11 Considerations for Selecting a **Decanter Centrifuge Repair Facility**









Checklist: 11 Considerations for Selecting a Decanter Centrifuge Repair Facility

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Understanding the technical details of how a decanter centrifuge works and having resources available to best maintain and repair centrifuge equipment is critical. What sets Centrisys/CNP apart as a world-class OEM decanter centrifuge manufacturer is our ability to leverage unprecedented experience and expertise to optimize centrifuge equipment around the globe. Delivering rapid, lifelong service for any brand of centrifuge equipment anywhere, our team minimizes costly downtime with service you can count on when you need it most.

The Centrisys/CNP team understands that not all <u>centrifuge repair and service</u> is the same. We understand that any shut down due to a centrifuge malfunction or inaccessible spare part may result in an emergency situation. Given the multiple shifts most customers run each day, decanter centrifuges must run at peak efficiency during all operational hours.

We've put together a helpful checklist below with 11 considerations for selecting the best decanter centrifuge repair facility so that you can be prepared next time you need to select the best service support. Let's dive in...



1. Ample Facility Space

Does the repair facility have sufficient space to repair correctly and safely? Floor and overhead space should be part of this consideration. Is there enough space to thoroughly inspect, clean, and measure the decanter centrifuge and its parts? There must be ample room in the facility to view and analyze the reasons for equipment failure.

A key measure of enough space in a decanter centrifuge repair facility is if a centrifuge skid system or a full centrifuge trailer system can be opened and repaired safely in the shop.

Repair facility square footage (and aerial square footage for the use of cranes) is a key enabler in providing ample room to inspect, measure, and clean every piece of equipment to either determine the reason for failure or properly repair equipment.



2. Current ISO Certification

Does the decanter centrifuge repair facility maintain an up-to-date International Organization for Standardization (ISO) certification? You might ask, "why is this important?" ISO certification certifies that the processes and documentation have met all of the standardization and quality assurance requirements. ISO is an independent, nongovernmental organization that develops standards to ensure the quality, safety, and efficiency of products, services, and systems.

Centrisys/CNP is ISO 9001:2015 certified, which specifies requirements for a quality management system to demonstrate an ability to consistently



provide products and services that meet customer and regulatory requirements, and enhance customer satisfaction through the practical application of systems and processes.

Essentially, ISO standards are in place to ensure consistency, and decanter centrifuge repair facilities with current ISO certification and annual inspection have taken the time and made an investment to ensure they provide the highest level of quality and service.

3. Holds Liability Insurance



Does the decanter centrifuge repair facility have bonding and liability insurance?

Liability insurance protects all parties' interests in the event of a mistake, accident, or work stoppage issue that may occur during the course of operations. In short, liability insurance covers damage, injuries, and other problems that could happen during the repair.

Surety bonds are also widely used in the construction industry and ensure that a project will be finished. They are designed to certify that a business acts in accordance with certain laws, and if the terms are broken, the harmed obligee can make a claim on the surety bond to recover losses incurred.

Learn how to optimize decanter centrifuge performance. **Subscribe to our Service and Maintenance Tips here.**

4. Dedicated Quality Control

In the same line as ISO certification and liability insurance, it is important to know if a decanter centrifuge repair facility has a dedicated quality control department?

Quality assurance is achieved by establishing steps and procedures that require team members to implement a number of checks and balances before the completion of a project is approved.

Quality-control processes ensure consistency and safety, potentially eliminating unnecessary costs and reducing the likelihood of liability claims and lawsuits. It is a vital element to providing high-quality products and services that exceed customer expectations.



Specifically, Centrisys/CNP's quality control processes, which include the tracking of incoming components and outgoing equipment.

5. Access to High-Speed Balancer and Centrifuge Balancing Equipment



Below is a list of a few questions you should ask related to balancing equipment:

- 1. Does the decanter centrifuge repair shop you are considering have a high-speed balancer and balancing equipment?
- 2. Does the balancing equipment run at full or over speed?
- 3. Does the balancing machine balance above the first critical speed to account for flexible rotors?
- 4. Is the balancing machine capable of three plane balancing?

Balancing equipment at high speeds, as you can imagine, is not advised without proper protection and protocols. This is why at Centrisys, we've created an innovative approach with our state-of-the-art balancing bunker.

Centrifuges sent to Centrisys for repair or rebuild and then require balancing are done in our <u>Centrifuge Balancing</u> <u>Bunker</u>. This dedicated shop space provides the necessary safety and protection of employees and customers who come to witness the operation. It not only provides for noise reduction during high-speed balancing, but it affords a much-needed measure of safety for our operators and service technicians.





6. Utilizes Overhead Cranes

Below is a list of a few questions you should ask related to the use of overhead cranes:

- 1. Does the decanter centrifuge service center have overhead cranes to load and unload equipment in a safe manner? (Cranes are also used in the assembly/disassembly of equipment)
- 2. How many are in the shop and what kind?
- 3. Is the crane load weight sufficient for your needs?

There are many options to lift and move heavy equipment around a repair shop, but the most



efficient and safe way is by using cranes. Overhead cranes have higher loading and unloading capabilities and can lift a wider variety of equipment. They are essential when it comes to the assembly and disassembly of the centrifuge during a repair. If a repair shop has invested in overhead cranes, they have invested in both the most efficient process of centrifuge service and repair, as well as the safety of their employees. Centrisys/CNP currently has over 25 cranes in all of its service shops ranging from 15-ton to half-ton jib cranes. All of the company's cranes are certified and inspected annually by a third-party crane manufacturer. A third party safety trainer performs regular employee crane training.

7. Covers Centrifuge Repair and Parts Under Standard Warranty



Are the centrifuge repair and repair parts guaranteed and covered under standard warranties? Centrisys/CNP offers standard parts warranties for OEM and centrifuge parts manufactured at Centrisys (typically, six months is the standard).

8. Maintains a Centrifuge Spare Parts Warehouse and Distribution

It is crucial a decanter centrifuge repair facility maintain a <u>spare parts warehouse</u> and distribution for OEM and aftermarket centrifuge parts inventory. This prevents a customer from having to wait a significant amount of time to receive an essential part for a decanter centrifuge repair.

Centrisys/CNP's repair facility features a 20,000 square-foot parts warehouse and distribution center with over \$9M of centrifuge parts in-stock.

Standard OEM centrifuge parts, ancillary equipment, and other technical items are stocked to minimize centrifuge downtime, including the following centrifuge parts:

- Centrifuge specific high-performance lubricants such as Kluber grease
- Centrifuge bearings (ball, thrust, needle, cylindrical roll)
- O-rings
- Sensors
- Cables



- Valves
- Ceramic, TC and stellite wear components gaskets
- Feed pipes
- Centrifuge filters
- Mechanical and anti-centrifugal seals

Read more on <u>4 Innovative Ways Centrisys</u>
<u>Supports Centrifuge Parts Replacement here.</u>







9. Incorporates Innovative Repair Technology and Validation

Does the decanter centrifuge repair facility use <u>SOLIDWORKS</u> or a CAD program to enhance, analyze, and validate the repair?

Incorporating innovative ways to utilize technology to support customers' spare parts replacement and repair needs is an incredibly beneficial attribute to look for in a decanter centrifuge repair facility.

It's critical that a centrifuge repair facility can determine if the part is worn to the point of repair or if a new replacement is the best option. A quality centrifuge repair facility can evaluate the parts damage and decide what the next step of the repair should be to keep the centrifuge running for optimal use.



For over 30 years, Centrisys' mechanical engineers have used CAD programs and SOLIDWORKS to analyze wear patterns on both the worn part and the centrifuge. This type of thorough analysis will optimize your process and extend the life of the centrifuge.

Centrisys also maintains a Centrifuge Parts Design Library – a turn-key SOLIDWORKS resource for decanter centrifuge parts designed and produced at Centrisys. Our centrifuge parts library has been in development since 1994 and includes parts, components, and ancillary equipment from new, re-engineered, reverse engineered, and optimized for all makes, models, and years of decanter centrifuges.

10. Offers In-House Machining, Hardfacing and Fabrication



Does the decanter centrifuge repair facility offer inhouse centrifuge machining, and welding capabilities for certified welders in-house? These services help ensure quality control and production, prioritizing from design through final product.

11. Dedicated Engineers, Service Technicians, and **Field Service Technicians**

Likely one of the most important attributes of all is that your decanter centrifuge repair facility employs dedicated engineers and specialists. Below is a list of a few questions you should ask related to the service support team.

- 1. How accessible and knowledgeable is the team of service technicians?
- 2. Do they know and understand the most current upgrades and improvements for the centrifuge?
- 3. Is there familiarity with the critical tolerances and dimensions for the centrifuge?
- 4. Do they have or can they get the drawings for the centrifuge?
- 5. How many technicians are formally trained on centrifuge service and repair?
- 6. How many repairs has the service center successfully completed on the brand and model of centrifuge?
- 7. Are dedicated field service technicians also employed for on-plant-site centrifuge maintenance, repair training, and start-up at your plant if needed?
- 8. Is there a 24-hour emergency service?

As a manufacturer, the Centrisys/CNP team has intricate knowledge of every component of the entire centrifuge and system, with the engineering knowledge to develop solutions when service, repair, and parts replacement needs occur.

Also, Centrisys/CNP offers a formal training program and works closely with its local technical college (Gateway Technical College) to ensure the highest level of education and training for all decanter centrifuge service technicians.







EVALUATING CENTRIFUGE SERVICE AND REPAIR FACILITIES: What's Important?

As a customer, you need to know all your options to make an informed decision about if, when, and how to repair a decanter centrifuge. Selecting the best decanter centrifuge facility that offers reputable and knowledgeable technicians shouldn't be overwhelming. Next time you need to select the best service support, make sure the decanter centrifuge repair facility and its technicians check all of these boxes.

Checklist for Selecting the Best Decanter Centrifuge Repair Facility

Ample Facility Space
Current ISO Certification
Holds Liability Insurance
Dedicated Quality Control
Access to High-Speed Balancer and Centrifuge Balancing Equipment
Utilizes Overhead Cranes
Covers Centrifuge Repair and Parts Under Standard Warranty
Maintains a Centrifuge Spare Parts Warehouse and Distribution
Incorporates Innovative Repair Technology and Validation
Offers In-House Machining, Hardfacing and Fabrication
Dedicated Engineers, Service Technicians and Field Service Technicians

Do you have questions about service, repair, or parts for a decanter centrifuge?

Contact the experts at Centrisys/CNP today.

