



Centrisys Centrifuge Systems is pleased to sponsor this CEU qualified training course as a service to our Wisconsin associates:

**Optimizing process performance and mechanical reliability of the Decanter Centrifuge.
CEU credit 5 hrs**

Date: August 4, 2010

**Location: Dane County Land & Water Resources Park
Madison, WI Time: 9:00 – 3:30 (lunch provided)**

The course will cover all models of decanter centrifuges and provide the understanding to:

- Maximize machine reliability
- Reduce maintenance cost
- Reduce polymer cost
- Optimize performance to reduce disposal costs.

The afternoon hands on workshop will be hosted by Madison Metropolitan in their centrifuge dewatering building

The morning instructional session will be held at:

Dane County Land & Water Resources Park
Lussier Heritage Center
3101 Lake Farm Road
Madison, WI 53711

Lunch will be provided by Centrisys

The afternoon hands on workshop will be held at the Madison Metropolitan Wastewater facility. In the solids dewatering building.

Who should attend? Operators, supervisors and maintenance technicians for facilities that have centrifuges installed or are considering their use in the future. Professionals that are interested in understanding the principals of centrifugal dewatering and how it may benefit their facility.



An ISO 9001:2000 Company

Made in the USA

9586 58th Place
Kenosha, WI 53144
Phone: (262) 654-6006
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www.centrifuge-systems.com
chris.mahoney@centrisys.us



Instruction and discussions will be lead by:

- **Michael Kopper-** President of Centrisys. Michael has over 30 years of experience in the design, and application of decanter centrifuges all over the world.
- **Nicholas Flomp-** Nick is a Senior field tech for Centrisys who supports customers with on site pilot testing all the way through installation and start-up.
- **George Kueppers-** George is the Director of Manufacturing and oversees the field service and repair organizations. Under Georges Direction, the Centrisys technicians can provide support on any decanter whether it is a new gearbox for a Westfalia or a new bowl for an Alfa Laval.
- **Dennis Egge-** Superintendent of Janesville Wastewater (retired) Dennis will share his perspective of the proper use, practices and procedures for dewatering centrifuges based upon his experience over the years.



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Course Topic:

Optimizing process performance and mechanical reliability of the Decanter Centrifuge.

Overview:

The decanter centrifuge is a critical component of many plant's sludge management strategy. The proper optimization of the process variables can dramatically reduce the cost of dewatering through lower polymer and power demands. In addition, by understanding the mechanical design and implementing a disciplined maintenance program the plant can maximize runtime and efficiency while minimizing wear and tear on the equipment. Properly managed, these two programs can reduce operating and life-cycle costs while maximizing reliability and useful life for the decanter.

Agenda: Morning 3 hours

- 9:00 – 9:40 Background – Centrifuge theory, design and process application.
- Topics covered- operating principals, sedimentation theory, solids settling and compaction, application and effectiveness of polymers as settling aids.
- 9:40 – 10:20 Application- The design and application of horizontal decanter centrifuges for wastewater treatment.
- Topics covered-mechanical capabilities and limitations, wear protection, process control, automated backdrives and maximizing process performance.
- 10:20 – 10:35 Break
- 10:35 – 11:15 Operation- proper start-up and operation of the decanter centrifuges.
- Topics covered- Touch screen interface and control features. Initial checklist for machine and installation. Start-up procedure in automatic and manual mode. Typical Set points and settings for process control. Process optimization. Automated and manual methods of shutdown and cleaning.
- 11:15 – 12:00 Trouble shooting – the section will be divided into three sections.
- Mechanical
 - Controls
 - Process.
- 12:00 – 1:00 Lunch: At Heritage Center – sponsored by Centrisys



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PM Workshop 2 hours

Mechanical maintenance-

- 1:15 – 2:00 Class room- Maintenance requirements, schedule and procedures for the decanter, backdrive, controls, motors, sensors, grease, oil and filters
- 2:00 – 2:35 Workshop- detailed review of seal and bearing assemblies for the bowl and conveyor. Gauging of wear and useful life of tungsten carbide for the feed zone, conveyor and solids discharge.
- 2:35 – 2 – 45 Break
- 2:45 – 3:15 Demonstration of standard routine maintenance procedures.
- 3:15 – 3:25 Q&A
- 3:25 – 3:30 Review
- 3:30 Adjourn





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July 30, 2010

Registration Form

Optimizing process performance and mechanical reliability of the Decanter Centrifuge.

CEU credit 5- hrs

Date: August 4, 2010

Location: Madison, WI

Name	
Title	
Department	
Company/ Municipality	
Street address	
City, State, Zip	
Phone	
Email	

Please register me for the upcoming course and send me information on the event. _____

I will be attending the morning class room session _____

I will be attending the afternoon workshop _____

Notes/comments/considerations



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