

Dredge Dewatering Products Overview

2017 - Revision D



A Manufacturing Legacy

Quality and Reputation that Span Two Centuries.







150 Year Legacy

Founded in 1864 in Elgin, Illinois, we have evolved into a worldwide leader in design, manufacture and service of specialized solid/liquid separation products in a number of industries.

Multi-Disciplined Manufacturing Team

Elgin is made of two specialized divisions; Elgin Separation Solutions (Liquid/Solid Separation, Solids Separation, and Water Intake Solutions), & Elgin Power Solutions.

Widespread Service Footprint

With a complement of new equipment manufacturing facilities, service facilities and spare part stocking locations, Elgin maintains seven operations throughout North America.

No other solids control and drilling fluid management capital equipment manufacturer in the O&G industry, has the legacy and history maintained by Elgin.



Slurry Management History

A 26-Year History in Mobile Packaged Solids Control & Dewatering Systems



Founded in 1990, we have become the industry leader in reliable, durable and fully integrated slurry management systems for the foundation drilling, pipeline, geothermal, and waterwell Industry.



Separating Elgin From the Competition

Setting Out to Bring Significant Technological Advances to the Industry.







Complete OEM Product Integration

No other dredge dewatering OEM has the ability to bring with it full in-house integration of shakers, shaker screens, centrifuges, pumps, agitators, and conveyance systems.

The Highest Si Area In the Inc

No other dredge dev
OEM provides more screening
surface area than Elgin, the
key to dewatering. Elgin, has
its own proprietary, dual-deck
shaker that doubles the
available screen surface area.

ate-of-the-Art Controls & Instrumentation

No other dredge dewatering OEM provides operation automation systems and the ability to remotely operate the dewatering system from any smart phone, tablet or personal computer.

Other available options include, tank level sensors, tripleaxel trailers, and integrated dewatering systems.



Elgin's Dredge Dewatering Systems

A 30-Year History in Making Mobile Packaged Dewatering Systems



ESS-1000DT

1,000 GPM Multi-Pass Dewatering System With Both Desanders and Desilters





Fitted with (2) 2.5HP Hi-G linear motion vibrator motors.



Dual 6-Panel Dual-Deck Linear Motion Shakers with 112 ft² (10.4m²) of surface area.



Fitted with (3) independent 40/40/40 HP 6x5 250 Series centrifugal pumps.



Includes two desanders (12") and ten desilters (5"), screen savers & valve isolation.



Fully integrated controls with onboard Wi-Fi networking system.



4,500 gallon, triple axel mounted tank with optional venturi polymer mixing hopper.



ESS-1000DC - Containerized

1,000 GPM Containerized Dewatering System With Both Desanders & Desilters

Includes a bank of (2) 12" hydrocyclones, with screen savers.

Dual 6-Panel Dual
Deck Linear
Motion Shakers
with 112 ft²
(10.4m²) of total
screening surface
area.

Container modules may be interconnected to create 2,000, 3000, and 4,000 GPM systems. **EPARATION SOLUTIONS**

Includes a bank of (12) 5" hydrocyclones, with screen savers and valve isolation.

Fitted with (3)
recessed
independent
40/40/40 HP 6x5
250 Series
centrifugal pumps.

4,500 gallon, triple partitioned tank constructed from a 20' CSC Certified Shipping Container.

Provides a new option in international field erected dewatering systems that provide for high fluid volume management.

ESS-1500DT

2,000 GPM Multi-Pass Dewatering System With Both Desanders and Desilters



9,000 gallon triplepartitioned tank with continuous recirculation dewatering system.

Two 5HP topmounted agitators with gear-boxes are coupled with a series of fluid mixing guns.

Dual Hyper-G dualdeck shakers to remove debris and coarse solids from the dewatering system.

(3) 10" desander hydrocyclones provide the next solids cut. Includes a single-deck Hyper-G shaker.

(18) 5" desilter hydrocyclones provide the polishing solids cut. Includes a single-deck Hyper-G shaker.

Optional 6" Venturi Polymer Mixing Hopper.



ESS-2000DT

2,000 GPM Multi-Pass Dewatering System With 25 Micron Cut



Key Differentiators	Elgin 2000DT	Competition
Number of Transport Loads (Not Including Conveyors)	1	2
Field Erection Time (Assuming Two Laborers)	1 Hour	1 Day
Operational Real Estate ("Foot Print")	800 ft ²	1,000 ft ²
Centrifugal Pump Fluid Handling (Series 250 Pumps)	8x6x14	6x5x14
Total Screening Surface Area	215 ft ²	130 ft ²
Shaker G-Force	7 G's	6 G's



ESS-2000DT

2,000 GPM Multi-Pass Dewatering With Both Desanders and Desilters



Fitted with (6) 2.4HP or 2.5HP Hi-G linear motion vibrator motors.



Six (6) six-Panel Dual-Deck Linear Motion Shakers with **340 ft²** (**31.6m²**) of surface area.



Fitted with (3) independent 75HP 6x8 250 Series centrifugal slurry pumps.



Includes four desanders (10") and thirty-two desilters (4"), screen savers & valve isolation.



Fully integrated controls with onboard Wi-Fi networking system.



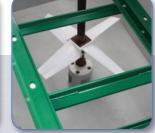
10,200 gallon (38,600 liters), dual axel mounted tank

ESS-2000DT

2,000 GPM Multi-Pass Dewatering System With Both Desanders and Desilters



Diesel powered hydraulic jacking system to level the system upon placement.



Three 5HP top-mounted agitators with gear-boxes are coupled with a series of mixing guns.

ELGIN



Polymer Mixing

Hopper.

Two sets of retracting deck lights fully illuminate the working deck of the entire system.



200 KW On-Board Generator Package



ESS-3000DT

3,000 GPM Multi-Pass Dredge Dewatering System With 25 Micron Cut





Key Differentiators	Elgin 3000DT	Competition
Number of Transport Loads (Not Including Conveyors)	1	2
Field Erection Time (Assuming Two Laborers)	1 Hour	1 Day
Operational Real Estate ("Foot Print")	800 ft ²	1,500 ft ²
Centrifugal Pump Fluid Handling (Series 250 Pumps)	8x6x14	6x5x14
Total Screening Surface Area	340 ft ²	160 ft ²
Shaker G-Force	7 G's	6 G's



ESS-3000DT - Continued

3,000 GPM Multi-Pass Dredge Dewatering System With 25 Micron Cut





Six (6) Six-Panel Dual-Deck Linear Motion Shakers with **340 ft²** (**31.6m²**) of surface area.



Fitted with (6) 2.5HP Hi-G linear motion vibrator motors.



Fitted with (4) independent 75HP 6x8x14 250 Series Centrifugal Slurry Pumps.



Includes forty (40) 4", ceramic-lined desilters with screen savers & valve isolation.



On-Board Debris Scalping System to Remove Course Solids from the Dewatering System.



10,200 gallon (38,600 liters), dual axel mounted tank.

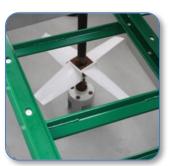
ESS-3000DT - Continued

3,000 GPM Multi-Pass Dredge Dewatering System With 25 Micron Cut





Encrypted Wifi for Remote Wireless Operation.



Two 5HP top-mounted agitators with gear-boxes are coupled with a series of mixing guns.



Two sets or retracting deck lights fully illuminate the working deck of the entire system.



Optional 6" Venturi Polymer Mixing Hopper.



Designed to maximize dewatering, while minimizing operational footprint and operational cost.

ESS-3000DT – Mixed Cyclones

3,000 GPM Multi-Pass Dewatering With Both Desanders and Desilters





Fitted with six (6) independent 75HP 6x8x14 250 Series slurry pumps.



Includes forty (40) 4", ceramic-lined desilters with screen savers & valve isolation.



Includes six (6) 10" desanders.



Designed to be Integrated with an Independent Scalping Shaker Package.



Designed to maximize dewatering, while minimizing operational footprint and operational cost.

ESS-3000DT – Desanders Only

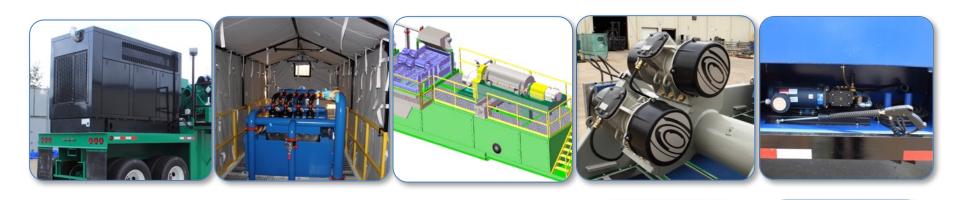
Up to 7,500 GPM Multi-Pass Coarse Solids Dewatering With Desanders





Dredge Dewatering System Options

A Myriad of System Options are Available Upon Request.



150 to 400KW Generators

On-board generator packages (sound-attenuated versions also available) provides power to the entire dewatering package.

Winterization Packages

Elgin's packages can be fitted with a complement of winterization packages including, emersion heaters, convective heat ports, pump cabin enclosures and working deck enclosures.

Centrifuge Integration

Depending on the model selected, Elgin dewatering packages can be full integrated with a centrifuge directly within the footprint of upper deck. Includes feed pump and VFD HMI touch-screen interface.

Dual Motion, Multi-G Shakers

Elgin's Hyper-G
Shakers can be
fitted with dual
motion, multi-G
shaker motors to
maximize shaker
performance and
allow for tuning of
the shaker relative
to the operation
conditions.

Integrated Pressure Washer

Fully integrated within the tank structure, this high pressure washer will keep screens from blinding and allow for rig cleanup at the end of the job.

Other available options include tank level sensors, triple-axel trailers, and integrated dewatering systems.



Smart Panel Control System

A New Paradigm in Dredge Dewatering System Controls

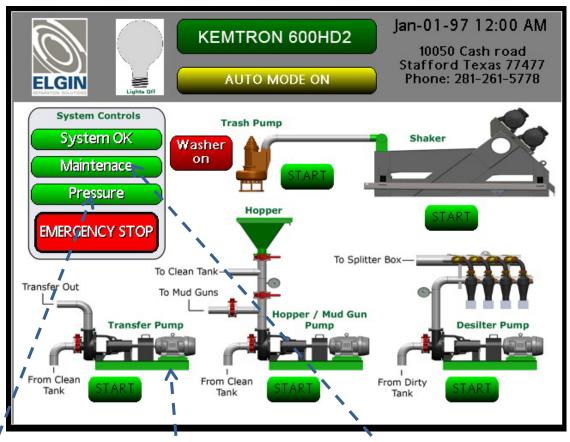
- Elgin's Proprietary Smart Panel Allows
 Operators to Run and Monitor the
 Dewatering System from a Smart Phone,
 Tablet or Laptop.
- Comes integrated with Operation Data Logging for Performance Monitoring and Failure Tracking.
- Hydrocyclone Pressure Monitoring to Ensure Optimum Drilling Fluid Conditions.
- Tank Fluid Level Indicators and Alarms.
- Automated Pump Operation with Interlocks.
- Audible and Visual Alarm System Interlocks.
- Automated Operator Alerts to Ensure Proper Preventative Maintenance.



Elgin's Smart Panel Control System prov. the lowest cost operator oversight of any dredge dewatering system in the industry.

Smart Panel Control Interface

Directly From Your Smart-Phone, Tablet or Laptop.



Pressure Monitoring of Hydrocyclone Manifold to Maximize System Performance. Touch Screen
Interface to Control all
On-Board Pumps and
Shakers.

Integrated Run-Time
Counters for All Systems
to Enhance
Preventative
Maintenance.

Further Integration with Optional Upgrades, Including an On-Board Pressure Washer.



Smart Panel Control Interface

Directly From Your Smart-Phone, Tablet or Laptop.





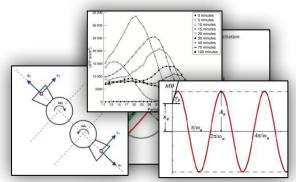
Run Time Counters Will Preemptively Notify Operators of Greasing and Maintenance Schedules. Detailed Event Logs Will Track Fault Conditions and Maintain Detail Records of the Units Operation. On-Board Hydro-Cyclone Pressure Sensors Will Notify Operators of Need to Service Equipment. Any Tripped Electrical Conditions Due to Overloads Will be Clearly Noted on the User Interface. Full Wireless Integration with Your Smart Phone or Tablet with a Dedicated Local Wifi Network.

Unsurpassed Value

Definitive Value Proposition in Utilizing Elgin Dredge Dewatering Systems.







Unsurpassed Experience

As the trend-setting leading in package, mobile dewatering systems, we ship one packaged dewatering system or solids control system per week. No other manufacture ships more packaged systems.

Unsurpassed Durability

With decades of experience building package mobile systems, we have developed a reputation for the most durable systems in the market. The average asset life ranges from 7 to 10 years.

Full-Scale Engineering Support

Our dedicated Engineering team evaluates system hydraulics, frictional losses, predictive reliability, and failure mode evaluation analysis ("FMEA") for each system built. Combined with our ability to creatively customize your system, there is no better choice.

In addition to the above, we are the only Dredge Dewatering System OEM that manufactures its own shakers and screens ensuring 100% integrated accountability for the entire system.

