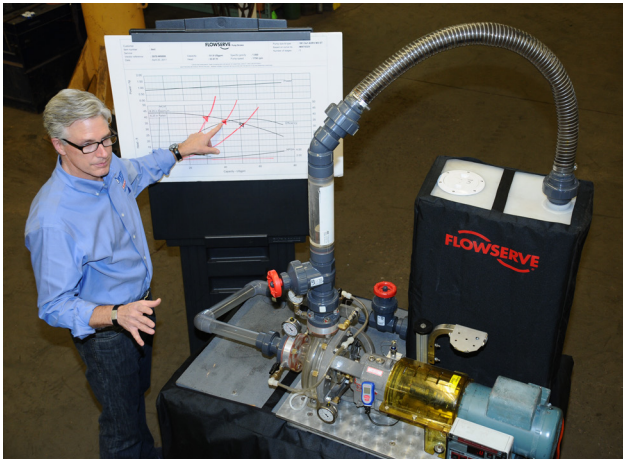




2018 CATALOG OF TRAINING



YOUR EDUCATIONAL RESOURCE



Drawing on a wealth of engineering and service expertise, Siewert Equipment offers accredited seminars and training for engineers & operators.

With professional licensing credits provided by the Practicing Institute of Engineers (PIE), the NYS Dept. of Environmental Control (DEC), and the NYS Dept. of Health (DOH), we can help you stay on the cutting edge of the industry.

EXPERIENCED TRAINERS

- Our instructors have over 350 years of combined industry experience

HANDS-ON TRAINING

- Many of our seminars include live demos with glass-faced pumps and hands-on training



WE COME TO YOU

- We offer 1-2 hour lunch & learns at your location
- We provide coordination and instructors
- We handle the paperwork and approval process for accreditation
- We also host several 4-6.5 credit hour seminars every year across Upstate New York



Enhanced Water/Wastewater Treatment by Dynamic Mixing

Credits: PDH 1 hour; DEC .5 hour

Description: This course will provide a general overview of tank mixing options for both water and wastewater application and its benefits.

A-B-Ease of Valve Automation

Credits: PDH 1 hour; DEC 1 hour

Description: Introduction to the different types and applications for electrical actuators for water and wastewater treatment plants.

Screen Selection, Operation & Maintenance

Credits: PDH 1 hour

Description: This course covers what screenings are and why remove them, the removal quantities and quality, the different types of screens & applications, wash press types and applications and the design criteria.

Selection & Application of Vertical Turbine Pumps

Credits: PDH 1 hour

Description: This presentation will go through the hydraulic methodology and construction options available when configuring a vertical turbine pump to suit a given application.

Metering Pump Technology

Credits: PDH 1 hour; DEC 1 hour

Description: This course is designed to introduce engineers to metering pump technology, which is used in frequently in disinfection.

• Wastewater Pump Station Design

Credits: PDH 1 hour

Description: This course is an overview of the various types of pumps and pump stations, pump selection, causes of cavitation & how to prevent it, wet well design, how to do force main sizing & what parallel pumping is.

• Thickened Aerobic Digestion Process **

Credits: PDH 1 hour

Description: Overview of Thickened Aerobic Digestion Process technologies: G-TAD, M-TAD & Mem-TAD as well as results from existing operating plants.

• Mag Drive and Power Monitor Pump Demo

Credits: PDH 1 hour; DEC 1 hour

Description: This course is designed to illustrate how a live demo centrifugal pump runs on its curve and how a power monitor can keep a pump running in its optimal performance range.

• Air Control in Liquid Transmission Systems

Credits: PDH 1 hour; DEC 1 hour

Description: This course will provide an overview for the various types of issues when there is air in a wastewater or water line. It will describe the different types of equipment available to remove air from a pipeline.

• Mechanical Seal Basic Training

Credits: PDH 1 hour

Description: The subject matter covers Mechanical Sealing devices and proper use of them in a pump system to increase equipment reliability.

*** indicates training that we do through our manufacturers.
We may need additional time to coordinate.*

● **Low Pressure Sewer Systems: Providing a Sustainable Solution for Sewer Renewal ****

Credits: PDH 1 hour; DEC 1 hour

Description: The fundamentals of low pressure sewer systems & the viability of the systems as a sustainable solution for failing conventional sewer systems. Includes an overview of low pressure sewer systems, system equipment, operation & maintenance overview, & system design principles.

● **The Future of Low Pressure Sewers: Overview and Case Studies of Decentralized Flow Equalization ****

Credits: PDH 1.5 hours

Description: Smart Control Systems represent a step change in how collection systems can be conceived, designed and operated. These systems provide ultimate flexibility to deliver predictable flow to downstream infrastructure by shifting or smoothing diurnal peaks.

● **E/One Engineers' Day at the Factory ****

Credits: PDH 1 hour; DEC 1 hour

Description: You will tour a local manufacturing facility. Environment One Corporation manufacturers sewer grinder pump systems. The engineers will walk through the process stopping at various points along the way to understand the manufacturing processes & continuous improvement techniques as well as the testing and quality assurance areas.

● **Biogas Safety and Handling Equipment ****

Credits: PDH 1 hour

Description: This course will go over design principles & standards in the proper selection and specification of biogas safety equipment, and common equipment used in biogas handling.

● **Choosing the Right Blower Technology for your WWTP**

Credits: PDH 1 hour

Description: This course will provide an overview of each type and style of blower technology, what type of WWTP should use a specific technology and what the advantages and limitations of each are.

● **Efficiency Comparisons Between Aeration Blowers ****

Credits: PDH 1 hour

Description: This course covers the following: evolution of Blower Technologies, matching the technology to the application, right sizing of blowers and accurate evaluation of overall costs.

● **Screen Selection, Hydraulics & Screenings Handling ****

Credits: PDH 1 hour

Description: This presentation will review types of screens, screening equipment design, hydraulic considerations and screening handling.

● **Nutrient Removal and Recovery Solutions**

Credits: PDH 1 hour

Description: A comprehensive review of conventional and biological (BNR) and enhanced (ENR) nutrient removal solutions for liquid and side streams treatment trains at a water resource recovery facility.

● **Industrial Mixer Selection & Design**

Credits: PDH 1 hour

Description: The basics of defining the variables required for optimum mixing & the proper selection of a mixer based on process & mechanical guidelines.

• **New Approach to Progressive Cavity Pumping & Design**

Credits: PDH 1 hour; DEC 1 hour

Description: This presentation will provide information to engineers and operators for the design and maintenance consideration when specifying and repairing progressive cavity pumps. It will also review a new and innovative approach to maintaining flow output over the pumps lifespan.

• **Biogas Safety and Handling Equipment ****

Credits: PDH 1 hour

Description: This course will go over design principles & standards in the proper selection and specification of biogas safety equipment, and common equipment used in biogas handling.

• **Gorman-Rupp Factory Training ****

Credits: PDH 6 hours; DEC 9.5 hours

Description: This training will help those attending to better understand the concepts and interaction of the different types of pump curves, what NPSH and cavitation are and the different type of pumps are available. It will also educate the operators on how to take proper gauge readings and interpret them. This will empower them to properly troubleshoot their systems and keep their plant running more efficiently.

• **Submersible Pump Hands-On Maintenance**

Credits: DEC 3.5 hours

Description: This seminar will provide 45 min. of classroom training on the basics of centrifugal pump fundamentals, followed by 2.5 hours of hands-on, in-shop submersible pump control panel troubleshooting demonstration and pump tear-down and inspection training.

• UV Advanced Oxidation **

Credits: PDH 1 hour

Description: Advanced Oxidation is the process of creating hydroxyl radicals which have a large oxidation potential & drive destructive reactions of organic chemicals in water. This presentation goes over the advanced oxidation process including effects of water quality as well as the steps to design, test and scale up a system to be installed at a water treatment plant.

• Packaged Systems in the Water & Wastewater Markets

Credits: PDH 2 hours

Description: This course will discuss the evolution of packaged systems in the water & wastewater markets from factory built to custom engineered systems & how they can ease future maintenance of equipment, prevent exposure to confined spaces, reduce costs and improve quality.

• Microturbine Combined Heat & Power Systems **

Credits: PDH 1 hour

Description: The course covers the concept and benefits of combined cooling, heat and power (CCHP) systems and microturbine technology and its use in these systems. Integration of microturbine-powered CHP/C-CHP systems within a variety of facilities and with renewable biogas as a fuel option is discussed and several case studies are presented.

SEMINARS

We host several seminars every year across Upstate New York in Albany, Syracuse, Rochester, and Buffalo. The specific seminars offered vary from year to year; information on registration and dates will be on our website under 'Training & Events' and on our social media pages. You can also ask to be added to our email notification list. Below is a list of previous seminars.

Exploring the Pump Universe - Level 1

Credits:

PDH 6.5 hours ; DEC 6.5 hours

Description:

Students will learn the basics of centrifugal & positive displacement pumps & the differentiation among them. Hands-on demos will drive the technical points. Students will leave with the understanding of how proper selection, operation & maintenance lead to longer pump life.

Centrifugal Pump Seminar

Credits:

PDH 6.5 hours ; DEC 6.5 hours

Description:

This seminar will teach the attendees about the fundamentals of fluid mechanics and hydraulics as it relates to the pump industry. We further discuss pump types, running pumps efficiently and the best practices used to ensure acceptable reliability.

Positive Displacement Pump Seminar

Credits:

PDH 6.5 hours ; DEC 6.5 hours

Description:

Technical overview of the different types of positive displacement pumps. Features, benefits and processed application limitation of each technology will be presented along with a hands-on portion of troubleshooting and teardown.

Mixer Seminar

Credits:

PDH 4 hours

Description:

The seminar will cover mixer design and application in industrial processes, different types of mixer designs and their effects on the application process, and the importance and process of tank cleaning.

Control Valves for the Water & Wastewater Markets

Credits:

PDH 4 hours ; DEC 4 hours

Description:

This seminar will explain the various types of valves and gates, how they can be used to control flows through dams, flood control pump stations, levees (etc.) and how to specify what valves will be needed for new applications/installations and how to maintain/troubleshoot existing valves within their systems.

Screen Seminar

Credits:

PDH 4 hours

Description:

The seminar will cover mixer design and application in industrial processes, different types of mixer designs and their effects on the application process, and the importance and process of tank cleaning.

Water & Wastewater Technology Spotlight

Credits:

PDH 4 hours, DEC 4 hours

Description:

This seminar provides an overview of options in various types of pump technology. These can be used for chemical injection, disinfection, combination valves, etc. It will also provide information to attendees for design, maintenance and repair of the various types that will be discussed.