>	Spacious, climate controlled operators cabin with electronic over hydraulic joystick controls, rear back up camera w/ color monitor, 360 degree spotlight, 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.
<b>Pump Defender (Patented)</b>	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%.
<b>Clean Dredge Deck</b>	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.
<b>Complimentary Flexible Discharge Package</b>	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.
<b>Service and Support</b>	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.



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IMS, A Division of EDT



Recipient of the U.S. President's E-Award

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