



There Is Genius In Simplicity







WWW.CUSTOMDREDGEWORKS.COM

Building The Ultimate Mining Dredge

"Built-Like-A-Tank" Hefty Construction

Created for the day-to-day rigors of Mining

Design Innovations to Maximize Production and Minimize Shutdowns

Compliant with or Exceeding Industry Construction Standards

Conforms to Industry & Government Safety Standards and Requirements

Retains a high percentage of Original Value over decades

Custom Designed to achieve Success with your Deposit and specific mining challenges

Mine Sand, Gravel, and even Rock up to 12" in diameter*

Cut and Emulsify clay

Customizable Features with robust Upgrade Options

All models include the CDW Dredge Operations System with Touch-Screen Display

Redundant Analog Gauges and Controls

Created with 22-years of experience encountering almost every conceivable mining scenario

Minimal amount of unexpected downtime

Utilize "Best-In-Class" Parts and Components for fast Repairs and Replacements

Built by a Family Owned Company

As members of our Family, our Customers enjoy unending Support

The premier value Dredge in the Aggregate Mining Industry



* Rock size dependent upon pump design







BUILDING ON A HISTORY OF EXCELLENCE

A new Dredge is likely one of the largest and most important investments you will make for your business. Our primary goal is to make sure that your decision to acquire a dredge from Custom Dredge Works will produce maximum return on your investment day-in and day-out for years to come.

Custom Dredge Works brings 40-years of hands on metal fabrication experience and 22-years of dredge design expertise to building world class dredges. We are focused exclusively on manufacturing the highest quality custom dredge solutions possible. With a sizable fleet of more than 120 dredge projects built and in operation, Custom Dredge Works has emerged as the premier manufacturer of hydraulic cutter suction dredges. Our growth and success comes from you, our customer, and is earned by delivering a dredge that exceeds expectations for both quality, performance and budget.



There is Genius in Simplicity!

There are very few industries where the old adage 'Time is money' is more apropos than in Dredging. For this reason, Custom Dredge Works believes in the genius of simplicity.

Our dredges offer the perfect combination of form & function resulting in optimum performance, consistent reliable results, and excellent return on investment.

- *A Dredge That Is Easy to Operate*
- *A Dredge With Easy to Acquire Replacement Parts*
- *A Dredge That Is Easy To Self-Repair and Maintain*
- *A Dredge That Is Reliable*

After years of real world experience with what works, and analyzing the challenging issues produced by competitive solutions, Custom Dredge Works believes that High value Dredges should meet the following requirements:

1. **“Built like a tank” Construction:** Solid, heavy duty, especially ladders and Trunions. Extra internal supports, reinforcements, trusses, double and overlapping welds and joints. Socket welds on all hydraulic lines. Rigid quality control inspections and scrutiny. Skilled craftsmen, utilizing the latest fabrication technology.
2. **Longevity:** Maintained properly, our dredges are designed and built to provide a productive functional lifespan of up to 40 years.
3. **Accurate and Predictable Production Capability:** Our dredges are very carefully custom designed for each client and application. If the site composition was accurately described, and the dredge Operator is competent, our dredges should consistently perform at or beyond the desired metrics.
4. **Minimize Unscheduled Shutdowns:** Since time is quite literally money in the world of Dredging, unscheduled shutdowns must be minimized and shortened as much as possible. After years of trial & error and common-sense analysis, consistent patterns have emerged as to why unscheduled shutdowns occur. Based on these patterns, our dredges anticipate, avoid, and shorten shutdowns employing key strategies.
5. **Use only “Best-in-Class” O.E.M. parts:** This allows for quick and easy access to local parts dealers in most locations for fast self maintenance or local certified repairs. The specific OEM brand components used in your customized dredge are determined by you and aligned with your preferences.
6. **Utilization of high quality electronic controls:** However, the dredge must be able to operate in the event of a lightning strike or an electronic failure. Our dredge control systems have built-in redundancy so you can continue to operate independent of a PLC or computer control.
7. **Employ two completely separate Hydraulic systems.**
8. **Stainless Steel Hydraulic fluid tanks:** Avoid the residue pollutants produced by tank coatings, which inevitably corrupt all hydraulic systems.
9. **Back-Up Gearbox Replacement Program:** CDW stocks its standard gearboxes, in the event a replacement must be immediately available. CDW can ship new or offer a remanufactured alternative at a more economical cost.
10. **Fast deployment of replacement parts:** Parts and service crews can be dispatched for emergency projects at a moments notice.
11. **Support:** Immediate expert telephone support.



BUILDING A SUPERIOR WORLD CLASS DREDGE

Customization is our Fine Art

Our charter commitment and devotion is to custom design, engineer, and build your Dredge bow to stern guided by your uniquely specified requirements. We begin every build by completing an exhaustive analysis of your unique environment, obstacles, production objectives, and preferences balanced against your investment budget to develop a tailored design.

Distinguishing Characteristics

The right tool for the right job. Experience has shown that inexpensive solutions usually lead to production issues in the field, while overly complicated technology and gadgets can translate into unscheduled shutdowns with long wait times for parts and trained repair technicians. In addition, it is common for many of our competitors to employ proprietary parts and components, which require long-term allegiance. This approach typically results in costlier and time consuming repair and maintenance issues.





Custom Dredge Works offers Semi-Portable Hydraulic Cutter Suction Dredges with the following Design Highlights and Options

- Straight Suction, CutterHead, or ChainLadder
- Discharge sizes 8" to 20"
- Fixed or Swinging Ladders
- Deep Digging Ladders with Underwater Mounted Pumps
- Electric, Diesel, or Natural Gas
- The Best-in-Class OEM systems, components, and parts
- Determine your preferred brands for Engine, Pump, and other Components
- Any desired Spud or Wire configuration for Positioning
- Heavy duty socket welds for all hydraulic connections
- All hydraulic lines are heavy steel pipe
- Stainless Steel Hydraulic fluid tanks
- Dual Hydraulic Systems to minimize oil contamination
- Remote control Stellar Crane
- Any cab size and configuration
- GPS and other Dredge Automation and control options and capabilities
- Data Log Recording, Reporting and Distribution capabilities
- CDW Production Control Valve System
- Touch Screen Displays
- Redundant hydraulic manual controls
- Redundant analog gauge instrumentation
- Control Boosters and Dewatering Wheel from Cab
- Remotely view and record dredging activities from any location
- Water Jets, Venturies
- Any color scheme design per your preference
- Marine Grade Epoxy Paint
- Solid HDPE Planks Located Along Side Flotation; extends life of hull
- Aluminum Speedrail Package
- 18-month warranty on the dredge and all components
- Hands-on Dredge Assembly, Launch, and Training

CUTTER SUCTION DREDGES

We are confident that once you evaluate all that we have to offer and review our methods and designs, you will agree that selecting Custom Dredge Works as your partner is the optimal choice to design and build your next dredge.



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Complimentary Ongoing Support

As a Custom Dredge Works customer and member of the Custom Dredge Works family, your team will enjoy direct access to our professional support team to expedite and trouble shoot issues with your Custom Dredge Works dredge.

Our support team includes experts in Electrical, Automation, Hydraulics, Mechanical, and Replacement Parts.



DIGGING DEEP

- Modern CutterHeads with replaceable teeth
- CutterChain designs with 7", 8", 9", or 11" pitch
- Straight Suction and Powerful Water Jets
- Underwater Ladder Mounted Pumps
- Production Control Valves, and Venturies
- Extra Strong Ladders and Trunions
- Dredge deep with power and confidence



AUTOMATION

- Touch Screen Displays
- Display and Record all variables and activity
- View and Record Production Remotely
- Automate Dredging Plan
- Depth, GPS, Pump Speed, Density Meter
- Automate pump speed and ladder control
- Control of Boosters from cab
- Many Automation options are available



CUSTOMIZE YOUR COMPONENTS

- Choose favorite make Pump, Engine, Winch, etc.
- Configure your cab size, controls, lights, cranes, etc.
- Request unique designs, components and features
- Personalize the color scheme and dredge name



POSITIONING

- Three-wire
- Five-wire "Christmas-tree"
- Rear Spuds and/or Forward Spuds
- Walking or Push Spuds
- Traveling Spud Barges
- Self-propulsion options



ELECTRIC POWERED DREDGES

Custom Dredge Works is one of the largest and most highly regarded electric dredge manufacturers in the US. We have a team of skilled Electrical and Mechanical Engineers on staff with extensive experience in designing, building, and launching electric powered dredges and booster pumps. Our engineers can also assist you with insight and recommendations for establishing electrical transformers at your location.

Custom Dredge Works brings a unique skill set capable of facilitating power conversion projects from diesel powered dredges and boosters to electric power.

[\(Ask for our White Paper on the cost savings of converting to electric\)](#)



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ELECTRIC POWERED DREDGE FEATURES

ECOLOGICAL BENEFITS:

- Elimination of diesel engine air pollution
- Elimination of fuel spill water pollution
- Considerable reduction in noise pollution as they are much quieter than diesel!
- Compliance with current or future Federal, State, and Local emissions, water, and noise statutes

ECONOMIC BENEFITS

- Electric powered dredges are now roughly equal in cost with Tier 4 diesel dredges
- Reduction or elimination of engine maintenance costs
- Easier to locate and hire qualified workers
- Electric motor useful life can be two to three times greater than diesel engines
- Improve production output with reduced maintenance and downtime
- Consistent Production and cash-flow predictability
- Improve customer satisfaction
- The resale value and demand for used electric dredges is much greater
- Ease of use. A simple on/off switch and an occasional squirt of oil
- Happier, less encumbered and less stressed operations and maintenance personnel
- Elimination of fuel transport costs
- Elimination of fuel spill liability and cleanup costs
- Elimination of shutdown costs for refueling and oil changes
- Elimination of liability for non-compliance of emission, water, and noise pollution statutes
- Improved public relations image with neighbors, environmental authorities and activists
- May contribute to making mining permits easier to obtain
- Acquire LEED points and boost your reputation for Government contracts.



BOOSTER PUMPS



BOOSTER PUMP STATION FEATURES

- Best-in-Class OEM parts (no proprietary, hard to replace parts)
- Expert, computerized assistance in sizing and placement of your new booster pump(s)
- Superior engineering and a customized design per your specifications and requirements
- Choose your Pump and size up to 24": Pearce, Metso, GIW, or other
- Excellent workmanship and Heavy-Duty A36 steel fabrication
- Safe, functional, and aesthetic Skids with Headache racks
- State-of-the-art Automated Engine Throttle Control and Telemetry
- Wireless system to monitor and control booster remotely (option)
- Expert Set-Up, Systems Integration, and Training
- Enclosed and air-conditioned container for VFD and motor controls
- An 18-month warranty on all other components and workmanship
- Painted any color scheme according to your preferences
- Marine Grade Epoxy Paint
- Long-life and high resale value
- Free after-sale support and consultation services

Contact us for a Free Computerized Booster Placement & Sizing Analysis



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DEWATERING BUCKET WHEELS

Through many years of real life applications along with the evolution of new technology and engineering improvements, Custom Dredge Works designs the highest quality and most cost-effective Dewatering Wheel in the aggregate industry.



DEWATERING BUCKET WHEEL FEATURES

- Wheels that produce 300 Tons Per Hour up to 1200 TPH
- Extreme quality and heavy-duty construction using ¼" thick A-36 steel
- Fabricated AR400 for Wheel and wear edges
- Hydraulic wheel drive
- Hydrostatic transmission
- Toshiba electric motor with softstart
- Standard urethane screens with 1/8" openings
- The Bucket Wheel Operating Systems adjusts the speed of the Bucket Wheel commensurate with the feed it receives from the Dredge and provides a variety of other automation controls.
- Remote display of wheel control via radio modem (option)
- Custom Dredge Works will provide a Service Technician to oversee the assembly of the Wheel on site and to provide system integrations and operator training
- A 12-month warranty on components and workmanship
- Free after-sale support, consultation services, and troubleshooting
- Painted any color scheme according to your preferences
- Marine Grade Epoxy Paint
- Our Bucket Wheels can accept direct dredge feed in many applications.

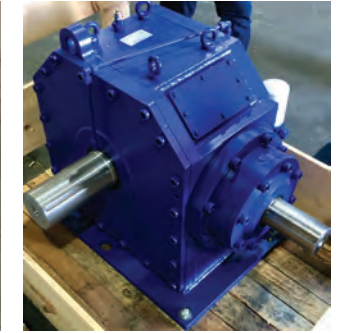
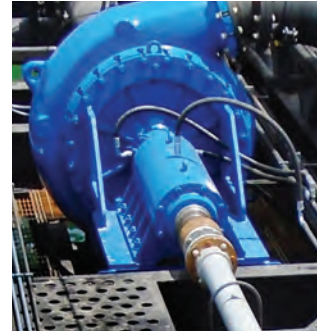






Replacement Parts

We also have a wide spectrum of parts & components in stock for most make/model dredges:



- Cutter Heads and replacement Teeth
- Gearboxes
- Hydraulic Components
- Most OEM PUMPS and Pump wear parts to fit all models (Pearce, GIW, Metso)
- Packing
- CutterChain Pitch sizes 7, 8, 9, and 11
- Nose Liners and Track Liners
- Discharge and Suction Hoses
- Discharge Elbows. WE STOCK MANY SIZES
- Winches and Winch Parts (Pullmaster, Gearmatic, Braden)

- Pipe Floats
- Cable Floats
- Snatch Blocks and Sheaves (New & Rebuilt)
- Aluminum Bronze Thrust Washers
- Cutlass Bearings
- Special Fabricated Parts per your design specs
- Floating Process Pump Stations
- Torque Tubes
- Joy Sticks / Controls
- Electric Motors
- Flow Meters
- and more...

Service & Support

We are experts at Dredge Renovations, Redesigns, and Upgrades. Conversions from diesel to Electric power, Ladder Extensions, etc. for ANY Make/Model Dredge.

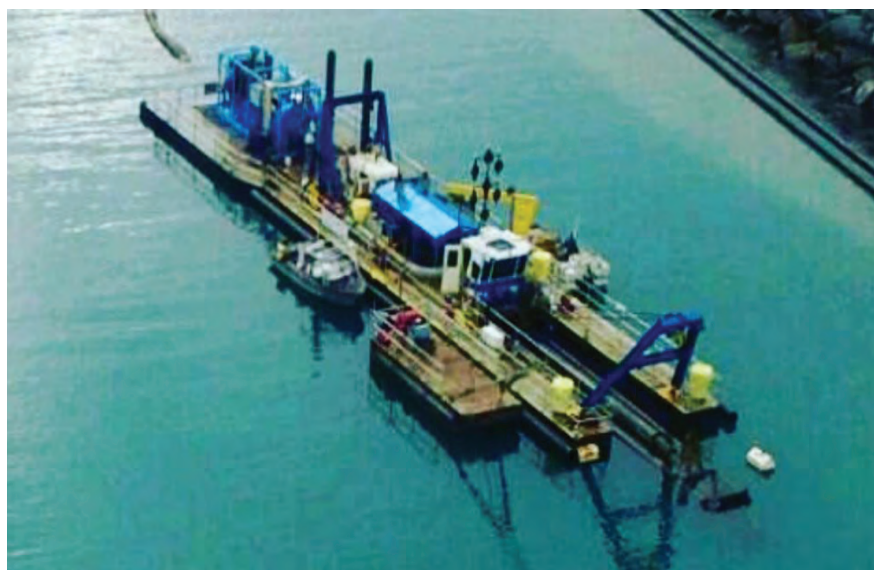
We have seven trucks and crews to provide fast on-site service for most dredge repair or upgrade projects.















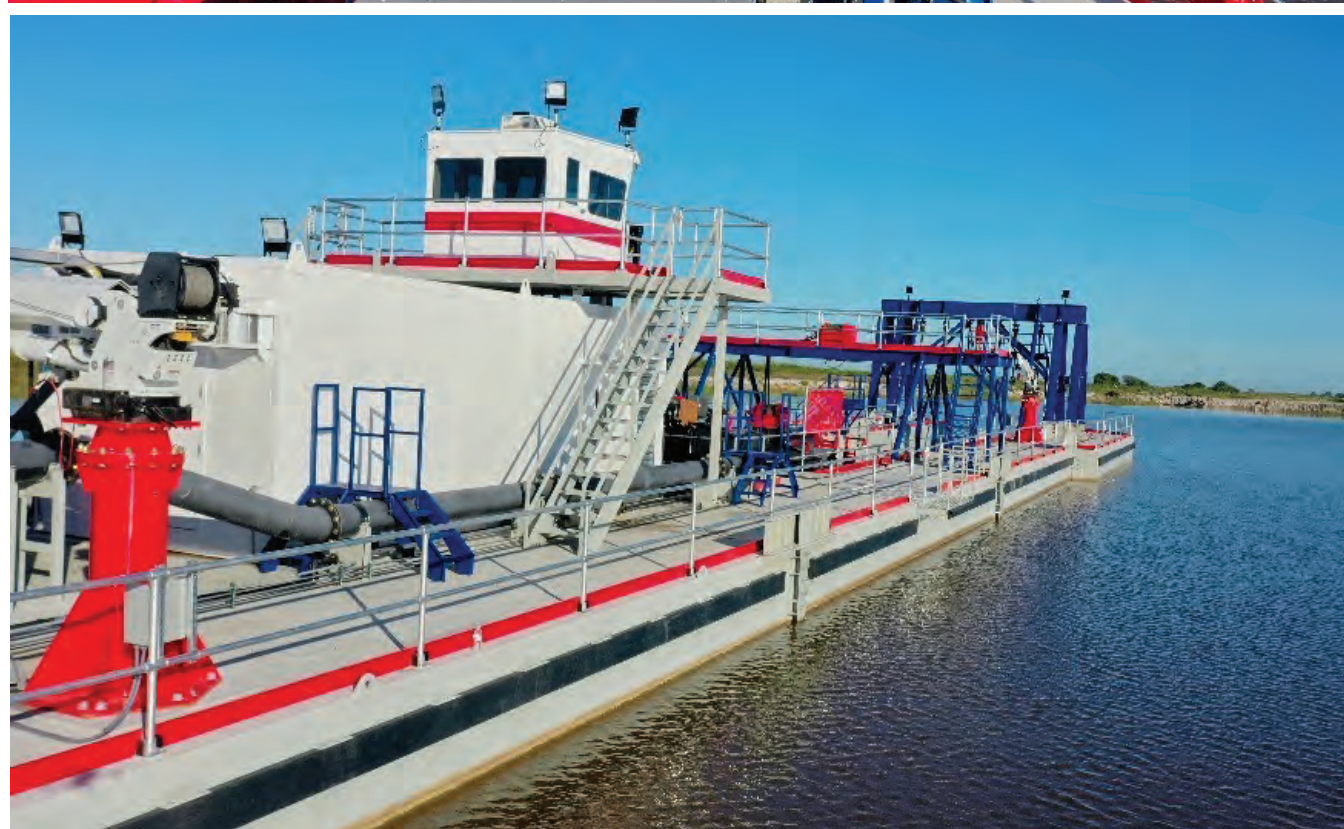
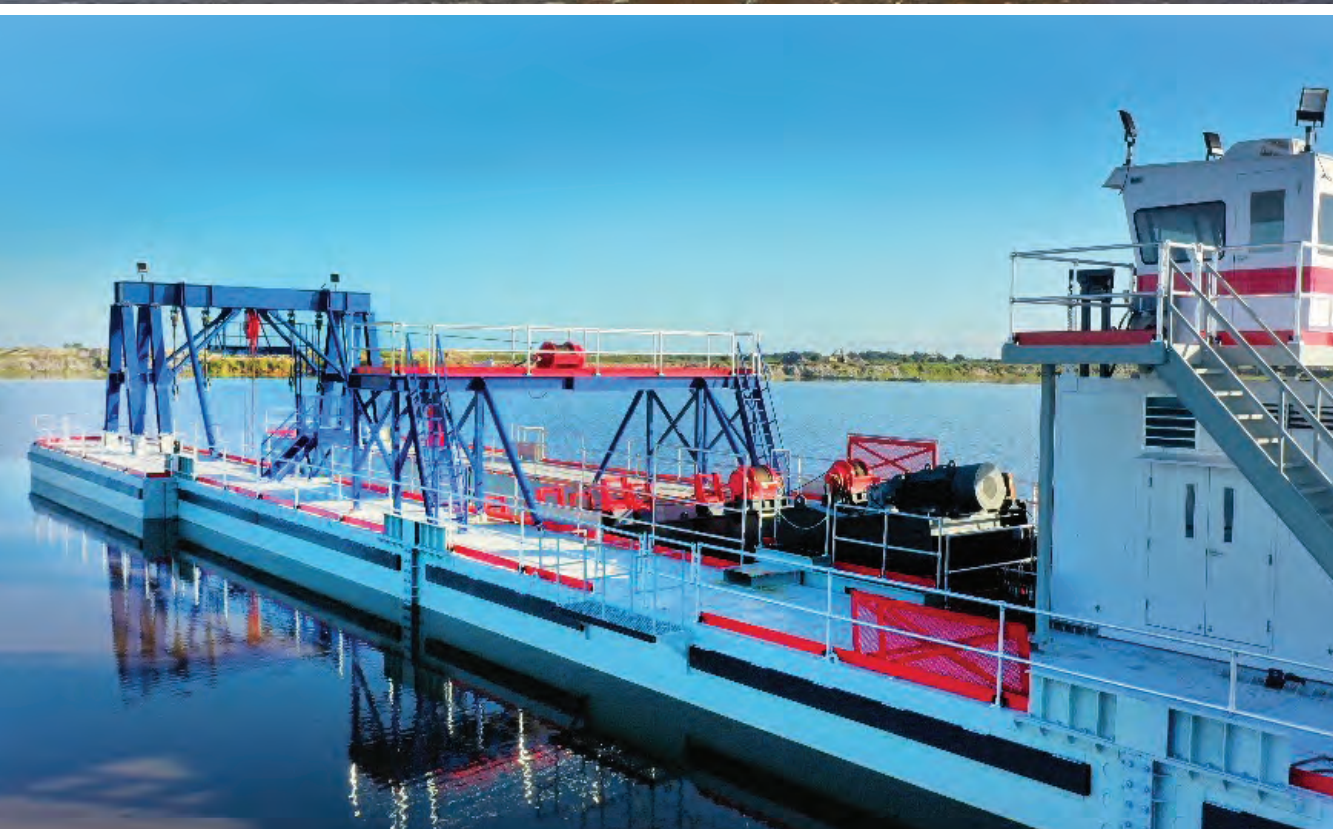






















WELCOME TO OUR FAMILY

We are a relationship focused company. We encourage you to visit with our team at our headquarters and manufacturing facility in Topeka, Kansas.

Our family is a collection of world class dredge experts...engineers, skilled craftsmen, equipment specialists, and executives working together synergistically in one location. Every one of our Customers and Employees is a member of our Family.

We believe you will be impressed with the size, quality and scope of our operation.

Once you see first-hand that industry-leading quality and proactive customer service are core values of our family, we think that you will join us.



There Is Genius In Simplicity





CUTTER SUCTION DREDGES

- Diesel, Electric, or Natural Gas
- Cutterhead, CutterChain, or WaterJet
- Ladder Length Up To 160'
- Pump Size Up To 20"



BOOSTER PUMP STATIONS

- High Quality and Sturdy
- Sizes up to 24" Discharge
- Telemetry & Operating System
- 18-Month or 2000 Hour Warranty



DEWATERING BUCKET WHEELS

- High Quality Proven Design
- 300 to 1200 Tons Per Hour
- Advanced Operating System



REMODELS, REPAIRS & PARTS

- Seven Field Service Trucks
- Fast Delivery of Parts & Components
- Power Conversions
- Ladder Repairs
- Upgrades for any Make/Model Dredge



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