

# Cutter Suction Dredges



# Selecting the Right Company

**P**urchasing a dredge is a major decision. Choosing the right size and model is important, but so is selecting the company who builds it. The supplier should support you with service, parts, training, and upgrades, all necessary to keep the dredge operating efficiently for 25 years or more. Ellicott has a long history of living up to these expectations, and its dredges have proven to be sound investments.



*Charles Ellis Ellicott*

**T**his tradition started in 1885 when Charles Ellicott started a machine shop in the growing city of Baltimore, Maryland. Business thrived, and in 1888 he was approached by a local contractor and asked to design and build new machinery for a dredge that was struggling in nearby Washington, DC. At that time, hydraulic dredging was still in its infancy and effective designs were still being explored.

Combining his engineering knowledge and manufacturing expertise, Mr. Ellicott supplied one of the first true dredge pumps and other specialized components. This retrofitted dredge was productive, reliable and well suited to its task. Word got around, and soon others started coming to Mr. Ellicott for complete dredges.



*Ellicott 20" Dredge at work in Panama Canal Lock in 1913*

**B**y 1907 the U.S. Corps of Engineers took notice and purchased four dredges for the largest construction project ever undertaken—the Panama Canal. The successful performance of these machines led to “Ellicott” becoming a name known all over the world for strong, capable, and versatile dredges.

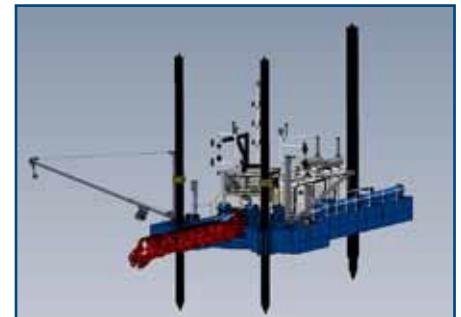


*Dredge Operator Control Systems*

From the beginning, Ellicott believed that developing innovations to meet the needs of customers was just as important as building reliable dredges. This philosophy led to many industry firsts including portable dredges, the swinging ladder dredge, submerged ladder pumps for deep digging and the bucket wheel excavator system.

**E**llicott has grown to become one of the world's largest dredge manufacturers, and while its products incorporate the best available technology, they are sold under the basic principles established by Mr. Ellicott over a century ago:

- Supply dredges that are designed to meet the customer's requirements.
- Build them to the highest standards.
- Offer service and training for every dredge.



*State-of-the-Art 3D CAD Engineering Model*

This tradition of offering modern, efficient, and well built dredges continues today as Ellicott® dredges find their way to all corners of the world.



*Ellicott designs and builds dredges at its Baltimore, Maryland and New Richmond, Wisconsin USA plants (pictured above) plus occasional overseas shipyards.*

## 370 Dragon<sup>®</sup>

12" x 10" (304 x 254 mm)

## 670 Dragon<sup>®</sup>

14" x 12" (356 x 304 mm) or  
14" x 14" (356 x 356 mm)

- Portable Dredges with a Simple Design—Ideal for First-time Owners
- High Durability and Easy to Maintain
- Specially Designed Control System, Engine, and Mechanical Components for Marine and Tropical Environments
- Choice of Digging Depths Available
- The 670's Full-length Side Tanks Provide Added Stability & Deck Space
- The 370 is also Available with Hydrostatic Pump Drive and Electronic Control System



370-20 (6 m) dredging a marina

Unit Model Digging Depths	370			
	20 ft (6 m)	26 ft. (8 m)	33 ft. (10 m)	42 ft. (12.8 m)
Cutter Power	40HP (30 kW)			
Pump Power	350HP (261 kW)			
Total Power	440 HP (328 kW)			
Nominal Pump Capacity	Up to 250 yd <sup>3</sup> /hour (190 m <sup>3</sup> /hour)			



370-42 ft. (12.8 m) mining sand



670-33 ft. (10 m) dredging small port

Unit Model Digging Depths	670	
	33 ft. (10 m)	42 ft. (12.8 m)
Cutter Power	100HP (75 kW)	
Pump Power	620HP (462 kW)	
Total Power	800 HP (597 kW)	
Nominal Pump Capacity	Up to 425 yd <sup>3</sup> /hour (345 m <sup>3</sup> /hour)	



670-42 ft. (12.8 m) dredging a river

## 870JD Jet Dragon®

14" x 14" (356 x 356 mm)



870JD 60 ft. (18 m) used for sand mining

<b>Digging Depth</b>	60 ft. (18 m)
<b>Cutter Power</b>	100HP (75 kW)
<b>Pump Power</b>	575HP (429 kW)
<b>Total Power</b>	960 HP (716 kW)
<b>Nominal Pump Capacity</b>	Up to 450 yd <sup>3</sup> /hour (345 m <sup>3</sup> /hour)

- Ideal Medium Size Dredge for Deep Digging Applications
- Hydra-Jet Suction Assist Allows for High Production at any Digging Depth
- NO Submerged Ladder Pump—Keeps Design and Maintenance Simple

## 1170 Dragon®

16" x 16" (406 x 406 mm)



## 1270 Dragon®

18" x 18" (457 x 457 mm)



	1170	1270
<b>Digging Depth</b>	33 ft. (10.5 m)	50 ft. (15.24 m)
<b>Cutter Power</b>	155 HP (116 kW)	
<b>Pump Power</b>	850 HP (634 kW)	1000 HP (746 kW)
<b>Total Power</b>	1200 HP ( 895 kW)	1350 HP (1007 kW)
<b>Nominal Pump Capacity</b>	Up to 600 yd <sup>3</sup> /hour (460 m <sup>3</sup> /hour)	

- High Production with Dedicated Engine for Pumping System
- Separate Engine for Hydraulic System
- Used in a Variety of Applications including Coastal, River Dredging, and Sand and Gravel Mining

# 1870 Dragon<sup>®</sup>

20" x 20" (508 x 508 mm)



<b>Digging Depth</b>	50 ft. (15.24 m)
<b>Cutter Power</b>	250 HP (186 kW)
<b>Pump Power</b>	1280 HP (955 kW)
<b>Total Power</b>	1755 HP (1309 kW)
<b>Nominal Pump Capacity</b>	Up to 1000 yd <sup>3</sup> per hour (775 m <sup>3</sup> /hour)

- 5-piece Hull allows Transport by Trucks
- Optional Spud Carriage & Anchor Booms
- Separate Engines for Dredge Pump and Hydraulic System and Generator
- Proven Record for River Dredging, Port Applications and Land Reclamation



# 4170 Super-Dragon<sup>™</sup>

27" x 24" (686 x 610 mm)

<b>Digging Depth</b>	58 ft. (17.7 m)
<b>Cutter Power</b>	750 HP (560 kW)
<b>Pump Power</b>	2680 HP (1998 kW)
<b>Total Power</b>	4232 HP (3156 kW)
<b>Nominal Pump Capacity</b>	Up to 1800 yd <sup>3</sup> per hour (1375 m <sup>3</sup> /hour)



- Heavy-duty, Long Life Design
- 750 HP Cutter allows Digging of Very Hard Materials
- Available as a Single Welded Monohull Design or 6-piece Dismountable Hull
- Optional Spud Carriage & Anchor Booms

## **Super-Dragon™**

Greater than 24" Discharge



## **Coastal Dragon®**

Hulls with Additional Freeboard



## **Wheel-Dragon™**

Dual Wheel Excavators



## **Electric Dredges**

Available in All Sizes



## **Booster Pumps**

325HP through 2,000HP

- Ideal for Pumping Greater Distances
- Skid Mounted or Floating
- Electric or Diesel



[www.westafricadredge.com](http://www.westafricadredge.com)