

ClearWave 20[™] Containerized Dewatering System

System Features



Dedicated Polymer Tanks with Top Mounted Agitators and Injection Pumps



Exterior Screw Conveyor for Solids Discharge



Cabinet Enclosure with Integrated Touch Screen Human Machine Interface (HMI)



Dedicated Progressive Cavity Feed Pump

As industry environmental regulations continue to become more stringent, having the right solids control and dewatering equipment has become vital to operations. Dewatering presents a great deal of benefits and advantages. One such benefit includes discharge compliance, in which many cases result in a "zero-discharge" or "closed-loop system." In addition, the importance of



recovering oil from waste is vital to maximizing profits. With the correct combination of chemicals, effective removal of solids, while recovering high quality oil and water, can be achieved.

Dewatering also maximizes drilling fluid recovery, ultimately lowering overall mud costs as well as disposal and transportation expenses. Furthermore, these systems improve rate of penetration. With a "zero-discharge" or "closed-loop system," operations can operate without open pits, therefore reducing the location footprint and environmental impact.

For over 25 years, Elgin has been designing solids management and dewatering systems for the most demanding environments. With this experience, Elgin has

designed a variety of Containerized Dewatering Units. These units are designed with the customer in mind by being mobile and compact. Furthermore, they also incorporate sophisticated graphical user interfaces, chemical additive injection systems, Apex 14MVD™ or Apex 16FVFD™ decanter centrifuge, and in-line mixing systems. By utilizing proprietary polymer hydration manifolds, the polymer enhanced flocculation of colloidal and ultra-fine drilled solids can be efficiently removed with a decanter centrifuge.

This versatile unit can be customized by our engineering team to meet any specific needs or challenges. It may be operated as a stand-alone device or



can be incorporated as the cornerstone of a sophisticated closed-loop solids control and waste management treatment system. Systems can be climate controlled and insulated, upon request.

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





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Apex 14VFD™ Centrifuge

Elgin's Apex 14VFD™
is fitted with a NEMA
premium, continuous
duty, energy-efficient,
poly-chain driven, 50 hp
main drive. The 50 hp
main drive can operate
the centrifuge up to a
maximum rotational
speed of 3,250 rpm, thus,
generating more than
2,100 G's of force.



Select Floc™
Polymer Conditioning
System (Optional)

By using existing equipment at the rig, the Select Floc™ allows customers to optimize existing assets, while incorporating the advances of Elgin's polymer make-down and feed systems to createon-site dewatering.

Overview of Unit Features:

- · Compact design for small footprint.
- 200 gpm progressive cavity feed pump for homogonous feed.
- Apex 14MVD[™] or Apex 16FVFD[™] decanter centrifuge capable of producing 2,100 G's of force.
- 12" shafted screw conveyor for easy cuttings discharge.
- Easy to use VFD HMI control panel with proprietary touch screen interface.
- Top mounted polymer tank agitators and PC injection pumps.
- Integrated plumbing to achieve hydration residence time.

Model Number:	ClearWave 20™
Description:	20' HMI Containerized Dewatering Unit
Length:	20' (6.1m)
Width:	8' (2.4m)
Height:	9.5' (2.9m)
Centrifuge (rpm / G's):	Apex 14MVD™ (3,200 / 2,000)
Coagulant Tank:	2 qty. 160 gallon (606 liter)
Flocculant Tank:	2 qty. 330 gallon (1,250 liter)
Dissolution / Transfer Tank:	460 gallon (1,750 liter)
Tank Agitators:	4 x 1 hp
Electrical:	380V / 50Hz or 460V / 60Hz – 3 Phase

Apex 14VFD™ Centrifuge	
Equipment Image:	ELGIN
Maximum G-Force:	2,100
Maximum Speed:	3,250 rpm
Capacity:	200 gpm (12.6 lps)
Bowl Construction:	304 or 316 Stainless Steel
Bowl Diameter:	14'' (356 mm)
Bowl Length:	49.5" (1,257 mm)
Weight:	6,583 lbs (2,986 kgs)
Skid Dimensions:	103" (2,616 mm) L x 75" (1,905 mm) W x 48" (1,219 mm)
Gearbox Ratio:	52:1 or 125:1

Chemically Enhanced Mechanical Separation

By combining expertise in both dewatering polymers and solid/liquid separation technologies, Elgin has developed an organization capable of providing complex chemically-enhanced mechanical separation solutions. As a service oriented organization, Elgin's focus is on providing timely value. This value is further enhanced when customers take advantage of Elgin's integration, modularization, and customization capabilities. Elgin will continue to be an industry leader in bringing mobile and/or modular turn-key solutions to the industry's toughest fluid management problems.



