

## Introducing the latest innovation in Water Treatment Solutions

The Innovator series is the next generation of Industrial Waste Water Treatment equipment that uses electro-coagulation and chemical treatment to remove emulsified oils, heavy solids and metals from a broad range of waste streams.

### Innovator Series

by **waterMaze**  
WATER TREATMENT SYSTEMS



#### The Innovator Series consists of:

- *EC2 - Electro-coagulation System*
- *CoAg - Chemical Coagulation System*
- *Indexing Polishing Filter*
- *Clean Water Recycling Module*



PATENT PENDING

Since 1989 Water Maze has been manufacturing water treatment systems principally for industrial applications where waste water is generated in manufacturing or by a cleaning method, such as a pressure washer.

Water Maze is pleased to introduce the next generation in industrial wastewater treatment equipment - the Innovator Series. This new line-up consists of modular components, which can be used individually or together, offering an advancement in technology that will revolutionize the way wastewater is treated.

## EC2-20A - ADVANCED ELECTRO-COAGULATION TECHNOLOGY

### New technology treats many waste streams

This is an advanced Electro-coagulation (EC) system for treating wash water and other industrial waste water that contains suspended solids, emulsified oils, and heavy metals. This system combines both EC water treatment technology and chemical flocculation to enhance and speed up the process of removing constituents from the waste water.



The patent pending design of the Water Maze EC-20A system allows an extremely efficient rate of removal of oils, solids and metals from the waste stream. After the electro-coagulation reaction has occurred in the electrolytic cell, a small amount of EC+ polymer is injected to quickly clump the coagulated oils, solids & metals together for removal. Treated water can be purged to the Water Maze Indexing Polishing filter for further treatment, recycled, or discharged to sanitary sewer.

### Features & Benefits:

- No standing water in the tanks after processing
- No need to process dirty water; water is quickly processed and discharged to sewer or held for recycle
- Modular, compact design with a small foot print
- Highly efficient, continual flow batch feed processing system
- Processing flow rates up to 10 GPM (gallons per minute)
- Variable amp flow / voltage maximizes cell life and water quality
- Patent pending design

### EC2-20A - Advanced Electro-coagulation Technology | FEATURES

■ The EC2-20A uses a highly effective mixing of the **Electrically Coagulated and Chemically Flocculated** waste stream to assure adequate mixing and dwell time in order for constituents to clump together, making them easier to purge from the system.

■ The EC2-20A uses a unique **Electrolytic cell (EC)** design featuring a stationary cartridge housing, which automatically coagulates the waste water so that solids and oils adhere to each other. The EC cell plates use a variable amp flow, providing longer cell life.

■ The Electrolytic cell cartridge is easy to remove and clean; you can also easily replace only the cell cartridge as well.

■ Two 150 gallon **Processing Tanks** located on board, which stand empty except for when processing water. Without standing water, the need for odor control is eliminated.

■ The onboard **PLC Control System** automatically monitors and controls the filling and purging of each tank. Once the in-feed pump stops feeding water into the system, the PLC will allow time for chemical reaction within the processing tank, before automatically purging each tank. The PLC also automatically controls the voltage to maintain the amp setting.

■ Air actuated **Control Valves** for directing water flow (inlet and outlet).

■ **Compact Footprint** allows flexibility where the unit can be installed.

■ Simple and **Automated Operation** with one button control.

■ One **Electrical In-feed Pump** with two peristaltic pumps, PLC controlled.

■ **Integrated Design** accommodates interfacing of EC2-20A with other pre- and post-treatment equipment to create a totally self-contained wastewater treatment system.

■ In addition to an on-board, in-feed pump, the EC2-20A offers an optional **Clean Water Recycle Module**, which manages processed water (for recycle or discharge) as well as monitors and controls fresh-water makeup and excess water discharge.



**Model EC2-20A**  
(P/N 1.103-486.0)

■ **Main Door** with quick-release lockable latch allows for easy service access; skid with carbon steel support frame and cabinet with a two part epoxy primer and polyurethane finish.

■ **Internal tanks** are cone bottom design with automatic purge system for easy sludge removal.



ETL Certified  
to UL-73 and CSA  
22.2/68-69 Standards

PATENT PENDING

*Note: As with any water treatment technology, the Water Maze EC2 system performs best when the system is not overwhelmed with high amounts of influent constituents in the waste water. Therefore, for some applications, additional pretreatment of the influent waste water may be required (i.e., adjustment of pH, removal of excessive amounts of heavy solids and free-floating oils).*

EC technology does not normally remove dissolved solids or dissolved organic matter.

#### EC2-20A Specifications

Features	Description
Process Flow Rate	Up to 10 GPM
Compressed Air Supply	5 CFM @ 85 PSI
Electrical	230V 1ph 44 amps
Dimensions	78" L x 58" W x 81"H
Ship Weight	2,350 lbs
Available Options	- pH Controller - Stainless Steel Skid with powder coat finish - EC Flush Kit for treat & discharge applications

# Industrial Wastewater Treatment Systems

## Innovator Series

by **waterMaze**  
WATER TREATMENT SYSTEMS

### CoAg2-20A System | FEATURES

#### Advanced Chemical Treatment

The Water Maze CoAg2-20A System is an advanced chemical treatment system, using the method of adding a chemical coagulant and polymer to the treatment process, to efficiently remove suspended solids and emulsified oils from the waste stream.

The new Water Maze CoAg2-20A System is a very low maintenance, cost effective system to operate. The CoAg2-20A can be used on its own as the primary water treatment system, or as a pre-treatment system with other technologies, such as Electro-Coagulation or Bioremediation.

■ The CoAg2-20A System employs chemical coagulation and chemical flocculation treatment technologies to enhance and speed up the process of removing suspended solids and emulsified oils from the waste water. It may create water quality that is recyclable, or good enough for discharge to sanitary sewer.

■ Water Maze uses **CoAg+** which is a proprietary coagulant specifically formulated to treat suspended contaminants. After the coagulant has been added, the EC+ polymer is then injected to quickly clump the coagulated contaminants together for removal. The chemical process is highly efficient, allowing for adequate mixing and dwell time.

■ Two 150 gallon **Processing Tanks** located on board, stand empty except for when processing water. Without standing water, the need for odor control is eliminated.

■ The onboard **PLC Control System** automatically monitors and controls the filling and purging of each tank. Once the in-feed pump stops feeding water into the system, the PLC will allow time for chemical reaction, before automatically purging each tank.

■ Air actuated **Control Valves** for directing water flow (inlet and outlet).

■ Simple and **Automated Operation** with one button control.

■ One **Electrical In-feed Pump** with two peristaltic pumps, PLC controlled.

■ **Main Door** with quick-release lockable latch allows for easy service access; skid with carbon steel support frame and cabinet with a two part epoxy primer and polyurethane finish.

#### Features & Benefits:

- Processing flow rates up to 20 GPM (gallons per minute)
- No standing water in the tanks after processing - water is processed and discharged; eliminates need for odor control
- Modular and compact, uses inline mixing tubes for coagulant
- Modular, can be used alone or as a pre-treatment system
- Batch feed, continual flow processing system through two 150 gallon cone-bottom tanks



**Model CoAg2-20A**  
(P/N 1.103-487.0)

■ **Internal tanks** are cone bottom design with automatic purge system for easy sludge removal.

ETL Certified  
to UL-73 and CSA  
22.2/68-69 Standards



PATENT PENDING

#### CoAg2-20A Specifications

Features	Description
Process Flow Rate	Up to 20 GPM
Compressed Air Supply	5 CFM @ 85 PSI
Electrical	230V 1ph 20 amps
Dimensions	78" L x 58" W x 81"H
Ship Weight	1,330 lbs
Available Options	- pH Controller - Stainless Steel Skid with powder coat finish



## Indexing Polishing Filter - Model IPF2-20D | FEATURES

**Innovator Series**  
by waterMaze

■ The **Indexing Polishing Filter (IPF)** can be applied as pretreatment, or post treatment to another water treatment technology to remove particulates. The IPF comes with adjustable support legs to accommodate different sump sizes. Or, it can be lowered over the top of an existing sump drain.

■ The IPF employs various **micron size media paper** to filter out particulates in water. The IPF receives and distributes influent water with particulates across the media paper, which is recessed into the filter bed. The uniquely designed filter bed lightly, but firmly holds the media paper against the conveyor chain and allows the paper to slide or index forward as directed by the float and drive system.

■ The IPF is made of both **stainless steel** and **carbon steel**. The stainless steel is applied where there is a potential for standing water. All carbon steel components are painted with a two part epoxy primer and a polyurethane finish coat.

■ One roll of 50 micron media paper 27 inches wide, (1500 feet long) is supplied with the base unit. Other micron sizes are available in 5, 20 and 50 micron sizes.

■ The paper roll holder is equipped with a **sensor** that will signal the end of the paper roll. When purchased with the Water Maze Chemical CoAg or EC systems, the sensor will signal these systems to shut down until a new roll has been installed.

■ **Sludge tub** for collecting spent paper and solids is included with base unit.

■ **Optional Discharge Pump** available.



**Model IPF2-20D**  
(P/N 1.103-488.0)



PATENT PENDING

ETL Certified  
to UL-73 and CSA  
22.2/68-69 Standards

### Model IPF2-20D Specifications

Features	Description
Electrical	120V @ 15 amp draw
Construction	Stainless Steel / Carbon Steel
Dimensions	38.5" L x 47" W x 40" H
Ship Weight	336 lbs
Available Options	-Various micron paper sizes: 5, 20, 50 -Filtered water sump tray; holds approx. 40 gallons of water

## Clean Water Recycle Module - Model REC2-20A | FEATURES

**Innovator Series**  
by waterMaze

■ The **Clean Water Recycle Module** automatically manages the flow of treated water for reuse. It can be applied as a stand-alone module for the Water Maze EC2 system or CoAg system, and may also be applied to other applications where water recycling is required.

■ The system consists of a **control module** with a small footprint, and an optional holding tank, sized to the specific application requirements.

■ The **Clean Water Recycle Module** is equipped with an onboard in-feed pump (up to 20 GPM), and a transfer pump (up to 20 GPM).

■ **Control Floats** are included for installation within the holding tank.

■ Equipped with an automatic fresh water make up system, and automatic excess water discharge system.

■ Circulation pump with mazzei injection to manage clean water. Circulates and aerates water in the clean-water tank.

### Available Water Maze options:

- Clean water holding tanks (size based on application)
- Stainless Steel Skid
- UV Ozone system
- 2 HP effluent transfer pump in lieu of 3/4 HP
- PM-1000 BioSystem – bioremediation for consuming dissolved organic matter within the recycled water contained within the clean water holding tank
- AMC-1000 Auto-purge system

**Model REC2-20A**  
(P/N 1.103-489.0)



### Model REC2-20A Specifications

Flow Rates	Up to 20 GPM / option up to 30 GPM
Electrical	230V 1ph 23 amps
Dimensions	36" L x 28" W x 65" H
Ship Weight	Estimated weight 450 lbs

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