

Centrisys Skid System

High Performance Centrifuge Dewatering Systems

Centrisys Corporation has always been known for their innovative designs. Complete skid mounted dewatering systems are no exception. These systems are designed with all the components required for sludge dewatering & thickening in one single package with flow rates ranging from 5 to 500 gpm.

Systems are designed around the proven Centrisys High Performance Centrifuge.

Ancillary components which complete the system are chosen with performance & reliability in mind. Within a few hours of being on site, the systems can be placed in operation with a minimum amount of time.

Smaller municipalities as well as industrial companies find the simplicity of the Centrisys System a key to cost effective high performance dewatering. Operators with multiple plants can use the mobility of the Centrisys System for process requirements at several locations.



Systems Include The Following:

- High Solids Centrisys Centrifuge
- Skid/Stand Structure
- Catwalks & Handrails
- NEMA 4X PLC Control System
- All VFD's & Motor Starters
- Sludge Feed Pump (VFD Controlled)
- Polymer Blending Unit
- Dewatered Cake Conveyor
- Sludge Flow Meter
- All Inter-connective Electrical & Pipe Work
- Multiple Polymer Injection Points
- Single Point Connection Manifold



Built in the USA - ISO 9001 : 2008 Certified

Working Principle

The centrifuge is a rotating assembly that uses centrifugal force to separate solids from liquids. Sludge enters the rotating assembly through a stationary feed tube and is discharged in the feed compartment within the conveyor. Here the material is gently accelerated into the chamber of the bowl where the separation takes place. The solids which have settled along the wall of the bowl are conveyed toward the conical end of the bowl where further drying occurs prior to being discharged from the centrifuge. The clarified liquid travels the opposite direction of the solids and is discharged over adjustable weirs into a separate compartment.

Centrifuge Drive

The centrifuge bowl is driven by an electric motor through V-belts. The speed of the centrifuge is adjusted through the use of a Variable Frequency Drive (VFD). The conveyor is driven by a fully automatic backdrive that is completely independent of the centrifuge bowl. The conveyor drive is designed to consistently produce the highest possible cake solids automatically! This system insures the lowest installed horsepower over any other centrifuge manufacturer.

Construction

The centrifuge rotating assembly is made from advanced centrifugally cast duplex stainless steel. Non-rotating components which come in contact with the process material are manufactured of corrosion resistant stainless steel. The modular centrifuge base is manufactured from carbon steel with industrial epoxy coatings.

Optimization

The Centrisys decanters are the most versatile design available. The same units can be used for high solids dewatering or thickening within minutes through a nonproprietary touch screen interface.

Design

The compact in-line design reduces the amount of floor space and overhead height required with the ease of maintenance and operation in mind.

Technical Details	CS10-4	CS14-4	CS18-4	CS18-4HC	CS21-4	CS21-4HC	CS26-4	CS30-4
Feed Capacity (gpm)	5-35	20-60	50-100	75-125	100-175	150-225	200-400	300-600
Cake Dryness	Up to 40 % depending on sludge type and condition							
Polymer System	Optional Emulsion Blending Unit							
Screw Conveyor	Free Standing Conveyor for Loading of Standard Roll Off Bin							
Centrifuge Weight (lbs)	2000	3800	6500	8200	8500	10000	18100	28500
Total Installed HP	20	40	50	60	75	90	165	275
LxWx H	89x44x27	122x34x31	151x44x41	175x44x47	175x44x47	190x45x53	224x56x62	230x64x65
Auto Lube System	Yes							
Pre Wired	Yes							
Pre Piped	Yes							
Total Weight (lbs)	8500	9200	15000	18500	19000	25000	28000	
Total LxWxH	200x84x92	156x76x90	200x88x108	224x88x110	224x88x110	228x90x100	288x1000x120	

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