



IMS Model 7012 HP Versi-Dredge®

OPERATING DIMENSIONS

Length	51 ft. 5 in. (15.7 m)
Width	12 ft. (3.66 m)
Height	10 ft. 8 in. (3.25 m) w/muffler removed
Weight (less fuel)	47,700 lbs. (21,600 kg)

INTERNATIONAL SHIPPING DIMENSIONS

Length Option	49 ft. 2 in. (15 m) - STARWHEEL®s removed
Width	12 ft. (3.66 m)
Height	10 ft. 8 in. (3.25 m) w/ muffler removed
Weight (less fuel)	47,000 lbs. (21,319 kg)
Shipping Method	Break bulk, 20' ocean container required for all shipments

FLOTATION

Dimensions	Two (2) pontoons, 45 in. x 43 in. x 468 in. (1,150 mm x 1,090 mm x 11,900 mm); 10 ga. Steel sides, bottom and 1/4" plate tops, internal bulkheads and stiffeners, and painted w/ a marine grade epoxy paint
Displacement	63,300 lbs. (28,700 kg)
Draft	35 in. (890 mm)

WORKING CAPACITY

Cut	135 in. (3,430 mm) wide x 26 in. (660 mm) deep
Working Depth	30 ft. (9.1 m)
Depth Extension	None available

ENGINE

Type	John Deere Diesel Model 6135 AFM85; 6 cylinder 13.5 L, 500 HP (373 kW) @ 2,200 rpm
Fuel Capacity	400 gal. (1,510 liters)

HYDRAULIC SYSTEMS

Circuit #1	Slurry Pump 14.4 in ³ /rev. 115 gpm (7.3 liter/sec.) @ 5000 psi (34.5 MPa)
Circuit #2	Cutterhead, Boom, Winches and STARWHEELS® 8.5 in ³ /rev. loadsense 82 gpm (5.2 liter/sec) @ 2,500 psi (17.2 MPa)
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.

CUTTERHEAD

Cutterbar Diameter	26 in. (660 mm)
Cutterbar Length	135 in. (3,430 mm)
Drive	Recessed dual hydraulic motor; direct drive with no gear reduction
Speed (variable)	0 to 60 rpm @ 2,500 psi
Cutterhead Torque	23,885 in.-lbs. (2,969 N-m) @ 2,500 psi (peak)
Cutterhead Tip Force	1,837 lbs. (8,171 N)
Cutterhead Teeth	Replaceable carbide steel teeth

DREDGE PUMP

Type	GIW
Discharge Diameter	10 in. (254 mm)
Suction Diameter	12 in. (304 mm)
Sphere Passage	5.0 (127 mm)
Pump Performance	5,000 gpm (1136 m ³ /hr) @ 141 ft. (43.0 m) TDH (water) @ 800 rpm
Speed (variable)	0 to 790 rpm

PROPULSION

Propulsion	STARWHEEL® Drive Self-Propulsion system; cable drive infrastructure in place (cables & anchor pites sold separately)
Speed (variable)	0 to 31 rpm @ surface 0 to 7 rpm @ underwater 0 to 55 fpm (cable drive)

ELECTRICAL SYSTEM

Voltage	24 volt, negative ground
Alternator Output	200 Amp

SAFETY FEATURES

Includes	2 fire extinguishers, hand rail system, dual folding cabin doors, dual warning horns, 1 life ring, 2 life jackets, locking power unit
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ANTI-CORROSION FEATURES

Includes	Hull below deck is painted with a marine-grade epoxy, above hull deck painted with polyurethane epoxy, and remaining components are coated with heavy duty powder coating all suitable for salt water service. Also includes stainless steel hydraulic lines, fittings, and all suitable hardware.
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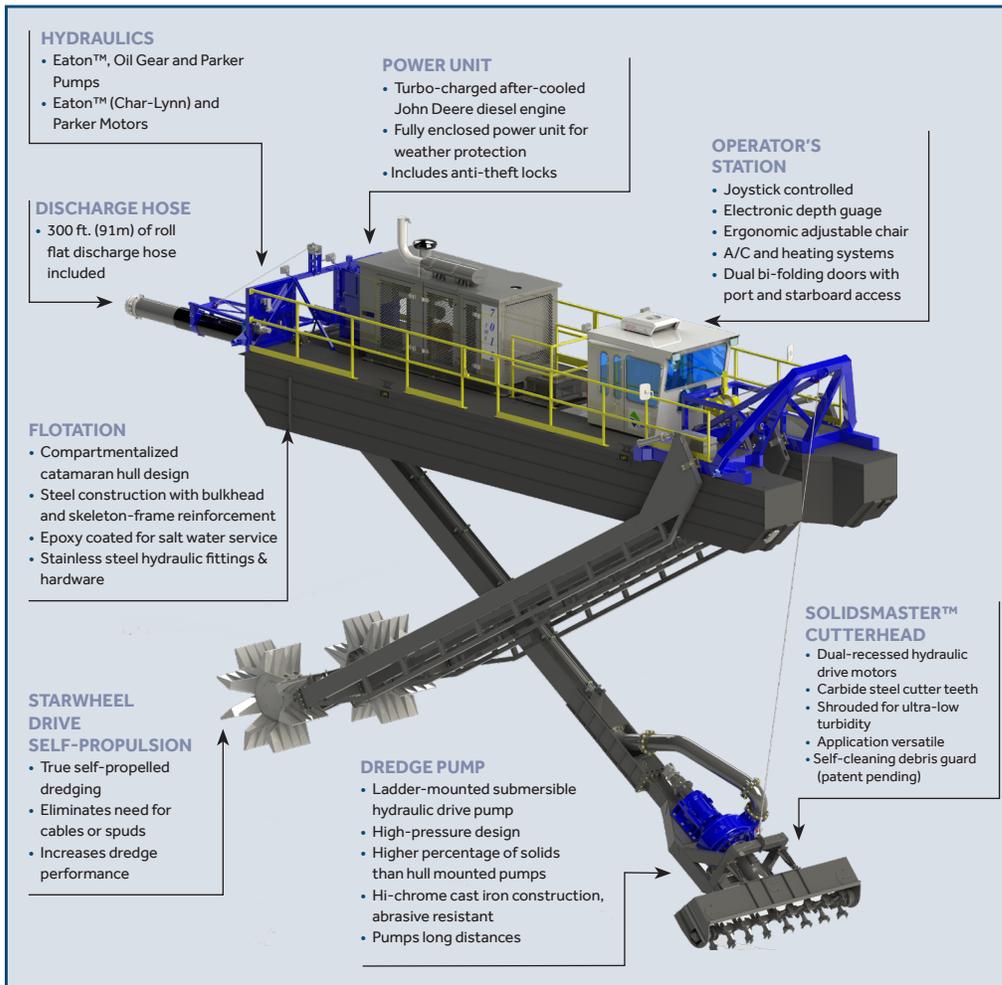
HOURLY ESTIMATED OPERATING COSTS (\$USD)

Fuel @ \$3.00/gallon	\$51.50
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 \$126.30

Prices subject to local economics

IMS Model 7012 HP Versi-Dredge®



A Model 7012 HP Versi-Dredge® mines sand from a river in Monrovia, Liberia.



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:

- 12 in. (305 mm) discharge pipe/hose
- Bi-Directional Broadcaster
- Dredging GPS System
- Cable Drive set-up package
- Dredge navigation lights
- Spare Parts
- Booster Pumps w/ custom instruments
- Environmental Plus Cutterhead

FEATURES	BENEFITS
Superior Pump Design	10 in. (254mm) x 12 in. (305mm) hi-chrome pump for continuous abrasive service. Ladder mounted for higher solids than the competition. Pump longer distances without a booster pump. 1,135m ³ /hr. (1,475 yds ³ /hr) nominal pump capacity & 284m ³ /hr. (371 yds ³ /hr.) total solids capacity.
High Solids Pump	Standard pump passes 5 inch (127mm) 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	30 ft. (9.1m) 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%.
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 & 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.

