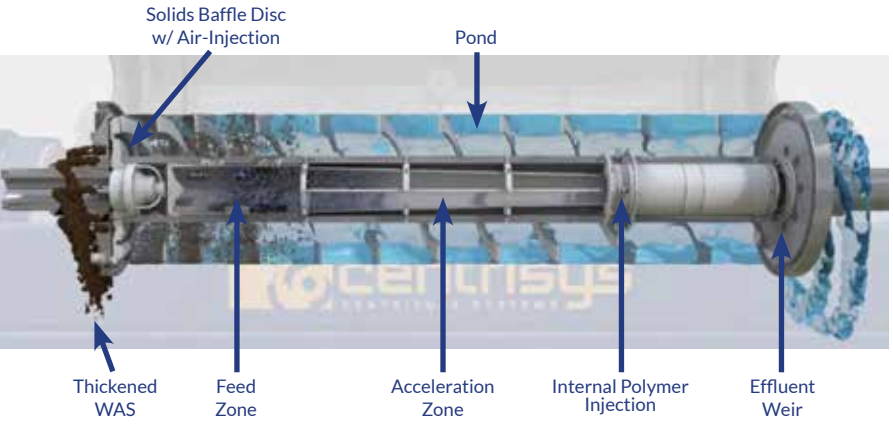
The Most Efficient Solution to Thicken Sludge

Centrisys Thickening Centrifuge

The Centrisys Thickening Centrifuge THK Series is designed to achieve high-performance thickening of biosolids with the patented Hydro-Pneumatic Technology proves that NO polymer is required under normal conditions. The THK improves upon existing technologies using fundamental principles of the centrifuge, gravity belt thickener (GBT), dissolve air flotation (DAFT) and the rotary drum thickener.



- No-Conical = greater comparative capacity
- Proprietary hydro-pneumatic control of cake solids
- Independent control of liquids and solids weir
- Greater G-volume
- Proprietary internal polymer injection system (optional)
- Highest grade materials of construction
- Proprietary tungsten carbide wear plows for grit and trash

Typical Applications

- Primary sludge
- Secondary (waste activated) sludge
- Oxidation ditch sludge
- Digested sludge
- MBR (membrane bioreactor) sludge
- Dilute pulp and paper waste prior to dewatering
- Concentration of food processing waste
- Concentration of algae
- Concentration of yeast

Features

- Proven no polymer required under normal conditions (150 SVI)
- Smallest and most efficient footprint for given flow rates compared to gravity belt and rotary drum thickening technologies
- Contained vapor system
- Expected ROI of 2.5 years due to polymer savings alone
- Reduced operating and maintenance costs
- 50% less power consumption compared to standard dewatering centrifuges
- Reduced installation costs by 35-50% ($/gpm)
- Simple to operate with minimal operator attention

Designed & Built in the U.S.A.

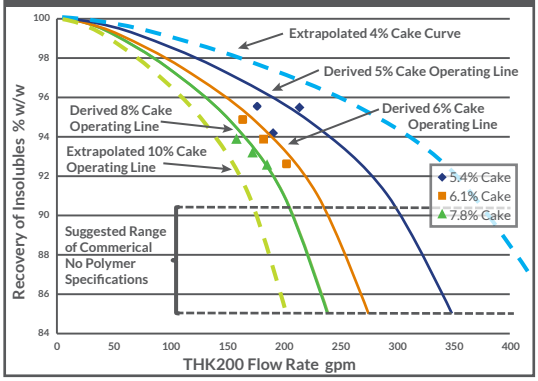
PRODUCT OVERVIEW: Thickening Centrifuges THK Series

Thickening Solutions: USA Built, Sold & Serviced Around the World

Thickening Centrifuges THK Series						
	THK200		THK350		THK600	
	Maximum	Average	Maximum	Average	Maximum	Average
Feed Flow Rate w/o Polymer* gpm	180	125	320	265	765	640
Feed Flow Rate w/ Polymer* gpm	250	200	500	425	1,100	800
Approx. Bowl Diameter in (m)	18 (0.45)		21 (0.53)		26 (0.66)	
Total Static Weight - Empty lbs (kg)	5,000 (2,950)		10,800 (4,900)		27,000 (12,250)	
Standard Main Drive HP	50		75		150	
Standard Scroll Drive HP	10		15		25	
Standard Total Installed HP	60		90		150	
G-volume Capacity at 3,000 G gal	200,000		332,000		718,000	

Thickening Centrifuges THK Series Performance		Waste Activated Sludge (WAS)	WAS/Primary Blend
No Polymer Specific Power** kW/gpm	Minimum	0.07	0.08
	Maximum	0.18	0.19
	Average	0.12	0.15
Polymer Specific Power** kW/gpm	Minimum	0.05	0.05
	Maximum	0.15	0.18
	Average	0.08	0.10
Average Solids Recovery % wt./wt.	w/o Polymer	93	90
	w/ Polymer	97	94
Average Cake Solids % Total Solids	w/o Polymer	4 to 7	
	w/ Polymer	5 to 10	

Gao Bei Dian Wastewater Plant - Beijing, China
WAS No Polymer 1.2-1.35% w/w feed



*Values are approximate for Influent Solids of 0.5% to 1.5% WAS. **Specific power estimations are for normal flows. Contact Centrisys for project-specific calculations.

Questions about Centrisys technologies? Contact us today!

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