

# ADVANCED PRODUCTS FOR Industrial Wastewater Treatment



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## W A L C H E M

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IWAKI America Inc.

### **Precision Control for Smarter Wastewater Treatment** **Sustainable and Compliant Treatment Solutions**

From rising water prices to strict discharge regulations, managing industrial wastewater is more complex than ever. Our advanced controllers, sensors, and metering pumps are engineered for flexibility to simplify your process, delivering accurate dosing, automated control, and real-time monitoring across a wide range of applications.

Walchem products serve a broad range of wastewater applications including aeration, pH control/neutralization, clarification, sludge management, chlorination/dechlorination, dewatering, and odor control, among others.

Connect with our experts today!

**walchem.com**

# Industrial Wastewater Treatment Controllers

Together with new and innovative sensor technologies, Walchem controllers provide reliable, flexible, and powerful monitoring and control of your wastewater and general industrial processes.

From the simple-to-operate, single-channel local control W100W Series to the powerful multi-parameter, remotely accessible Intuition-6® and Intuition-9®, Walchem controllers can be configured to fit almost any process application under control.



## W100W Series

### Easy Setup

Large display with simple icon-based navigation

### Flexible Sensor Input

Works with a wide range of sensors

### Monitoring

Supports conductivity, pH/ORP, and disinfection monitoring

### Versatile Relay Outputs

Three configurable relays (powered, dry, or pulse)

### Digital & Analog Outputs

- Two digital outputs
- Optional 4–20 mA analog output for integration with SCADA, dataloggers, or proportional control

### Global Ready

Universal power supply and multilingual support



## Versatile, Intelligent Control at Your Fingertips

**Large Touchscreen Display** for intuitive operation

**Universal Sensor Inputs** for unmatched flexibility with almost any sensor type

**Real-Time Graphing & Data Logging** both on-screen and online

**Email Alerts & Reports** for alarms, logs, and system summaries

**Remote Access** via Ethernet or cellular connection

**Easy Wall-Mount Installation** with pre-configured panel options

### Intuition-6 Advanced Control Features:

Lead/Lag control for up to six relays

Six configurable control outputs

Dual 4–20 mA analog input board option

Two combination input boards for maximum adaptability

Virtual inputs/outputs for calculated values and advanced functions





**Intuition-9 increases I/O with advanced capabilities for greater control, flexibility and connectivity, fully customizable for your system's needs**

**Flexible I/O Configuration:** Four expansion slots support up to eight sensor inputs, 24 analog inputs, 16 analog outputs, and LPR corrosion sensors

**Expanded Digital Inputs:** Includes 12 digital inputs for broader monitoring capability

**Advanced Control Algorithms:** Broadest array of control algorithms of any controller series

**Connectivity Options:** Connects to LAN or mobile devices for remote access and control

**Auxiliary Power Board (optional):** Both 12 VDC and 24 VDC outputs for added power flexibility

**Customizable Relay Control:** Up to 12 relay outputs with changeable 4-relay cards; Form-C relays available

**Virtual I/O:** Up to 16 virtual inputs and outputs for calculations, sensor redundancy, and disturbance detection



## Sensor Technologies + Accessories

**A broad range of reliable sensors and accessories, designed to work with our controllers and pumps, provides a complete solution for your industrial wastewater needs.**

**pH/ORP Sensors:** pH neutralization, enhancing coagulation/flocculation

**Disinfection Sensors:** Chlorine monitoring and adjustment

**Conductivity Sensors:** Electrodeless and contacting type

**Oil in Water Sensors:** Industrial wastewater monitoring

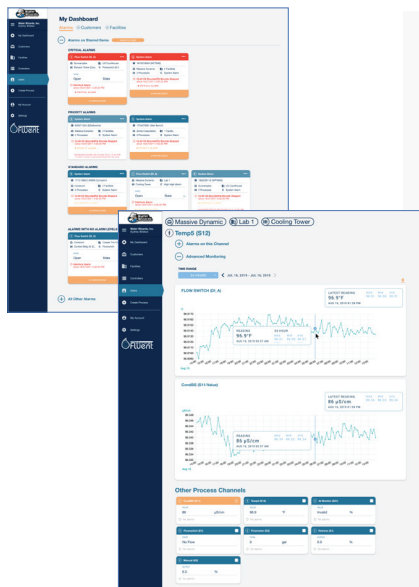
**Dissolved Oxygen Sensors:** Activated sludge, aeration basins, wastewater, and other sewerage processing

**Turbidity Sensors:** Industrial water process control, including wastewater and raw water



## Walchem Fluent®

**Our cloud-based water treatment management software tool that amplifies the value of Walchem controllers that have internet access.**



Configurable dashboard for quick access to alarms and key customer status

Graphic data visualization to easily compare multiple channels

Advanced alarm notification, escalation and acknowledgement for managed workflow

Monitoring and auditing of processes with quick access to historical data and alarm information, including acknowledgment and clearing

Remote access to process control equipment from anywhere, with secure cloud storage on Amazon AWS

Interactive graphs for data visualization, with the ability to compare and export to PDF/CSV for your reporting needs

Role-based user access for targeted permissions

Multi-language support



## Metering Pumps

Reliable Dosing Solutions for Precision and Performance

Our advanced range of metering pumps offers unmatched accuracy, control, and durability

### E-Series – Smart, Compact, and Versatile

Solenoid-driven diaphragm pumps with microprocessor control and superior mechanics

Up to 20 GPH & 290 PSI

High stroke rate with 1800:1 turndown

Multiple control options & advanced features

### IX Series – Digitally Driven for High Efficiency

Direct-drive diaphragm pumps powered by precision DC motors

Up to 80 GPH & 250 PSI

1000:1 turndown with  $\pm 1\%$  accuracy

Ideal for energy-efficient, high-resolution dosing

### LKN/LK Series – Heavy-Duty Performance

Mechanically actuated, motor-driven diaphragm pumps built for demanding tasks

Up to 856 GPH & 225 PSI

Rugged gear design for extended life

Manual control with a 10:1 turndown and versatile motor options



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## Sealless Pumps

Non-Metallic Sealless Pumps for wastewater process and chemical transfer applications



Patented dry run bearing system protects the pump in adverse conditions

Flow rates from 1 to 350 gallons per minute

Low cost polypropylene or chemical-resistant ETFE materials available

Fits any NEMA standard motor for flexible options

Close coupled, space-saving design

Modular replaceable liquid end parts

**IWAKI**  
**AMERICA**

## Air-Operated Diaphragm Pumps

Metallic and Non-metallic air powered transfer and circulation pumps

¼" to 3" size range up to 300 GPM (1135 LPM)

Air powered – no need for electrical connections

Self priming, and run dry or against a closed discharge valve

Portable and capable of self priming

Multiple elastomer choices to match your chemistry

Low maintenance and easy to build



**IWAKI**  
**AIR**

For more information on the entire Walchem product line, visit [walchem.com](http://walchem.com), [iwakiamerica.com](http://iwakiamerica.com) and [iwakiair.com](http://iwakiair.com).

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