

WATER INDUSTRY SOLUTIONS

THERMAL MANAGEMENT AND SIGNALING TECHNOLOGIES



**Reliable, Efficient
Cooling Solutions and
Modern Signaling
Technologies**

www.pfannenbergusa.com

Pfannenberg
ELECTRO-TECHNOLOGY FOR INDUSTRY



PFANNENBERG COMPLETE SOLUTIONS FOR THE WATER INDUSTRY

Pfannenberg, Inc. is a Global Manufacturer of Thermal Management, Liquid Cooling Solutions and Signaling Technologies. Established in 1954 by Otto Pfannenberg, for over 60 years Pfannenberg has been recognized as an industry leader within the Electrotechnology Industry.

Water and wastewater treatment processes must be efficient and cost-effective in order to improve production costs. From wastewater treatment facilities to lift stations and pumping systems, Pfannenberg's innovative Thermal Management and Signaling Solutions provide critical protection for manufacturing, processes and personnel, ensuring a cost-effective approach, longer service life and energy savings.

Pfannenberg's experts understand the Water Industry specific requirements and safety protocols and will help you find the best solution for your needs. Our comprehensive service team is available wherever and whenever you need it, worldwide. Pfannenberg's innovation has made it one of the world's leading manufacturers of Thermal Management and Process Cooling Equipment.





Reliable, Efficient, Thermal Management and Cooling Solutions

Enclosure cooling is more than an accessory, it is the backbone of your processes. Our products include the Original Filterfan® for moving air, H₂S resistant cooling units and energy efficient air to water heat exchangers that can use your existing water to cool your electronics. Trouble free production is only guaranteed if the sensitive climate inside your electrical enclosure is maintained. Even the slightest overheating of your electrical components can result in serious consequences including pump failure and premature aging of electrical components such as your variable frequency drives. Whether treating water or moving it, Pfannenbergl offers a variety of efficient solutions for cooling electronic control panels for the water industry.

Safety Guaranteed with Audible and Visual Signaling

Safety begins with understanding the situation in which an Audible and/or visual signal is being used in a wastewater treatment facility. There are 3 ways to classify an event, which will help you choose the best product for the situation. Indication, Warning and Alarm. Indication is used to notify a user the status of a machine, process or test procedure. Warning is used to notify a user of acritical event such as a dangerous situation or required corrective action. Lastly the Alarm event is used to warn personnel of a life threatening or emergency situations. Pfannenbergl offers modern audible and visual devices including flashing strobe lights, multi-tone sounders, flashing sounders, stacklights & hazardous area alarms to help safely protect personnel, machine processes and the environment.



THERMAL MANAGEMENT AND SIGNALING COMPLETE SOLUTION FOR WATER & WASTEWATER TREATMENT APPLICATIONS



LIFTING STATION

DTS units provide a tight enclosure seal preventing enclosure contamination and oxidation of components



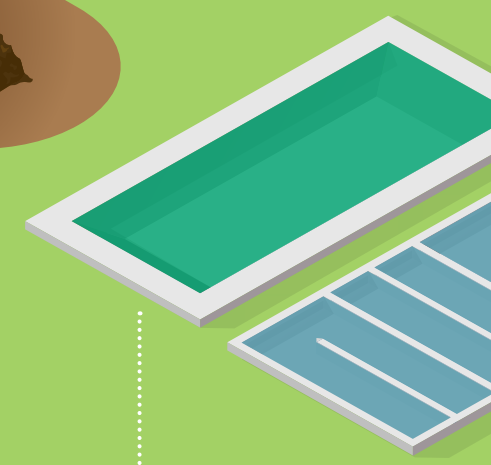
SEPARATION PROCESS

The Pyra-S RGB offers a 4X/ IP66 rated color changing LED light for reliable notification



SEPARATION PROCESS-SETTLING BASINS

PWS passive liquid cooling can aid pumping station control drivers helping to maintain operation 24 hours a day, eliminating downtime.



THERMAL MANAGEMENT PRODUCTS

DTS 3000 SERIES

- > 1 Year warranty
- > Epoxy/Zinc coated internal components
- > NEMA Type 12/3R/4/4X available
- > Up to 2.5 Ton Capacity
- > Front Facing Error Display
- > Easy Mounting System

PWS 3000 SERIES

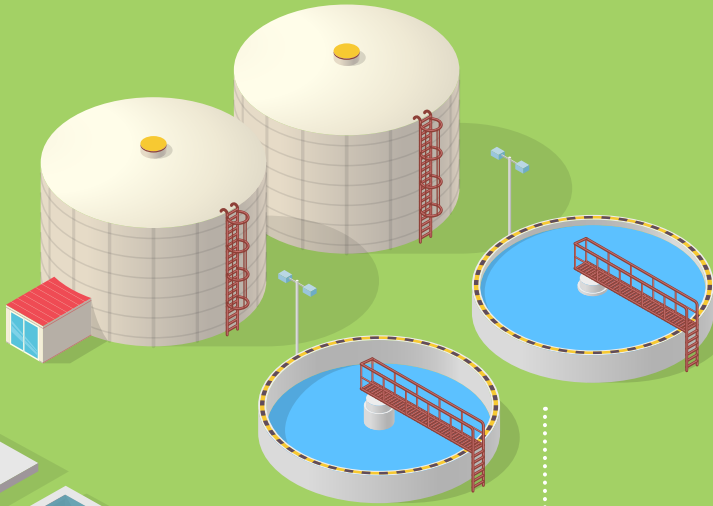
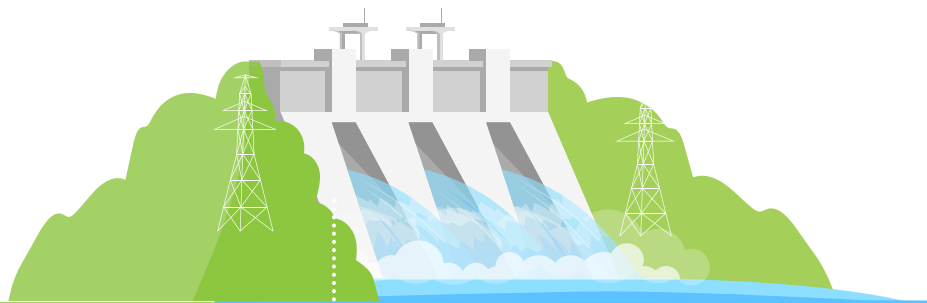
- > 1 Year warranty
- > Epoxy/Zinc coated internal components
- > NEMA Type 12/3R/4/4X available
- > Up to 3 Ton Capacity
- > Quick Fit Push Connections
- > Available with or without Valving

PKS 3000 SERIES

- > 1 Year warranty
- > Epoxy/Zinc coated internal components
- > NEMA Type 12/3R/4/4X available
- > Up to 180 W/C° Capacity
- > Best CCPD in HVAC Industry
- > Easy Mounting System

FILTERFANS (with Rainhood)

- > UL Listed NEMA Type 3R/4/4X available with use of Fan/Rainhood assembly
- > Tamper Proof hood attachment system
- > Easy Mounting System to ensure sealed connection



PURIFICATION OF CONTAMINATED LIQUID - DISINFECTING

Stainless steel NEMA type 4X designs help prevent corrosion and visible oxidation.



PURIFICATION OF LIQUID

The Cast Aluminum DS Series is offered in IP67 & ATEX Explosion proof versions, making it a great and reliable product to alarm you of a toxic gas leak.



OUTFLOW OF LIQUID SEWAGE

The PA L 1 offers a unique ability to have an audible device with steady-on/ Blinking/flashing modules.



AUDIBLE & VISUAL SIGNALING PRODUCTS

HAZARDOUS AREA ALARMS - ATEX RATED

- > 10 year warranty
- > Zone 0/20 - An explosive atmosphere occurs frequently or constantly
- > Zone 1/21 - An explosive atmosphere occurs occasionally
- > Zone 2/22 - An explosive atmosphere occurs only rarely and for a short time
- > Cast aluminum housing
- > IP 66 & IP 67 rated

PATROL SOUNDERS & FLASHING SOUNDERS

- > 10 year warranty
- > 100-122dB adjustable SPL
- > 4 different and distinct tone channels with 80 tones to choose from
- > 5-15 joules flash energy
- > Independent control of sound and strobe

PYRA-S LED RGB / STACKLIGHTS

- > Highly visible indication
- > Plug and play, quick and easy to install
- > Steady-on, blinking, flashing via dip switch control
- > Up to Nema 4/4X, IP 66 rated
- > Color changing by closed contacts

PYRA STROBE & FLASHING SOUNDERS

- > 10 year warranty
- > 5-15 joule flash energy
- > Adjustable flash rate
- > Nema 4/4X, IP 66 rated
- > Up to 103dB SPL

THERMAL MANAGEMENT FOR THE WATER INDUSTRY



CASE STUDY-

Control Panel Cooling Technique Helps Mitigate Hydrogen Sulfide Corrosion Problems with Wastewater Pumping Systems

A common threat to organic wastewater handling and treatment systems is the presence of hydrogen sulfide gas. Not only is this gas toxic to humans, but it also contributes heavily to corrosion problems in pipes, structures, instrumentation, and electrical systems. Lift stations and pumping systems are particularly vulnerable as H₂S sour gas readily attacks copper used in wires, electrical contacts, and cooling units used on motor control centers (MCC's).

A wastewater Treatment Facility contacted Pfannenberg to ensure the right Enclosure Cooling for their variable frequency drives (VFD's) located in their lift pump control panels. Since VFD's generate a considerable amount of heat, the PWS Air/Water Heat Exchangers were the best solution as it is necessary to employ an active enclosure cooling technique in order to keep VFD's operating within acceptable temperature limits.

Energy savings, longer service life, reduced upkeep, and lower acquisition costs are some of the obvious benefits gained by utilizing air-to-water heat exchangers for such requirements. In locations where H₂S sour gas is present, such as in wastewater treatment plants and sewage lift stations, the added benefit of total isolation of components, which could become corroded in such environments, is an advantage that should not be overlooked.



**COMPLETE LIST
OF APPLICATIONS**

Distribution Pump Controllers / Aeration Blower Controllers / Reverse Osmosis Control Panels / Lift Station Control Panels / Conveyor Motor Controls / Irrigation Pump Systems / Storm Water Pump Stations / Pressure Booster Pump Controllers / Motorized Screening Gate Controllers / Produced Water Treatment Systems

AUDIBLE & VISUAL SIGNALING FOR THE WATER INDUSTRY

CASE STUDY-

Pfannenberg Signaling Alarms Notify Personnel and Community of Chlorine Gas Leak

Audible and visual alarms are used across all areas of waste water treatment facilities. One of the most crucial areas that they will be used is during the final steps of treatment of the water for recirculation back into the freshwater system. Chlorine gas is injected into the water as a disinfectant to neutralize bacteria, protozoa, parasitic worms, and viruses in the wastewater treatment plant's effluent stream prior to its discharge to the environment.

A waste water treatment facility in North Tonawanda NY reached out to Pfannenberg to incorporate alarms to their facility for a gas detection system of chlorine gas. It was imperative they had a reliable system which was cost effective and most importantly added the greatest safety to their workers and surrounding community. Using Pfannenberg's unique acoustical sizing technology, this waste water treatment facility was able to incorporate audible and visual alarms to warn of a chlorine leak without the need of an excess of devices, resulting in thousands of dollars saved.



**COMPLETE LIST
OF APPLICATIONS**

Lift Station Alarm Panels / Fire Pump Systems / Tank Level Warning /
Loss of Flow Alarm / Gas Leak Alarm / Fire Alarm / Dosing Failure Alarm



PFANNENBERG'S SERVICE PROGRAM

DESIGNED TO KEEP YOU UP AND RUNNING 24/7



In-House & On-site Repairs

Factory Certified Refurbishment / Field Repair Options (Internal & External)

- Pfannenberg has an internal repair shop and offers flat rate pricing based on the model of the unit.
- Pfannenberg will repair these units and test them to the same standard as a unit that has just come off the assembly line.
- Should you not be able to send a unit in for repair, Pfannenberg offers field repair options using service partners.
- Pfannenberg has the ability to dispatch service partners, provide the spare parts, and get the unit back up and running right at the your facility.

INSTALLATION & COMMISSIONING / IN-HOUSE & ON-SITE REPAIRS / PREVENTATIVE MAINTENANCE / SPARE PARTS / EXTENDED WARRANTY



Preventative Maintenance

Pfannenberg offers PM programs to maintain the equipment your plant currently has and minimize downtime. PM is important because it allows each piece of equipment to run at its optimal performance rate.



PROTECTING THE LIFEBLOOD OF YOUR COMPANY

At the very core of your production is an often overlooked component.....
Your Thermal Management

ONE-STOP-SHOP SOLUTIONS PROVIDER

Pfannenberg's goal is to minimize any downtime your machine may experience from a failure.

Pfannenberg Sales America

68 Ward Road, Lancaster, New York 14086 USA
Phone: 716-685-6866 | Email: info@pfannenbergusa.com
www.pfannenbergusa.com

