

# Challenging the Status Quo to Bring Improved Equipment and Processes to the Industry

Since 1987, Centrisys has provided centrifuge equipment, repair and maintenance. The company evolved as a technical leader by developing decanter equipment for sludge dewatering and thickening. Centrisys applies its deep technology understanding to produce equipment and process breakthroughs that continue to improve efficiency, performance and safety. Centrisys has always leveraged what they know and has learned through the years to challenge the status quo and to consider new possibilities for equipment and processes. Centrisys is serious about continuous improvement.

## 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. It's through a niche emphasis on customization and continuous improvement that 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.

## A Mindset of Continuous Improvement

In 2014, Centrisys launched CNP – Technology Water and Biosolids Corporation. CNP supplies nutrient recovery and advanced biosolids treatment systems for pre- and post-digestion phosphorus recovery and thermal hydrolysis processes (THP). Working together, Centrisys/CNP constantly has their eye on the next level of equipment to increase performance that is relevant for resource recovery and advanced biosolids treatment.

## One Team, Two Companies - A Revolutionary Approach

Being both a biosolids equipment manufacturer and an environmental process developer gives the Centrisys/CNP an industry advantage. The teams communicate with each other and have a thorough understanding of what needs to be fine-tuned for complete process performance. The Centrisys/CNP team has a natural drive for problem-solving and developing new ways to deliver top-notch quality to their customers.

## 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 Product Innovation
- James Sandstrom, Chief Operating Officer
- Gary Stinson, Chief Financial Officer
- Josh Gable, Sales Director
- Andy Torres, Service Director
- Luis Garza, Mechanical Engineering Director
- Madhavi Batchu, Applications Engineering Director
- Hiroko Yoshida, R&D Director

### Facilities & Locations

- Kenosha, Wisconsin (Global Headquarters) – production, repair and service
- Stockton, California – repair and service
- Indaiatuba, Brazil – sales, repair and service
- Buenos Aires, Argentina – repair and service
- Plankstadt, Germany – repair and service
- Huelva, Spain – sales, 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

Leading global engineering firms and treatment plants recognize Centrisys/CNP for their innovative problem-solving approach to biosolids equipment and process development. Centrisys/CNP, headquartered in Kenosha, Wisconsin, has an international reputation for being ahead of the curve in wastewater and water treatment.

The Centrisys/CNP teams played a leading role with the Kenosha Energy Recovery Project by providing their equipment, processes and consulting throughout the installation process. Kenosha Water Utility (KWU) 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; Green Bay, Wisconsin; San Antonio, Texas and Fresno, California choose Centrisys dewatering and sludge thickening 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. MagPrex™ has seven North American installations: Howard County, Maryland; Medina County, Ohio; Elgin, Illinois; Fort Collins, Colorado; Denver, Colorado; Salt Lake City, Utah; and Meridian, Idaho.

## 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
- **HC Series:** Centrisys re-thought the standard CS design to increase G-volume and flow rate. The HC model has all the benefits of a standard sized dewatering centrifuge but has an advantage of a 15-20% increase in throughput capacity
- **DT Model:** 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 Model:** 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
- **DLT Series:** a dual belt, low-temperature belt dryer that reduces biosolids volume by a third and converts biosolids to Class A
- **CalPrex®:** a pre-digestion P-recovery process that recovers phosphorus as a brushite, which can be used as a fertilizer (*exclusive worldwide licensing*)
- **MagPrex™:** 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™:** a Thermal Hydrolysis Process (THP) that increases biogas production and digester capacity, while reducing sludge volume and polymer consumption (*exclusive North America distributor*)



**Metro Waster Recovery | Denver, Colorado:** Installation is complete for MagPrex, the world's largest struvite recovery installation (from digestate) and (8) CS26-4 dewatering centrifuges.



**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.