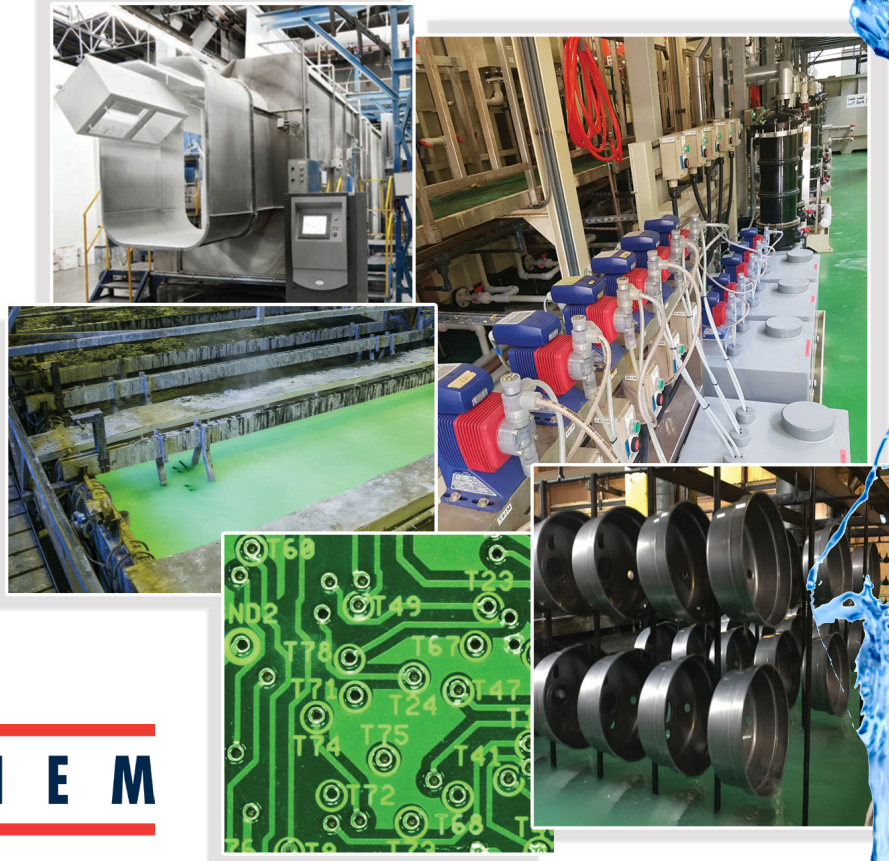


Metal Finishing and Surface Treatment Products



W A L C H E M

IWAKI America Inc.

Operating a world class metal finishing operation requires not only the proper chemical technologies, but excellent process control. This is best accomplished via monitoring and control of key process variables along with data acquisition and management.

Walchem, a leading manufacturer of online analytical instruments and electronic metering pumps, has long provided reliable and innovative solutions for the global water treatment market. We have done this by integrating our instruments, sensors, fluid handling, and extensive remote data communications technologies. Walchem has a long history in the metal finishing markets as a manufacturer of electroless nickel and copper controllers going back over 40 years.

Walchem, along with Iwaki Pumps and Iwaki Air, provide goods and services for all your chemical and water treatment needs throughout your manufacturing facilities from incoming water, utilities, pre-treatment, process and waste treatment.

Our team can assist you in optimizing your process needs. For more information on the entire Walchem product line, visit walchem.com, along with iwakiamerica.com and iwakiair.com.



General Industrial Controllers

The **W100, W600 and W900 Series General Industrial Controllers** provide reliable, flexible and powerful control of other parts of your metal finishing and surface treatment production. Whether your process is plating, powder coating, anodizing or liquid paint, we can provide economical and reliable ways to keep your finishing program under control.

W100 Series

The **W100 Series Controllers** provide an economical and reliable way to keep your metal finishing program under control.

- Large display with icon-based programming makes setup easy
- Universal sensor inputs give the same controller extraordinary flexibility with most any type sensor
 - Conductivity control of rinse tanks, alkaline cleaners, cupric chloride etch, cooling towers, boilers
 - pH control of electroplating baths, phosphatizing, seal rinses, etchants, chromates, fume scrubbers, wastewater, cooling towers
 - ORP control of etchants, fume scrubbers, wastewater, cooling towers
 - Disinfection sensors for dechlorination prior to RO, cooling towers
- Three relay outputs and three digital inputs standard
- Optional analog (4-20 mA) output to recording, datalogging, proportional control or connecting to SCADA systems
- Universal power supply and multiple language support make these truly global products
- Complete flexibility in the function of each relay



Intuition-6™ Series

The **Intuition-6 Series Controllers** provide programming and complete control in a broad range of metal finishing applications.



- Large color touchscreen display
- Universal sensor inputs give the same controller extraordinary flexibility with most any type sensor
- On-screen and web page graphing of sensor values and control output status
- On board datalogging
- Email alarm messages, data logs, graphs or systems summary reports
- Ethernet option for remote access via Internet, LAN, Modbus/TCP or BACnet
- Economical wall mount package for easy installation

The **Intuition-6 Series** has all the features of the W100 *plus*:

- Combination sensor input and analog input board that adds even more flexibility
- Lead/Lag control of up to six relays
- Optional dual analog (4-20 mA) input board for any 4-20 mA transmitter
- Six control outputs and six virtual control outputs allow controller to be used over a broad range of applications
- Six virtual inputs that be used for calculation from two real inputs (differential pressure, RO % rejection, etc.)

Intuition-9™ Series

The **Intuition-9 Series Controllers** provide unparalleled versatility and powerful programming for complete control of chemical applications in a broad range of metal finishing applications.

The **Intuition-9 Series** has all the features of the Intuition-6 Series *plus*:

- Four I/O slots that allow complete flexibility in adding sensor, analog inputs, analog output and LPR corrosion sensors
 - Up to eight sensor inputs
 - Up to twenty-four analog inputs
 - Up to sixteen analog outputs
- Twelve digital inputs
- Up to 12 relay control outputs and 8 virtual outputs
- Up to eight virtual inputs including calculations, redundant sensor and disturbance input
- Option WiFi connection to the LAN or to a mobile device



Intuition-6™ Series Metal Finishing Controllers

The **Intuition-6 Series Copper Nickel Controllers** provide reliable, flexible and powerful control of your electroless plating or etching processes. They provide the features of our Intuition-6 Series line **plus:**

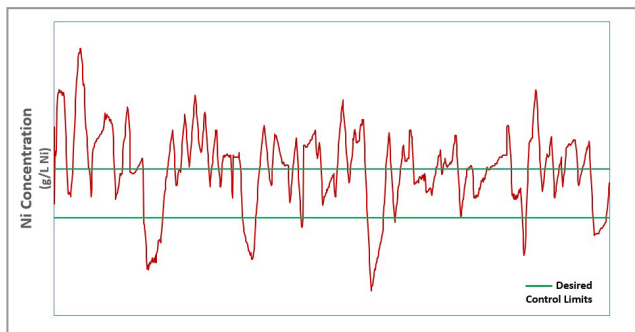
- Two sensor input slots providing extraordinary flexibility including the ability to monitor and control up to two electroless plating and/or microetch processes simultaneously
 - Copper or Nickel plus pH
 - Dual analog input for any 4-20 mA transmitter
 - Universal analytical sensors card for pH/ORP/ISE, conductivity or disinfection
 - Combination analog input and analytical sensor input
- Monitor your bath's concentration, pH and temperature and make chemical additions to maintain proper operating range
- Totalize based on time, volume or turns (MTOs) to gauge bath age
- User friendly interface to allow operators to easily change set points, alarms, interlocks, etc.
- Onboard data collection and built in parameter graphing
- Tie into production facility's LAN, DCS or other process management systems via standard ethernet protocols and/or Modbus TCP or BACnet



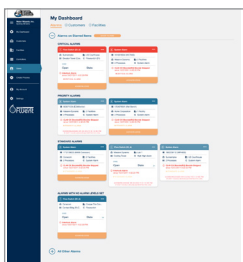
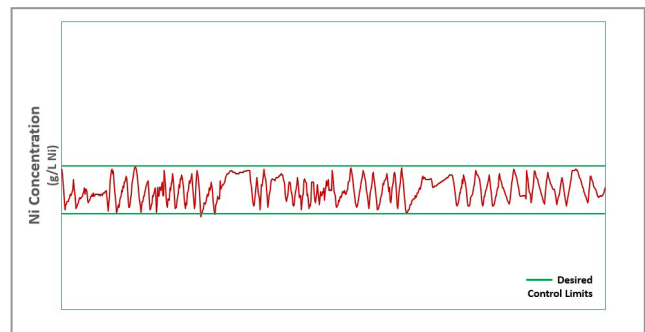
Vastly Improve Your Process Control

With the Intuition-6 Series Cu/Ni controllers you can significantly improve your process control. Minimize chemical over-feed and under-feed to improve overall bath performance and product quality.

Go from this:



To this:



Walchem Fluent®

Walchem Fluent® is a new cloud-based water treatment management software tool that amplifies the value of any Walchem controllers that have Internet access.



- Configurable dashboard with direct access to alarms and status of key customers and facilities
- Graphic visualization of data allow user to easily compare multiple channels
- Advanced alarm notification, escalation and acknowledgement for managed workflow
- Process monitoring and auditing
- Define roles for your users to target the right access for the right people
- Multi-language support
- Easy access to historical data
- Immediate access to process control equipment from anywhere in the world
 - Data stored, protected and backed-up in the cloud
 - Remote access and visualization of your data is reported through interactive graphs
 - Export an image of the graph for your reporting needs

IWAKI Metering Pumps

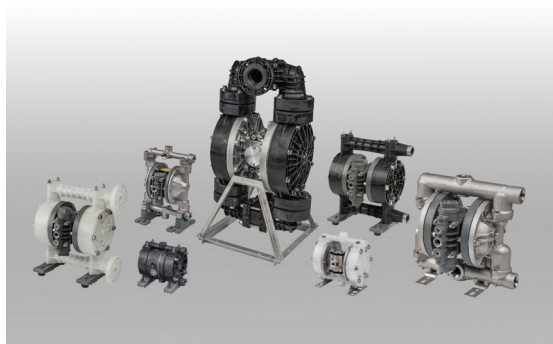
Walchem's IWAKI Metering Pumps are available in both solenoid drive (E-Series) and direct drive (IX-Series) to meet all your chemical feed requirements.

E-Series Metering Pumps are powered by advanced microprocessor based electronics and have a superior mechanical design. Features include:

- Output capacities up to 20 GPH (76 LPH) and pressure rating up to 290 PSI (20 bar)
- High pump stroke rate, up to 360 SPM provide tremendous turndown ratios up to 1800:1
- Flexible pump control including manual, scalable analog control, digital input with multiple/divide, batch control, external stop, AUX and interlock inputs and analog and alarm outputs
- Options include degassing heads, multifunction valves and flow monitoring

IX-Series Metering Pumps are digitally controlled direct-drive diaphragm pumps. IWAKI's years of experience in high-end motor technology has resulted in an extremely accurate, energy efficient and high resolution metering pump. Features include:

- Output capacities up to 80 GPH (300 LPH) and pressure rating up to 250 PSI (17 bar)
- Turndown ratio of up to 1000:1
- $\pm 1\%$ accuracy due to precise motor control and efficient valve design



IWAKI Air AODD Pumps

IWAKI Air AODD 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 to electrical connections
- Can run dry or against a closed discharge valve
- Portable and capable of self priming
- Multiple elastomer choices to match your chemistry

IWAKI Mag-Drive Pumps

IWAKI Mag-Drive Pumps non-metallic sealless pumps for chemical transfer and plating bath recirculation.

- Patented dry run bearing system protects the pump in adverse conditions
- Flow rates from 1 to 350 GPM (1325 LPM)
- Low cost polypropylene or chemical resistant ETFE materials available
- Pumps mount to NEMA standard motors making your motor choice infinite
- Close coupled to minimize space requirements
- Modular replaceable liquid end parts



Sensors and Accessories

High Quality Sensors and Accessories for metal finishing, pretreatment, utilities, incoming water and wastewater applications. Carefully designed and selected for compatibility with pumps and controllers providing you a complete system solution.

- Sensors: Copper/nickel, pH/ORP, contacting and electrodeless conductivity, disinfection and fluorometers
- Flowmeters and Watermeters
- Cooling coils and degassers for your electroless plating applications



Scan QR code with your smartphone camera for more details!



ISO 9001 registered company

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