

## Helping Customers Separate Solids from Wastewater More Efficiently

Worldwide, we must find every possible way to manage water resources more efficiently. That makes municipal and industrial wastewater innovation urgent and companies like Centrisys essential. For over three decades, Centrisys Corporation has advanced decanter centrifuge innovation for water, wastewater and solids separation.

Since 1987, Centrisys has provided centrifuge equipment repair and maintenance. The company evolved as a technical leader by designing, engineering and building decanter equipment for sludge dewatering and thickening. Centrisys applies its deep technology understanding to produce breakthroughs that continue to improve efficiency, safety and performance.

### Engineered, Designed and Manufactured in the USA

Based in Kenosha, Wisconsin, Centrisys is the only USA manufacturer of decanter centrifuges and sludge thickeners for municipal water and wastewater applications and one of the few companies in the world focused solely on this centrifuge technology. This niche emphasis gives the company room to systematically pursue new markets, industries and customers while bringing crucial innovations that support processing wastewater around the world.

Centrisys C.E.O. and founder Michael Kopper leads a team of diverse employees that bring fresh perspectives, continuous learning and a collaborative environment to tackle the toughest challenges in the industry.



DingFuZhuang WWTP Beijing, China: Five Centrisys THK600 and four CS21-4HC.

### Advanced Biosolids Treatment Systems

In 2014, Centrisys launched CNP – Technology Water and Biosolids Corporation which supplies nutrient recovery and advanced biosolids treatment systems for phosphorus recover and thermal hydrolysis processes. Together, Centrisys/CNP systematically expands their offerings to include innovative technologies that are relevant for resource recovery and advanced biosolids process intensification.

## Centrisys/CNP at a Glance

### Industry Applications

- Municipal Water + Wastewater
- Animal Protein + By-Products
- Animal Waste + Manure
- Biofuels
- Chemical Processing
- Food + Beverage
- Mining + Minerals
- Oil + Gas
- Power
- Pulp + Paper
- Site Remediation
- Steel Mill
- Tunneling

### Company Leadership

- Michael Kopper, C.E.O. and Founder
- Gerhard Forstner, CNP North America President
- George Kueppers, VP of Production
- James Andresen, Chief Operating Officer
- Josh Gable, Sales Director
- Luis Garza, Mechanical Engineering Director
- Geoff Harvey, Electrical Engineering Director
- Robert Greidanus, Manufacturing Director
- Robert Havrin, Process Engineering Director

### Facilities & Locations

- Kenosha, Wisconsin (Global Headquarters) – production, repair and service
- Stockton, California – repair and service
- Lufkin, Texas – repair and service
- Huelva, Spain – sales, repair and service
- Indaiatuba, Brazil – sales, repair and service
- Buenos Aires, Argentina – repair and service
- Plankstadt, Germany – repair and service
- Abu Dabi, U.A.E.
- Chengdu, China – sales, repair and service
- Singapore – repair and service
- Global support centers



# Continuous Innovations Gain Industry Leaders Attention

Many organizations recognize Centrisys/CNP for its valuable innovation leadership. Lead engineering firms analyze and publish wastewater separation technologies recommendations from Centrisys/CNP. Kenosha, Wisconsin has an international reputation for being ahead of the curve in wastewater and water treatment. Kenosha has been recognized with the 2017 ACEC Grand Award, 2017 W&WD Top Project Award and the 2018 Utility of the Future Today Recognition for their Energy Optimization Resource Recovery Project which included a CS21-4HC, (2) THK200s and PONDUS.

Cities like New York City; Denver, Colorado; Austin, Texas; Seattle, Washington; Cleveland, Ohio and Fresno, California choose Centrisys centrifuges based on careful consideration of the proven advantages. Beijing, China, one of the world's largest wastewater treatment plants, installed 16 THK600 sludge thickening centrifuges to help reduce their biosolids footprint. MagPrex™ has six North American installations with two plants fully operational by the end of 2020 and another two plants operational in 2021.

## The Centrisys/CNP portfolio includes:

- **CS Series:** available from 6- to 44-inch machines, the 2- and 3-phase decanter centrifuges deliver the highest torque with the lowest horsepower; has lower operating and maintenance costs and delivers increased solids handling with higher flow rates
- **DT Series:** the first decanter centrifuge developed specifically for the manure industry; removes suspended solids and nutrients from manure slurry which allows producers to haul less and utilize recovered solids
- **T Series:** a shallow beach centrifuge for mineral applications, mining, tunneling, oil and gas
- **THK Series:** specifically designed for sludge thickening, available in three sizes: 200, 350 and 600. The THK sludge thickener design uses little to no polymer, optimizes flow rates and significantly reduces floor space requirements and treatment plant odors



Metro Wastewater Reclamation District Denver, Colorado: Installation underway for MagPrex, a post-digestion P-recovery process and (8) SC26-4 dewatering centrifuges.

- **CalPrex™** is a pre-digestion P-recovery process that recovers phosphorus as a brushite, which can be used as a fertilizer (*exclusive worldwide licensing*)
- **MagPrex™** is a post-digestion P-recovery process that turns dissolved nutrients into struvite crystals, which can be used as a slow releasing fertilizer when harvested and utilized separately (*exclusive North American distributor*)
- **PONDUS™** is a Thermal Hydrolysis Process (THP) that increases biogas production and digester capacity, while reducing sludge volume and polymer consumption (*exclusive North America distributor*)
- **LIPP GmbH** is a digester and storage tanks manufacturer (*exclusive North American distributor*)
- **Passavant® Variable Inlet System hydrograv® adapt** is an inlet system that adjusts loading to fluctuations in a secondary clarifier (*exclusive North American distributor*)

Centrisys/CNP continues to build on this momentum, seeking new ways to maximize uptime, efficiency and performance in biosolids technology while supporting global efforts to better manage resources along the way.



**Reduce Energy Use:** Centrisys was the first to design decanter centrifuges with advanced hydraulic scroll drives as a standard. The Viscotherm ROTODIFF® back drive provides the highest torque to weight ratio, 100 percent torque at all speeds and low energy consumption. This hydraulic back drive technology saves energy costs for over 2,000 Centrisys customers worldwide.



**Capture the Most Phosphorus:** The combination of CalPrex and MagPrex captures 50%+ total phosphorus entering treatment plants and can reduce polymer consumption up to 30%. The plant reduces the phosphate recycle load up to 90%, reduces disposal costs up to 20% and reduces maintenance costs up to 50%.



**Service and Repair Capabilities:** The ability to service ALL makes, models and brands of decanter centrifuges allows Centrisys/CNP to help you get the most out of your equipment. The service department provides data, training and engineering expertise to efficiently repair centrifuges across a range of applications, while accessing maintenance parts housed at our USA service centers.