



WHIRLER

DECANTER CENTRIFUGES

*specializing in expert & Prompt
REPAIR, comprehensive SERVICE, and reliable AMC solutions*

**WHIRLER CENTRIFUGALS PVT LTD
AHMEDABAD**



WHIRLER

Decanter Centrifuge

Dive into the world of Decanter Centrifuges with us! Discover Whirler expansive capabilities, delve into common challenges and operational insights, explore our unparalleled expertise and cutting-edge technologies, and finally, uncover the distinct advantages and myriad benefits of partnering with Whirler. Get ready for an insightful Q&A session!

- Whirler Centrifuge Overview
- Whirler Infrastructure
- Problems in Decanter Centrifuges
- Centrifuge Operational Details
- Whirler Expertise
- Decanter Technologies
- Whirler Advantages
- Summary & Benefits
- Q&A



About Whirler Centrifugals



- Whirler is 45+ years of experience company, run by second and third generation of engineers, manufacturing all kind of Centrifuges, Screw Press, for solid liquid separation application.
- Whirler is the first INDIAN company to manufacture Decanter Centrifuge Indigenously, installed in 1992, is still is in operation.
- Whirler has installed 1000+ different type centrifuges in various applications in all corner of India, and abroad.
- Not only manufacturing, we also provide service and repair services to all kind and model of decanter centrifuges along with their replacement parts.
- Yearly we service and repair 100+ models of all brands of decanter centrifuges.



Manufacturing & Service

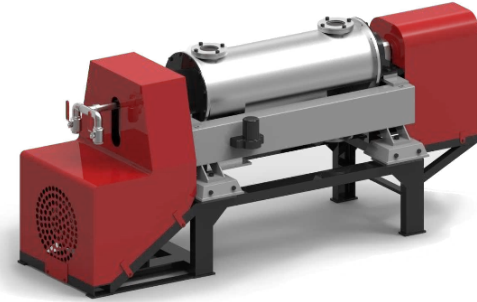


Step into Whirler's expensive ~72,000 sq ft manufacturing powerhouse, strategically located near Ahmedabad, India's engineering hub. Our state-of-the-art facility boasts in-house CNC, VMC, and grinding machines, licensed CAD/CAM software, and three cutting-edge balancing machines, all powered by a dedicated team of 100+ skilled personnel. With a formidable annual manufacturing capacity of 200+ machines and the ability to repair and overhaul an astounding 200+ centrifuges, we set the benchmark for efficiency and quality.



Common Problems in Decanter Centrifuge

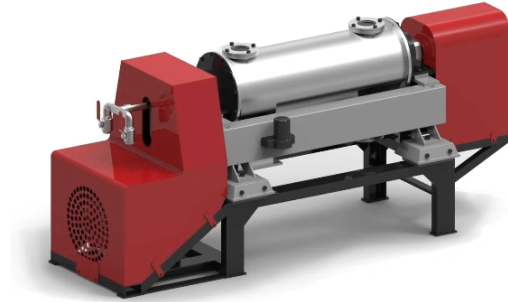
- Bearing Noise and Maintenance
 - For constant running decanter centrifuge, a bearing needs to be checked and replace ideally at 8000 Hours of operation.
 - *For improving running efficiency, we provide upgradation option to fully automatic lubrication of main pedestal bearings for all models of centrifuges.*
 - Internal (Scroll) Bearing problems can be checked with greasing and flushing the bearing with clean grease and checking ejected grease quality.
 - *We provide option to upgrade centrifuges with vibration sensors to predict bearing failure before it can create major damage to the centrifuge.*
 - We provide quarterly visits (wit AMC) to check and improve uptime of the centrifuges for all kind of bearing failures.



Common Problems in Decanter Centrifuge



- Vibration
 - Due to uneven wear of scroll / screw flights and/or damage of its tiles, can create unbalanced in the screw and bowl which is the most common decanter centrifuge failure scenario.
 - We provide vibration sensor based upgradation to predict this failure mode and prevent major damage to the centrifuges.
 - Due to complete inhouse facility..
 - to build tiles for the scroll of the centrifuge
 - Weld and rebuild of the scroll material
 - Scroll straightening
 - Machining
 - Grinding
 - Balancing
 - We can provide shortest turnaround time in the market for all brand and model of centrifuges.



Common Problems in Decanter Centrifuge



Struggling with differential speed loss due to sudden load or clogging? This can cripple your decanter centrifuge! Whirler offers a revolutionary upgrade for older centrifuges, transitioning from clutch and brake systems to a robust dual motor configuration with an upgraded electrical control panel. This not only dramatically improves centrifuge loading but also significantly extends its operational lifespan, transforming your efficiency!



Common Problems in Decanter Centrifuge



- Long Term Storage and Startup
 - Some time due to project requirements, or other circumstances, decanter centrifuge can be non-operational for long period of times, if that is the case, keep following precautions.
 - Overfilled the bearings with grease to reduce dust and water ingress.
 - Store in humidity free and water free location.
 - Do run (or manually rotate) machine at slow speed for 2-5 minutes every week.
 - Remove belts.
 - Do not start machine without complete checkup.
- If you need to start your long stored decanter centrifuge, do contact us for trouble free startup.



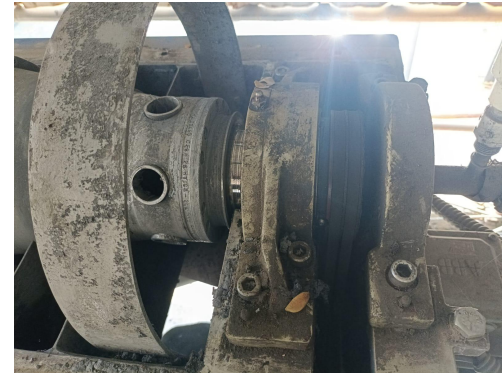
Approach WHIRLER for Repair of your centrifuge



Ready to get your centrifuge running optimally? Contact Whirler today via email at info@whirlercentrifugals.com or call us at +91 9426419038. Provide us with crucial details (model no., motor details, installation location, photos) for a rapid assessment and to determine if on-site or workshop repair is best. Once at our factory, we conduct a thorough disassembly and present a comprehensive work review. Upon your approval, we promptly commence repairs, returning your machine with a 4-hour no-load trial, verified parameters, and detailed service reports. Enjoy a 3-month guarantee on all our work, and for long-term cost-effectiveness, we highly recommend our Annual Maintenance Contract (AMC) for all serviced machines!



No challenge is too great! At Whirler, we possess the unmatched expertise and capability to repair decanter centrifuges of ANY brand, ANY model, and in ANY condition. Bring us your toughest cases – we thrive on bringing machines back to life!



No challenge is too great! At Whirler, we possess the unmatched expertise and capability to repair decanter centrifuges of ANY brand, ANY model, and in ANY condition. Bring us your toughest cases – we thrive on bringing machines back to life!



Whirler STP & WTP Product Range



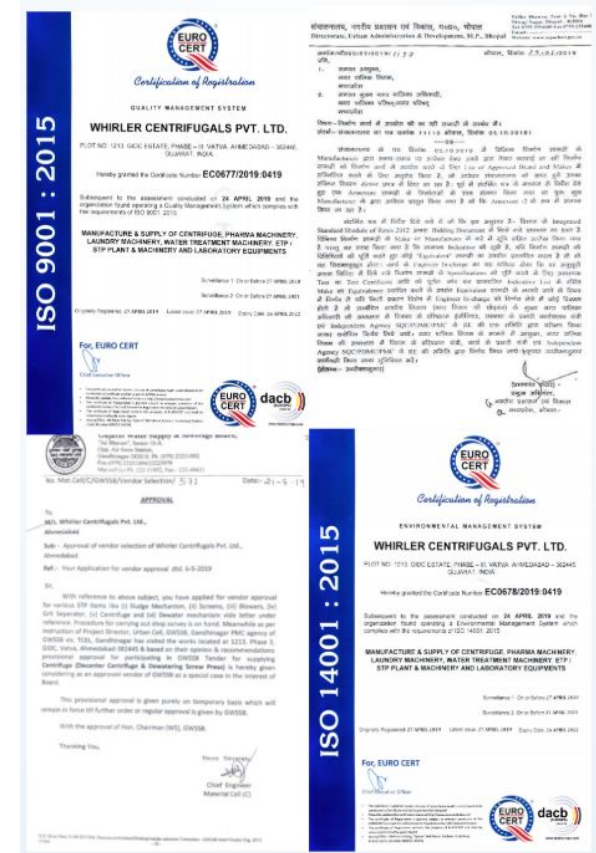
- Whirler makes Decanter centrifuge for STP & WTP Sludge Dewatering Application.
- Whirler makes Screw Press for Oily STP & WTP Sludge in food Industry.
- Whirler makes Basket Centrifuge for KLD scale small STP & WTP Plants.
- Whirler makes Dual Screw Press for biogas slurry dewatering application.
- Whirler makes Decanter for lime-sludge dewatering application.
- Whirler have solution for all kind of ETP/STP & WTP Sludge Dewatering and Drying application.



Quality & Approach



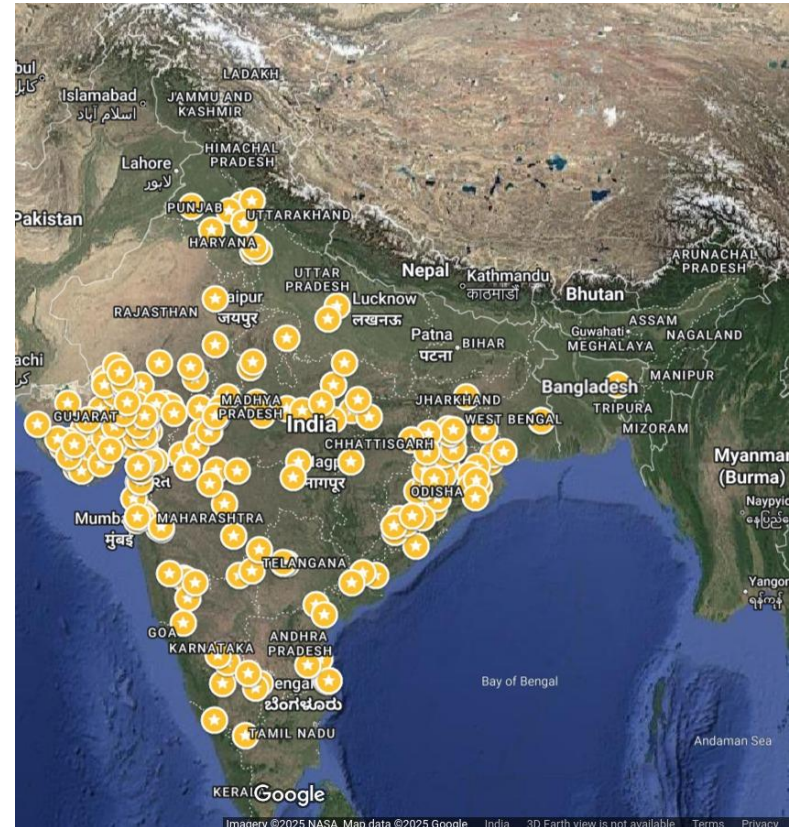
- Whirler is an ISO 9001:2015 and ISO 14001:2015 Certified Company.
- All Decanters manufactured are thoroughly tested and certified, with TPI like SGS, TUV Nord, DNV, Lloyd's, EIL, PDIL, BVI, TUV SUD, Tata Projects etc.
- Team of 4+ Dedicated engineers, 20+ technicians and 40+ workers ensure timely qualified execution.
- Yearly execution of 100+ projects.
- Yearly execution of 100+ repairs and services of all brands and models



Experience



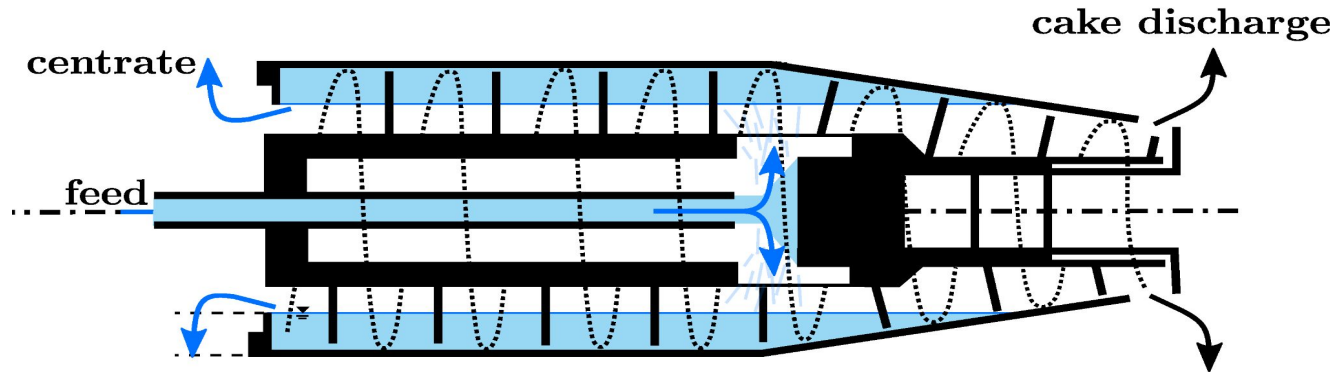
- Whirler has supplied and Repaired Decanter Centrifuge in
 - Municipal STP & WTP Plants
 - Regional STP & WTP Plants
 - CETP Plants, ETP Plants
 - Mining Plants
 - Paper Mills
 - Ethanol Plants
- In Industry like paper, dye, chemical, food, starch, pharmaceutical, plastic, recycling, lchette processing etc.
- We have worked with central, state, municipal body, CETP contractors and International Water treatment Plant manufacturers.



How Decanter Works ?



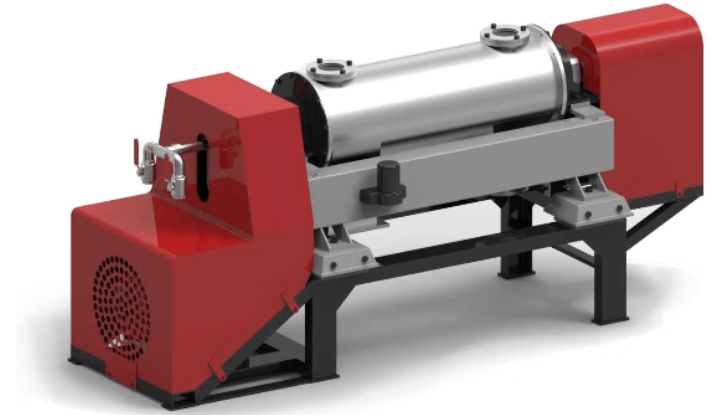
1. **Feed Introduction:** The mixture (slurry) containing solids and liquids is continuously pumped into the center of a rapidly rotating horizontal bowl, usually through a stationary feed pipe.
2. **High-Speed Rotation & Separation:** The bowl spins at high speeds, generating powerful centrifugal forces (thousands of times greater than gravity). This force throws the denser solid particles outwards against the bowl's inner wall.
3. **Solids Conveying:** An internal screw conveyor (scroll), rotating at a slightly different speed than the bowl, continuously scrapes the accumulated solids along the bowl wall towards one end (the conical section).
4. **Separate Discharge:** The compacted solids ("cake") are discharged from ports at the conical end, while the clarified liquid ("centrate" or supernatant) flows towards the larger cylindrical end of the bowl and exits through adjustable overflow weirs or ports.



Decanter Selection



1. **Performance Requirements (Cake Dryness & Capture Rate):** Define the target cake dryness (percentage of dry solids, %DS) and the necessary solids capture rate (typically >95%) to ensure a clear centrate (low suspended solids) returning to the plant.
2. **Sludge Characteristics & Wear Resistance:** Assess the specific type of sludge (e.g., primary, secondary/WAS, digested, mixed, Sewage), its abrasiveness, and variability in solids concentration. Select appropriate stainless steel grades and robust wear protection to ensure longevity and minimize downtime.
3. **Capacity & Polymer Consumption:** Ensure the centrifuge has adequate hydraulic and solids handling capacity (m^3/hr and kg DS/hr) to process the plant's peak sludge flow.
4. **Operational Costs & Reliability:** Consider ease of operation (automation level, control system flexibility for differential speed and pond depth), required maintenance proven reliability and service support for the centrifuge model in demanding STP & WTP environments.



Whirler Benefits



1. **Design Features:** Standard Design with locally and indigenously developed components provides ease of maintenance, with 15+ years of spares support.
2. **Advanced Wear Protection Technology:** Whirler Centrifugals 's high performance Stellite alloys based wear protection on critical parts (scroll edges, feed/discharge zones), leading to longer operational life, on site and lower maintenance costs.
3. **SCADA Control Systems & Automation:** All panel comes with SCADA systems communication option and support.
4. **Localized Support & Service Structure :** A key unique benefit Whirler Centrifugals might emphasize is strong, responsive local manufacturing, service, spare parts availability, and technical support based within India, potentially offering faster turnaround times and tailored solutions for the Indian market compared to international competitors.



Service & Maintenance



1. **Responsive Local Field Service:** Backed by readily available and qualified field service engineers, ensure timely on-site assistance for troubleshooting and repairs.
2. **Comprehensive Technical Expertise & Training:** Providing highly skilled technicians for effective diagnostics, maintenance, and operational optimization.
3. **Robust Spare Parts Availability:** Maintaining a significant inventory of genuine spare parts, minimize delivery times and equipment downtime during maintenance or breakdown scenarios.
4. **Proactive Maintenance Programs & Support:** Offering structured preventative maintenance plans and service contracts tailored to customer needs and operating conditions, supplemented by technical phone support or remote diagnostic capabilities.



Q & A

Questions ?

- Clarification ?
- Elaboration ?
- Comparisons ?
- Opinions ?
- Critique ?
- Technical ?
- Commercial ?



Let's Work Together

- Email : info@whirlercentrifugals.com
- Phone : +91 94264 19038
- Office : L605, GIDC, Odhav,
Ahmedabad 382415, Gujarat, India
- Works : 13,14 Industrial Estate,
Varsola, Mahemdabad, Kheda 387130,
Gujarat, India.



Thank You

- Thank you for your time, consideration, and opportunity to present WHIRLER's decanter centrifuge technology, its capability to provide comprehensive solution to all kind of centrifuge related problems and solutions.
- We look forward to mutually rewarding opportunities.
- Thank You.

