

# MELGIN

**Aftermarket Turn-Key  
Solutions Provider**



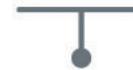
# Trusted OEM Provider



Elgin Separation Solutions ("Elgin") has evolved into a world-wide leader in design, manufacture and service of specialized liquid/solids separation, dewatering, material sizing, and waste management solutions.



Elgin has invested in high-quality, full-service, product support centers in Houston, TX; Princeton, WV; Raleigh, IL; and Poca, WV; and Baroda, India to manage your equipment repair needs.



Elgin's in-house team of engineers and technicians can custom design complete turn-key systems designed to meet customer needs in finding the ideal solution suitable for any project requirement.

**Looking for spare parts? Elgin's OEM parts are designed to outperform aftermarket parts.**

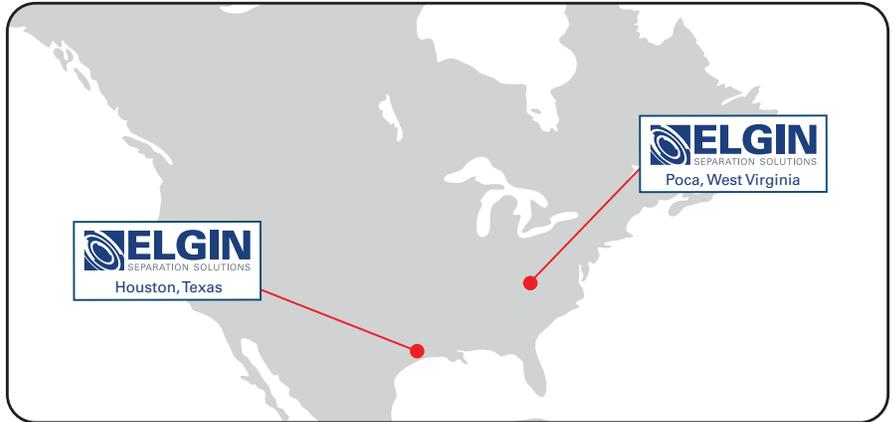
Fluid Recovery • Natural Resource Recycling • Waste Management • Dewatering  
Feeders • Product Classification • Material Handling • Liquid/Solid Separation • Crushers



# Full Service Repair, Remanufacture & Refurbishment Services

## Distributed Service Footprint

Relative to our commitment to the product life cycle and asset management, Elgin Separation Solutions (“Elgin”) has invested in high-quality, full-service, product support centers in Houston, Texas; and Poca, West Virginia. Each of these service centers have been set up to provide full repair, refurbishment and remanufacturing services for your entire solids control and waste management fleet. In addition, Elgin now has the ability to provide after-market refurbished centrifuges and spare parts to help control capital equipment expenditures and to maximize the life-cycle of existing capital equipment assets. Simply send your used centrifuge core to Elgin and we will provide you a detailed report of the refurbishment expenses required to bring it back to fully operational specifications.



## OEM Standards

Elgin has collected decades of experiencing designing, manufacturing, servicing and refurbishing decanter centrifuges, screenbowl centrifuges, and vertical cuttings dryers. As an original equipment manufacturer (“OEM”), Elgin has a unique understanding of the design basis and the key operating principles of the equipment it services. By deploying OEM quality control techniques and documented acceptance criteria a higher standard and level of confidence can be expected from a centrifuge or vertical cuttings dryer that has been serviced by Elgin. Combined with our service-driven perspective and reliability as a timely service provider, your capital equipment fleet could not be entrusted to better hands.



**Contact Elgin Today**  
**304-755-0294**



# Turn-Key Service Center Poca, West Virginia

Since 1988, Elgin has been focused on repairing and refurbishing screenbowls, decanter centrifuges, and vertical cuttings dryers in Poca, West Virginia. Servicing the mining, food rendering, chemical, and oil & gas industries, we have developed a team of professionals specialized in working on Bird™ style centrifuges\*, Sharples™ style centrifuges\* and FLSmidth's™ screenbowl centrifuges\* along with every other major manufacture in the industry. With a combined experience of over 50 years, Elgin is your one-stop-shop for all repair, refurbish, and spare part needs.

## Specialized Equipment Repair

### Fine Coal Screenbowl Services

Bird™ & FLSmidth™  
36 x 72 (4" and 6" Feed)  
40 x 72 (4" and 6" Feed)  
44 x 132 (6" and 8" Feed)

### Case Tops & Bottoms Services

**Screenbowls**  
36 x 72 Bird™ & FLSmidth™  
40 x 72 FLSmidth™  
44 x 132 Bird™ & FLSmidth™

**Centrifuge**  
24 x 60 Bird™  
24 x 38 Bird™  
18 x 50 Bird™  
3400 Sharples™

### Rendering Centrifuge Services

24 x 60 Bird™  
24 x 38 Bird™  
18 x 50 Bird™  
3400 Sharples™

### Vertical Cuttings Dryer Repair

WSM-01™  
WSM-03™  
WSM-04™  
CSI-03™  
CSI-04™

### Screenbowl Torque Arm Repair

Bird™ & FLSmidth™  
36 x 72 (4" and 6" Feed)  
40 x 72 (4" and 6" Feed)  
44 x 132 (6" and 8" Feed)

### Screenbowl Oil Lubrication System Repair

Bird™ & FLSmidth™  
36 x 72 (4" and 6" Feed)  
40 x 72 (4" and 6" Feed)  
44 x 132 (6" and 8" Feed)

### Screenbowl Gearbox Repair

Bird™ & FLSmidth™  
36 x 72 (4" and 6" Feed)  
40 x 72 (4" and 6" Feed)  
44 x 132 (6" and 8" Feed)

### Centrifuge Gearbox Repair

Derrick™  
Alfa Laval™  
NOV™  
Hutchinson Hayes™  
Tecumseh™  
G-Tech™  
Tomoe™  
Elgin/KEMTRON™

### Coarse Coal Centrifuge Repair

VM1400 FLSmidth™  
VM1500 FLSmidth™  
VM1650 FLSmidth™

### Eriez™ Magnetic Separator Repair

\* Derrick Equipment Company, as subsidiary of Derrick Corporation ("Derrick"); Alfa Laval, Inc. ("Alfa Laval"); National Oilwell Varco, Inc. ("NOV"); Hutchinson & Hayes International, Inc. (H&H); G-Tech Bellmor ("G-Tech"); Tecumseh Industries, Ltd ("Tecumseh"); Tomoe Engineering USA, Inc. and their respective products are protected trademarks and/or registered trademarks of the respective listed companies and are not affiliated with Elgin Separation Solutions or Elgin Equipment Company.

# Decanter Centrifuge Core Exchange Program

## Centrifuge Core Exchange Program<sup>1</sup>

Relative to our commitment to the product life cycle and asset management, Elgin Separation Solutions ("Elgin") offers a core exchange program. When you surrender your used core (rotating assembly) to Elgin, a fully refurbished core will be delivered to you the same week<sup>2</sup>.

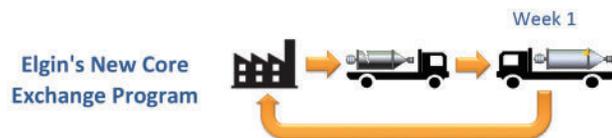
In turn, the core submitted by you, the Customer, in exchange for an Elgin refurbished core will be provided to Elgin in kind along with a USD Core Exchange Fee. Our goal is to extend the life of your assets and minimize any potential down time.



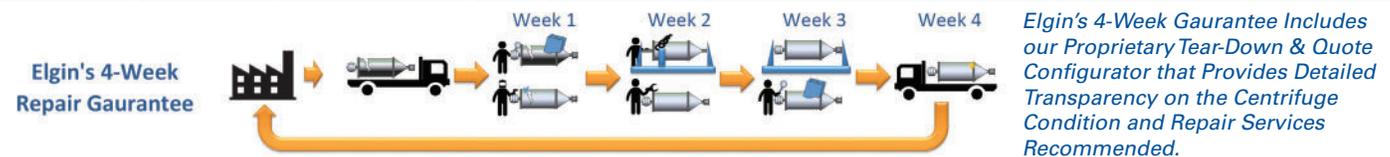
*Fully refurbished core provided from Elgin meets or exceeds industry standards.*



## Superior Service and Delivery Through Elgin



Sign up today for Elgin's Proprietary Core ("Bowl") Exchange Program. When enrolled, you simply surrender your core and we will send you a replacement core the same week.



<sup>1</sup>Elgin's Core Exchange Program is restricted to the centrifuge core (rotating assembly). The Customer core submitted in exchange for the Elgin refurbished core shall be submitted to Elgin with full title. The new Elgin core will be provided with a full title. Both Elgin and the Customer shall release all legal ownership of the cores exchanged. Customer cores that have undergone catastrophic damage are not eligible for Elgin's Core Exchange Program. Complete details relative to defining catastrophic damage are available for review. The Elgin refurbished cores shall be provided with standard warranty on parts and workmanship.

<sup>2</sup>Initial enrollment in the program will result in receiving an Elgin branded core equal or greater in value to the surrendered core. The customer core received, in exchange, will be repaired and placed into inventory on hold for same customer waiting future exchange. If at any time, the customer leaves the program, all surrendered cores in inventory become legal ownership of Elgin.

**Contact Elgin Today 304-755-0294**

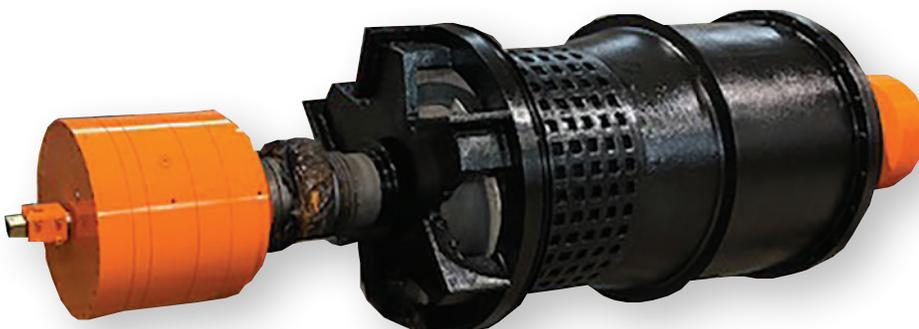
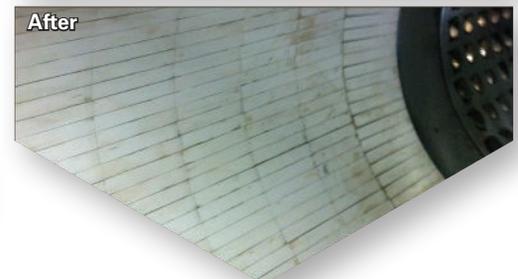
# Screenbowl Centrifuge Repair / Remanufacturing

## Complete In-House Quality Inspection & Repair

Elgin has collected decades of experience designing, manufacturing, servicing and refurbishing decanter screenbowl centrifuges. As an original equipment manufacturer ("OEM"), Elgin has a unique understanding of the design and key operating principles of the equipment it services. By deploying OEM quality control techniques and documented acceptance criteria, a higher standard and level of confidence can be expected from a screenbowl centrifuge that has been serviced by Elgin. Combined with our service-driven perspective and reliability as a timely service provider, your capital equipment fleet could not be entrusted to better hands.

## Distributed Service Footprint

Relative to our commitment to the product life cycle and asset management, Elgin has invested in high-quality, full-service, product support centers in Houston, Texas; and Poca, West Virginia. Each of these service centers have been set up to provide full repair, refurbishment and remanufacturing services for your entire screenbowl centrifuge fleet. Simply send your used centrifuge core to Elgin and we will provide you a detailed report of the refurbishment expenses required to bring it back to fully operational specifications. Our team works to restore your centrifuge to OEM specifications or tailor the equipment to meet your specific requirements. When we rebuild or repair your centrifuge, you can expect it to perform as good as (if not better) than the day it was delivered new. Our goal is to extend the life of your assets and minimize any potential down time.



# Contact Elgin Today

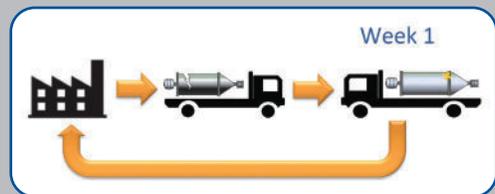
## 304-755-0294

**Core Component Inspection / Repair  
for 36 x 72, 36 x 96, 40 x 72, and  
44 x 132 Screenbowl Centrifuges**

- Screen Wash Header
- Screw Conveyor
- Dewatering Screen
- Planetary Gearbox
- Main Bearings
- Thrust Bearings
- Discharge Head
- Tile Replacement



Sign up today for Elgin's Proprietary Screenbowl Core ("Bowl") Exchange Program. When enrolled, you simply surrender your core and we will send you a replacement core the same week.



# One-Stop-Shop For All Decanter Centrifuge Spare Parts

Elgin has vast experience in the service and refurbishment of the industry's most popular centrifuges. As highlighted below, Elgin can provide a one-stop-shop service relative to maintaining your entire centrifuge fleet. Instead of distributing your maintenance service among a variety of supplier, Elgin provides a single point of contact.

Though Elgin's field service, repair and remanufacturing services are tough to beat, our greatest value is in the depth of engineered spare parts offered. Spare parts provided by Elgin are designed to out perform those typically available from our competition. This is not simply because of our commitment to dimensional accuracy, but because of the enhanced features that we commonly incorporate.

Many of the spare parts offered by Elgin include a host of abrasion-resistant spray coatings, epoxy-resin set ceramic tiles, and brazed tungsten carbide tiles. Elgin's customers quickly recognize that our spare parts not only are cost competitive, but significantly outlast those provided by our competition and competing original equipment manufacturers.

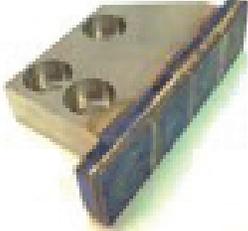
Centrifuge OEM Name & Model	Centrifuge Image	Spare Parts	Field Service	Repair / Reman & Refurbish
Derrick DE-1000™				
Derrick DE-7200™				
Alfa Laval Lynx 20™				
NOV 3400™				
Elgin/KEMTRON 1450™				
Hutchinson & Hayes 1448™				
Tecumseh 1655 & 1655 FVS™				
Hutchinson & Hayes 5500™				
G-Tech 1656™				
KEMTRON 1967™				
Alfa Laval Lynx 40™				
Tomoe TDM-50™				

*\* Derrick Equipment Company, as subsidiary of Derrick Corporation ("Derrick"); Alfa Laval, Inc. ("Alfa Laval"); National Oilwell Varco, Inc. ("NOV"); Hutchinson & Hayes International, Inc. (H&H); G-Tech Bellmor ("G-Tech"); Tecumseh Industries, Ltd ("Tecumseh"); Tomoe Engineering USA, Inc. and their respective products are protected trademarks and/or registered trademarks of the respective listed companies and are not affiliated with Elgin Separation Solutions or Elgin Equipment Company.*

# Contact Elgin Today 304-755-0294

## Engineered Spare Parts

The below table provides a sample of the spare parts and consumable designed and made available by Elgin. Each of these spare parts has been designed to out-perform those available from competitors. No other OEM is more committed to supporting the entire service needs of your decanter centrifuge and vertical cuttings dryer fleet.

<p>H&amp;H 5500™, G-Tech 1655™, and Tecumseh 1655™ Solids Hub Plates with Tungsten Carbide Enhanced Plow</p> 	<p>NOV 3400™, Derrick DE-1000™, KEMTRON 1448™ Solids Discharge Ports and Plows</p> 	<p>H&amp;H 5500™, G-Tech 1655™, and Tecumseh 1655™ Solids Discharge Ports with Tungsten Carbide Enhanced Leading Face</p> 	<p>Alfa Laval Lynx 40™, NOV 3400™, and KEMTRON 1967™ Tungsten Carbide Solids Discharge Saddles</p> 
<p>NOV 3400™, H&amp;H 1448™, Derrick DE-1000™, KEMTRON 1448™ Fluid Discharge Ports</p> 	<p>KEMTRON 1967™ Fluid Discharge Ports</p> 	<p>Alfa Laval Lynx 40™ Tungsten Carbide Enhanced Plow</p> 	<p>Tomoe TDM-50™ Solid Head OD Plow with Tungsten Carbide Enhanced Interior Tiles</p> 
<p>NOV 3400™, H&amp;H 1448™, Derrick DE-1000™, &amp; KEMTRON 1448™ 52:1 Gear Boxes</p> 	<p>Alfa Laval Lynx 40™, KEMTRON 1967™, &amp; Centrisys 1854™ 80:1 Gear Boxes</p> 	<p>Tomoe TDM-50™ Solid Head Face Plow with Tungsten Carbide Enhanced Interior Tiles</p> 	<p>Tomoe TDM-50™ Solid End Bowl Exterior Wear Ring with Tungsten Carbide Enhanced Interior Tiles</p> 
<p>NOV 3400™, H&amp;H 1448™, Derrick DE-1000™, KEMTRON 1448™ Torque Arm Assemblies</p> 	<p>H&amp;H 5500™, G-Tech 1655™, and Tecumseh 1655™ Lid Clasps</p> 	<p>H&amp;H 5500™, G-Tech 1655™, and Tecumseh 1655™ GB-53 Trip Arm</p> 	<p>V-Belt and Poly-Chain Drive Belts for All Centrifuge Manufacturers</p> 

# Elgin Decanter Centrifuge Solutions

## Quality, Innovation, and Performance

As an original equipment manufacturer of decenter centrifuges, Elgin knows how important quality design and manufacturing is to our customers. Utilizing high efficiency motors, precision bearings housed in heavy-duty pillow blocks, SA-69 premium gearboxes, stainless-steel epicentric liquid-end ports, and wide-mouth tungsten or ceramic-lined discharge ports, you can be assured Elgin centrifuges provide consistent performance for all your solids control needs.

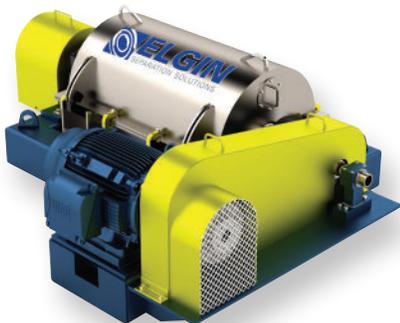
Elgin centrifuges can be configured in multiple styles for your operational needs. Options available include left or right motor placement, fluid clutch or soft start functions, active oil lubrication system or fully greased bearings and bushings. Contact your Elgin representative today and let our in-house engineering team design the perfect centrifuge solution for your operation.



Apex 1842BD™



Apex 1850BD™



Apex 2438BD™



Apex 2460BD™

## Key Features and Benefits



Four Stainless Epicentric Liquid-End Discharge Ports



Heavy-Duty Pillow Blocks with SKF Bearings



Four Wide-Mouth Solids-End Discharge Ports



SA-69 Gear Box with 80:1 or 140:1 Ratio

**Contact Elgin Today 304-755-0294**

Contact your Elgin representative today for all your repair / refurbish, spare parts, and new centrifuge needs. 304-755-0294

Model Number	Apex 1842BD™	Apex 1850BD™	Apex 2438BD™	Apex 2460BD™
Equipment Image				
Maximum G Force	1,130 G's	1,130 G's	1,130 G's	1,130 G's
Maximum Speed	2,100 rpm	2,100 rpm	2,100 rpm	2,100 rpm
Hydraulic Capacity	80 gpm (5.0 lps)	80 gpm (5.0 Lps)	150 gpm (9.5 Lps)	150 gpm (9.5 Lps)
Bowl Construction	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Bowl Diameter	18" (475 mm)	18" (475 mm)	24" (610 mm)	24" (610 mm)
Bowl Length	42" (1,066 mm)	50" (1,270 mm)	38" (965 mm)	60" (1,524 mm)
Weight	4,547 lbs (2,062 mm)	5,000 lbs (2,268 kgs)	6,300 lbs (2,858 kgs)	8,300 lbs (3,764 kgs)
Dimension	97" (2,463 mm) L x 72" (1,828 mm) W x 34" (863 mm) H	107" (2,718 mm) L x 78" (1,981 mm) W x 35" (889 mm) H	104" (2,641 mm) L x 84" (2,134 mm) W x 37" (940 mm) H	124" (3,149 mm) L x 82" (2,082 mm) W x 38" (965 mm) H
Gearbox Ratio	80:1 or 140:1	80:1 or 140:1	80:1 or 140:1	80:1 or 140:1



### Modular Lubrication System

Elgin has developed a modular centrifuge lube system that provides improved system performance and optimizes centrifuge up-time. Elgin's lube system monitors both flow and temperature and can provide a signal that can be routed back to a central control room. In addition, Elgin's centrifuge lube system provides for an enhanced heat exchanger and expanded 50-gallon capacity lube oil reservoir.



## Global Support

Elgin provides full installation and technical support for all its equipment. With technical support offices in Edmonton, Canada; Houston, Texas; Raleigh, Illinois; Poca, West Virginia; 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 worldwide 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.