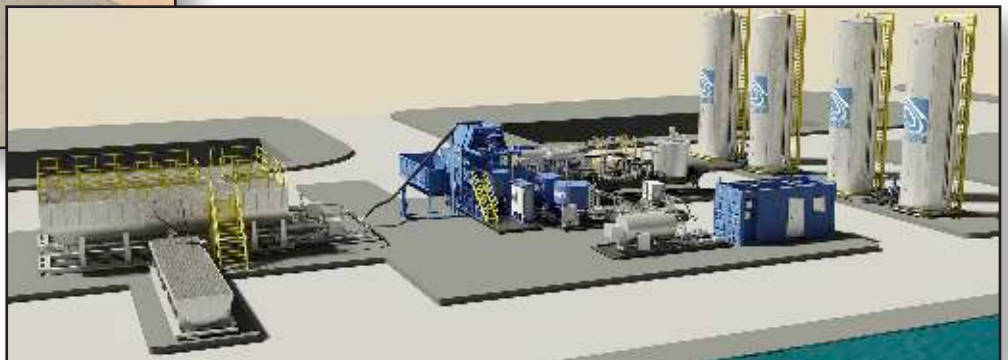
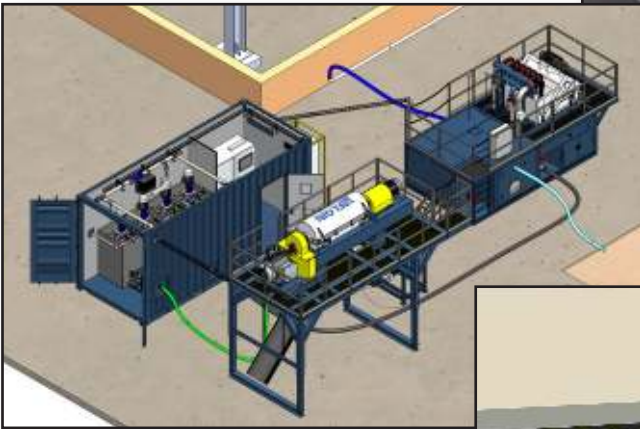
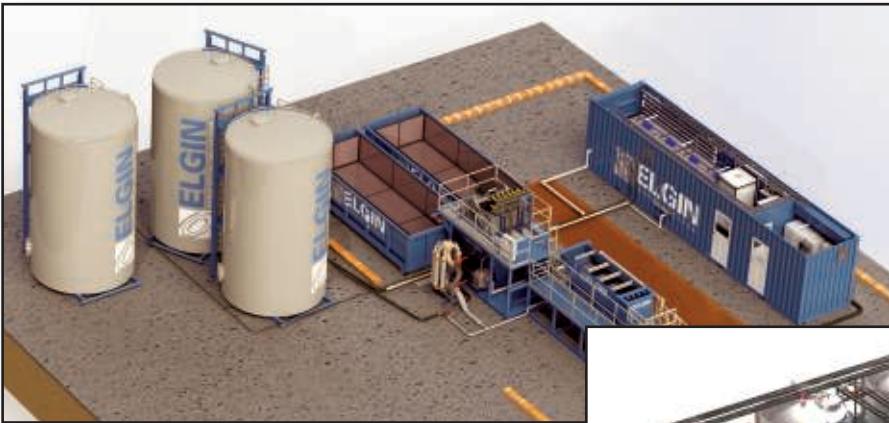




## Turn-key Industrial Solutions



Fluid Recovery • Natural Resource Recycling • Waste Management • Dewatering  
Product Classification • Material Handling • Liquid/Solid Separation

## Who We Are

Elgin Separation Solutions is an innovative turn-key solutions provider for solids control, dewatering, and waste management operations that solve challenging real-world problems operators face today.

Whether you are working toward maximizing product recovery or looking to get the most out of your “zero-discharge” closed-loop system. Elgin’s field proven turn-key solutions are the perfect choice.

As the leading turn-key solutions provider, Elgin has brought together the industry’s specialists in the engineering, design, manufacture, commissioning, and servicing of solids control, dewatering, and waste management systems.

Elgin’s team can custom design the perfect solution for any application needs. Whether looking for a stand-alone system or fully enclosed dewatering system, Elgin’s in-house engineers work closely with customers to evaluate and design the ideal solution.



Elgin has decades of experiencing designing, manufacturing, and servicing turn-key solids control, dewatering and waste management solutions. As an original equipment manufacturer (OEM), Elgin has a unique understanding of the design basis, and the key operating principles, that ensures maximum performance in the field. Combined with our service-driven perspective, and reliability as a turn-key solutions provider, your capital equipment fleet could not be entrusted to better hands.



# Proprietary System Automation

Elgin's proprietary user interface provides complete control of all systems, as well as, a sophisticated set of diagnostic tools, information libraries and fault logs. Control systems include a variety of enhanced features including, internal lighting, ventilation and heating, Ethernet porting for diagnostics and programming

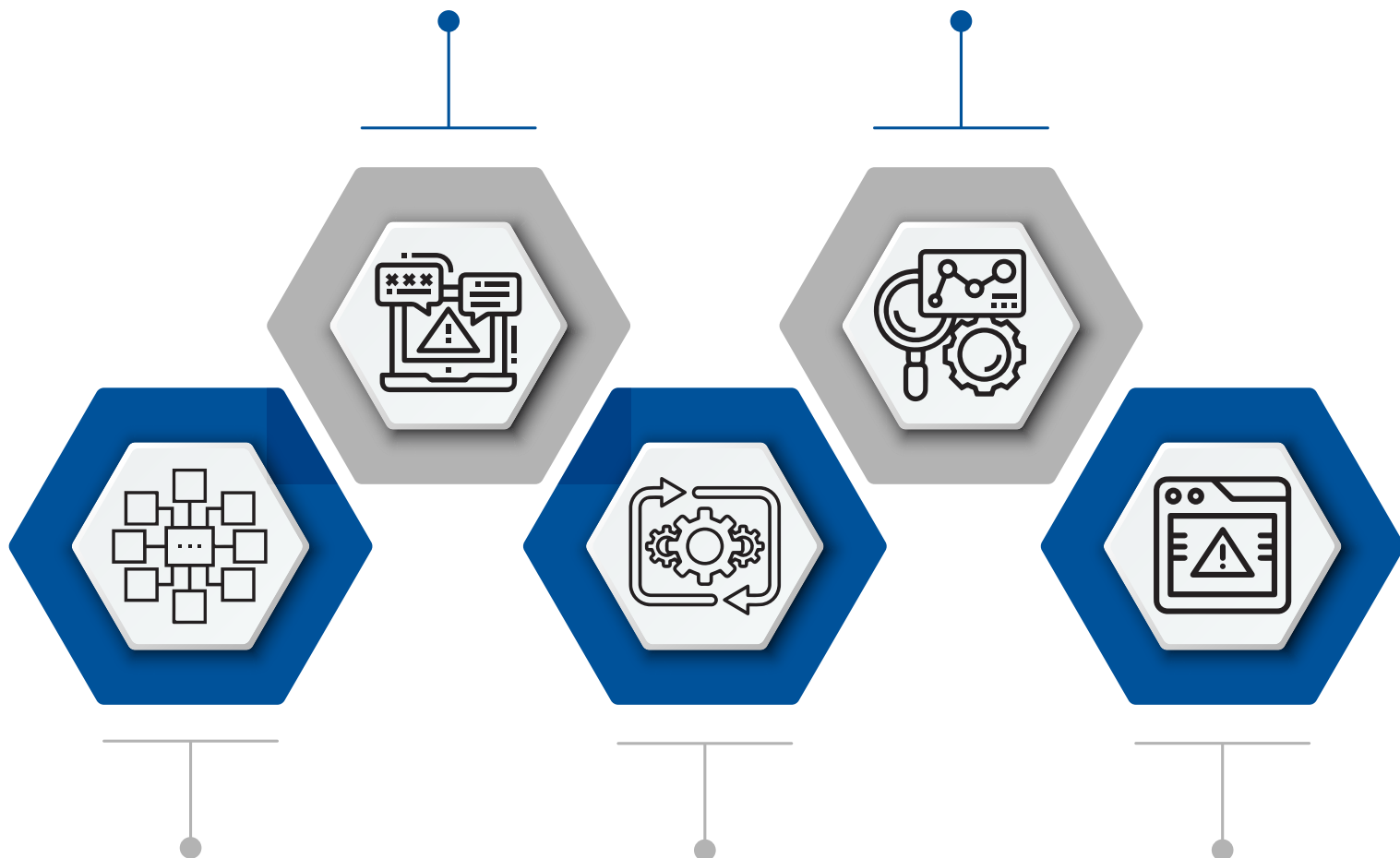
updates, and a custom designed user interface that allows for maximum operating flexibility and control. Panel upgrades can include onboard Wi-Fi network module allowing for remote operation/monitoring via laptop, tablet or smart phone.

## System Alarm Notifications

Safety interlocks built into each system alert the operator when potential system shutdown/damage has or may occur.

## Remote Control and Diagnostics

Each user interface comes with the capability of remote control offering the ability to control a centrifuge from great distances.



## Data Logging

System performance and operation data tracking storage logs for improving job performance.

## 'Cruise Control' Automation

Elgin can incorporate automated controls for efficient operation and lower operator oversight.

## Maintenance Alerts

Operational alerts notify operator of routine equipment maintenance schedules.





# Industrial Wastewater Treatment Plant

Elgin offers industrial solutions to meet the needs for effective chemical and solids treatment, for even the most stringent water quality requirements. Elgin designs modular, expandable, closed-loop

industrial wastewater systems to treat a number of Contaminants of Concern ("COC's"), specifically coarse and fine suspended solids, free heavy oils, emulsified fine oils, and dissolved solids and salts.

## High-Capacity Vertical Liquid Storage Tanks

Depending on operating conditions, vertical tanks can be utilized to allow for oil/water separation using microemulsions treatment processes.

## Suspended Solids Separation Vibratory Shaker and Hydrocyclone Desilter Systems

The shaker / hydrocyclone system will remove coarse and fine solids down to 30 microns by using a combination of screen media and hydrocyclone desilters.

## Containerized Polymer Injection and Control Center

Elgin's Containerized Chemical Injection and Control Centers will provide a highly flexible platform able to hydrate and activate both liquid and for dry polymers via a set of redundant polymer mix tanks that are coupled directly to premium progressive cavity feed pumps.



## Dewatering Roll-Off Boxes

Dewatering boxes take advantage of a high-strength, long-lasting filter media that allows hydrated solids to dewater under the force of gravity. Roll-off boxes are fitted with a set of discharge drains.

## Post-DAF Filtration System / Pre-RO Filtration System

Minimal levels of suspended solids ranging from 1 to 30 microns, will remain present in the DAF cleaned water effluent.

## Emulsified Oil and Ultra-Fine Suspended Solids Removal Dissolved Air Flotation System

A Dissolved Air Flotation ("DAF") systems are installed to target emulsified oils and ultra-fine solids between 0 and 30 microns.



# Integrated Cuttings Waste Management Plant

Elgin's Integrated Cuttings Waste Management System has been designed to treat oil-based raw cuttings slurry, generated by the oil and gas drilling industry, by utilizing chemically-assisted mechanical separation. Via the deployment of microemulsions, Elgin's system uses liquid/solid separation

technologies to remove coarse, then fine, suspended solids respectively. Once the coarse and fine solids have been removed from the slurry, the residual microemulsion will enhance phase separation of the oil and water, prior to being transferred to a oil & wastewater collection system.

## Oil / Water Separation and Collection Tank Systems

Vertical tanks receive recovered centrate from the decanter centrate. Microemulsion process separates the oil and water. Installed capacitor probes identify when the liquid phase has shifted from oil to water or water to oil.

## Centralized Control System

Fully integrated control panel system with HMI touch-screen will monitor in-line instrumentation and individual system performance.

## Coarse Solids Separation Vertical Cuttings Dryer

Raw cuttings slurry is introduced to the vertical cuttings dryer via the hopper. The VCD will separate the free liquid and solids with a particle size diameter less than the nominal cut point of the screen.



## Hopper / Feed Pump System

The raw cuttings are introduced to the system via a below-grade hopper system to allow for the cuttings slurry to be loaded directly into a VFD, progressive cavity, solids-slurry, conveyance feed pump.

## Microemulsion Injection System

Adding microemulsions to recovered centrate from the primary vertical cuttings dryer before centrifuge processing increases liquid/solids separation and oil/water separation.

## Ultra-Fine Particle Separation Decanter Centrifuge

A high-speed decanter centrifuge separates solids from liquid down to 5 microns or less utilizing polymer injection.



# Mobile Coarse Solids Dewatering Plant

Elgin's Mobile Coarse Solids Dewatering System has been designed to treat water-based and oil-based waste cuttings slurry, generated by the oil and gas drilling industry, by utilizing a combination of mechanical separation technologies. This system incorporates individual skid-

mounted systems and a 20' high-cube containerized control room allowing handling to be achieved via transport trucks. As dictated by the feedstock parameters, a de-emulsifying microemulsion package may be deployed.

## Round-Bottom Slurry Tank Feed System

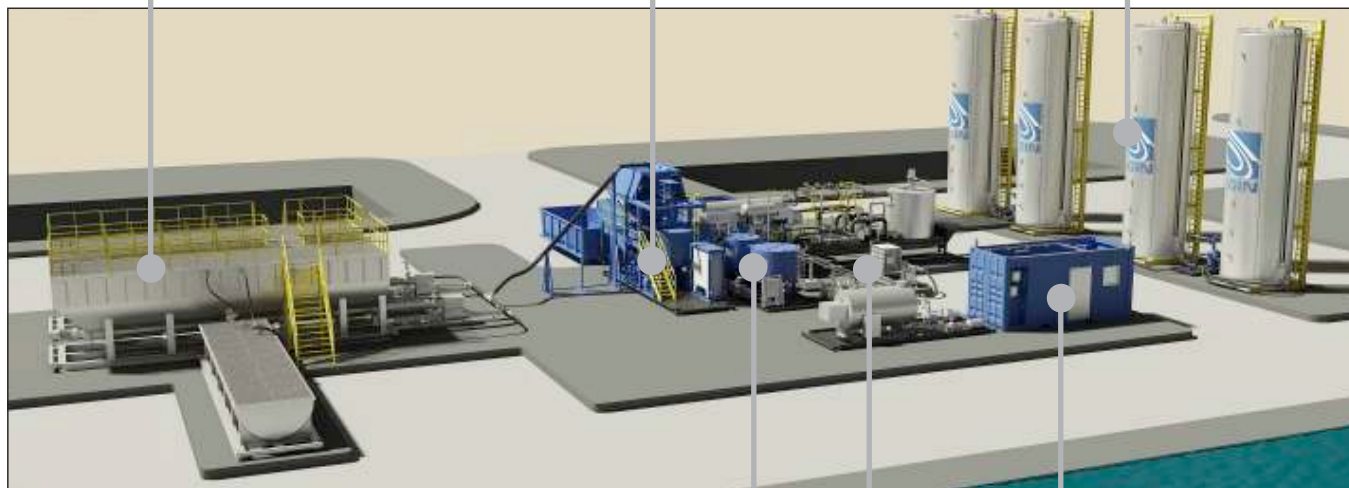
Fitted with cuttings slurry transfer system: a fully-integrated screw conveyor and a specialized VFD-driven progressive cavity pump.

## Vertical Cuttings Dryer Turn-Key Waste Management System

This system has been designed to reduce drill cuttings and waste solids moisture by 90% and recover thousands of gallons of drilling fluid and/or water that would normally have been disposed of with the waste solids.

## Oil and Water Vertical Cylindrical Storage Tanks

Vertical cylindrical receiving tanks with two self-priming receive oil and water centrate from the Three-Phase Tricanter Centrifuge via the Oil Transfer Pump to either transfer fluid to storage tanks, or feed optional decanter centrifuge for further processing.



## Recovered Oil/ Water Receiving Tanks

When deploying a Three-Phase Tricanter Centrifuge, a dedicated Recovered Oil Receiving Tank and dedicated Recovered Water Receiving Tank are deployed.

## Microemulsion Injection System

The chemical injection package is directly connected to a 1,040 liter polymer tote via a 1" flexible connection. The chemistry is injected via a progressive cavity pump to accommodate any emulsified bonds found between the oil, water, and solids.

## 20 Foot Containerized Central Control Room

Fully integrated control panel system with HMI touch-screen will monitor in-line instrumentation and individual system performance.





# Hydrovac Waste Treatment Plant

Elgin's Hydrovac Waste Treatment System has been designed to treat water based slurry, generated by the trenchless/wastewater industry, by utilizing chemically-assisted mechanical separation. Via the deployment of polymers, Elgin's system uses liquid/solid separation technologies to remove

coarse, then fine, suspended solids respectively. Once the coarse and fine solids have been removed from the slurry, the recovered centrate will be transferred to a wastewater collection system. Dried discharged solids are then hauled off for disposal at a local collection area.

## Containerized Polymer Injection System

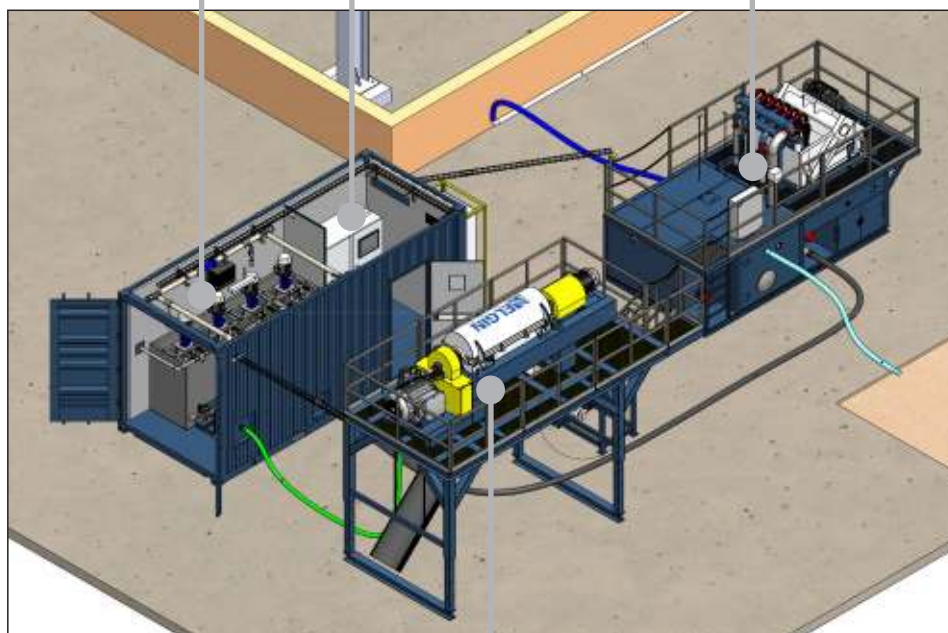
Elgin's Containerized Chemical Injection provide a highly flexible platform able to hydrate and activate both liquid and for dry polymers via a set of redundant polymer mix tanks that are coupled directly to premium progressive cavity feed pumps.

## Centralized Control System

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## Suspended Solids Separation Vibratory Shaker and Hydrocyclone Desilter Systems

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## Ultra-Fine Particle Separation Decanter Centrifuge

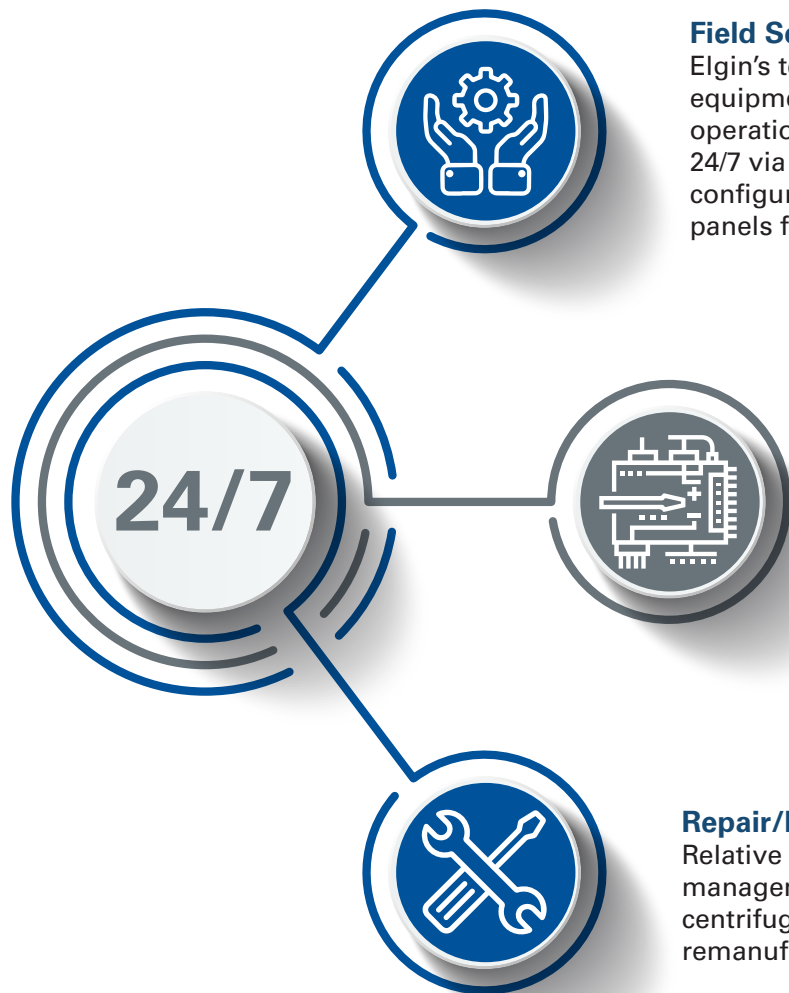
A high-speed decanter centrifuge separates solids from liquid down to 5 microns or less utilizing polymer injection.



## Global Support

Elgin provides full installation and technical support for all its equipment. With technical support offices in Brisbane, Australia; Edmonton, Canada; Houston, Texas; Raleigh, Illinois; Moscow, Russia; Dubai, United Arab Emirates; and Baroda, India, Elgin can mobilize field technicians within 24 hours to almost

any location in the world. With over 30 year's of experience in centrifuge repair and refurbishment of the industry's most popular decanter centrifuges, Elgin has the largest one-stop-shop service footprint for maintaining your entire centrifuge fleet.



### Field Service Technicians

Elgin's technicians specialize in field installation and equipment commissioning for both on-shore and off-shore operations. In addition, technical support is available 24/7 via phone or video chat. Depending on system configuration, our technicians can remote access control panels for troubleshooting and software upgrades.

### OEM Spare Parts

Elgin maintains a complete inventory of spare parts and consumables available to ship world-wide ensuring minimal equipment downtime. Additionally, Elgin offers replacement parts for most competitor centrifuges.

### Repair/Refurbish Services

Relative to our commitment to the product life cycle and asset management, Elgin has invested in high-quality, full-service, centrifuge repair centers to provide repair, refurbishment and remanufacturing services for your decanter centrifuge fleet.



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



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