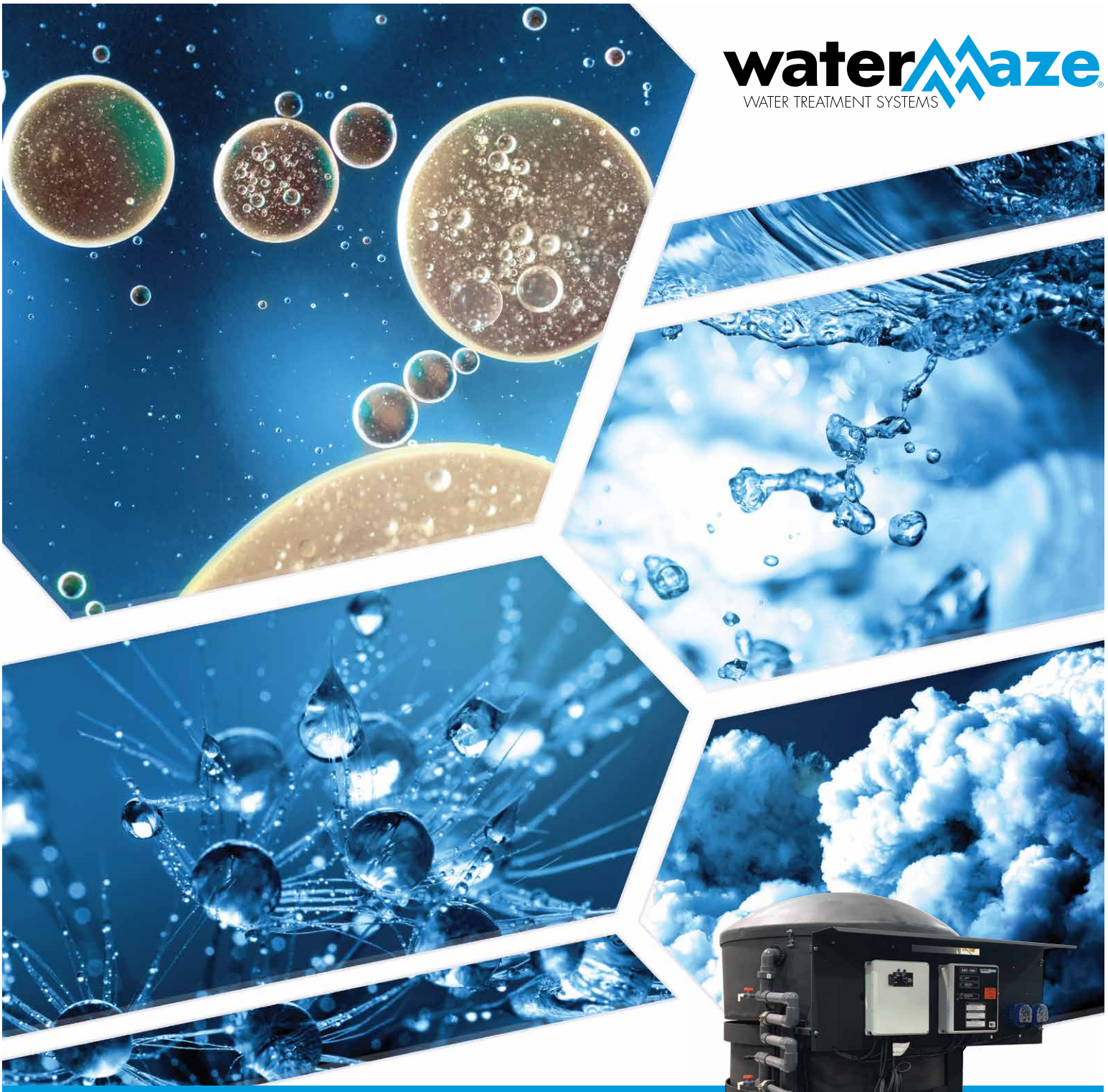
waterMaze
WATER TREATMENT SYSTEMS

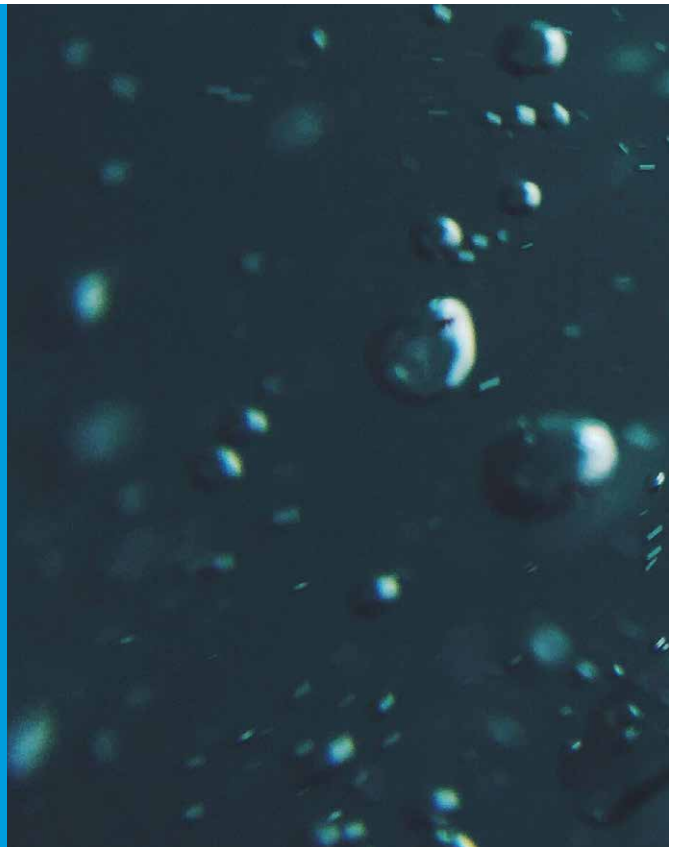


2020 Catalog and Application Guide

Technologies for cleaning industrial wash water.

Professional | Wash Water Solutions

COMPLETE WASH WATER SOLUTIONS.



Since the late 1980s, Water Maze has been perfecting the art and science of wash water treatment. We have incorporated various technologies that are capable of: settling heavy solids, removing suspended solids; skimming free-floating oils; removing emulsified oils; bio-remediating organic matter; and reducing (evaporating) water. We provide systems for discharge to a city sewer, as well as for recycling water for a limited time period.

CONTENTS

WATER TREATMENT TECHNOLOGIES

Typically, multiple products and/or multiple water treatment technologies become part of the total solution. Only Water Maze offers such a complete range of products and technologies. Combined with our extensive network of local supporting dealers, Water Maze is your best partner for wash water and industrial water treatment systems. Incorrect selection of products and/or water treatment technologies can be a costly mistake. Equipment selection should involve a qualified application sales engineer that can assist and guide the buyer through the process.

The approach would normally involve the following minimal qualifying questions:

- What is the source of the influent water and how is the water generated?
- How much water volume (hourly and daily) will need to be processed?
- What are the constituents in the water that will need to be removed? (Oils, Solids, Metals, etc.)
- What are the characteristics of the constituents in the water? (Free-floating oils, emulsified oils, settleable solids, suspended solids)
- What is the intended use of the treated water? (Recycle, discharge to sewer, etc.)

Manufacturing Excellence

All Water Maze products are built and tested in America. Our manufacturing center is ISO 9001 and 14001 certified. Every product is tested before shipping to ensure high quality and reliability.

SOLUTIONS

We manufacture the building blocks that are integrated into complete water treatment solutions. We tailor our wide array of technologies to each customer's application and requirements.

Engineering & Technical

Our team of design engineers and service technicians have decades of experience in industrial water processes. We have designed and installed thousands of installations across the country that are treating and recycling millions of gallons of water every day.

SYSTEM DESIGN

Every project is a partnership between the customer, Water Maze engineers, and your local dealer expert. We do not simply sell products – we provide integrated solutions designed to meet your needs.

WATER ANALYSIS

We provide a comprehensive evaluation of your wastewater and use that information to develop an optimized system designed to treat it to the standard of your application.

Expertise & Support

The Water Maze service network is available throughout North America. Trained technicians are available for start-up, service and ongoing operational support. From initial design consultations to after-sale support, we have expertise to assist every step along the way.

Water Maze treatment systems are designed to provide many years of reliable service with minimal repair and maintenance downtime. We are proud to have systems continuing to operate after twenty years. However, when you need us, our factory support hotline is staffed with experienced technicians. Local dealer service capabilities can have a technician, parts, and supplies on site quickly to keep your operation running.

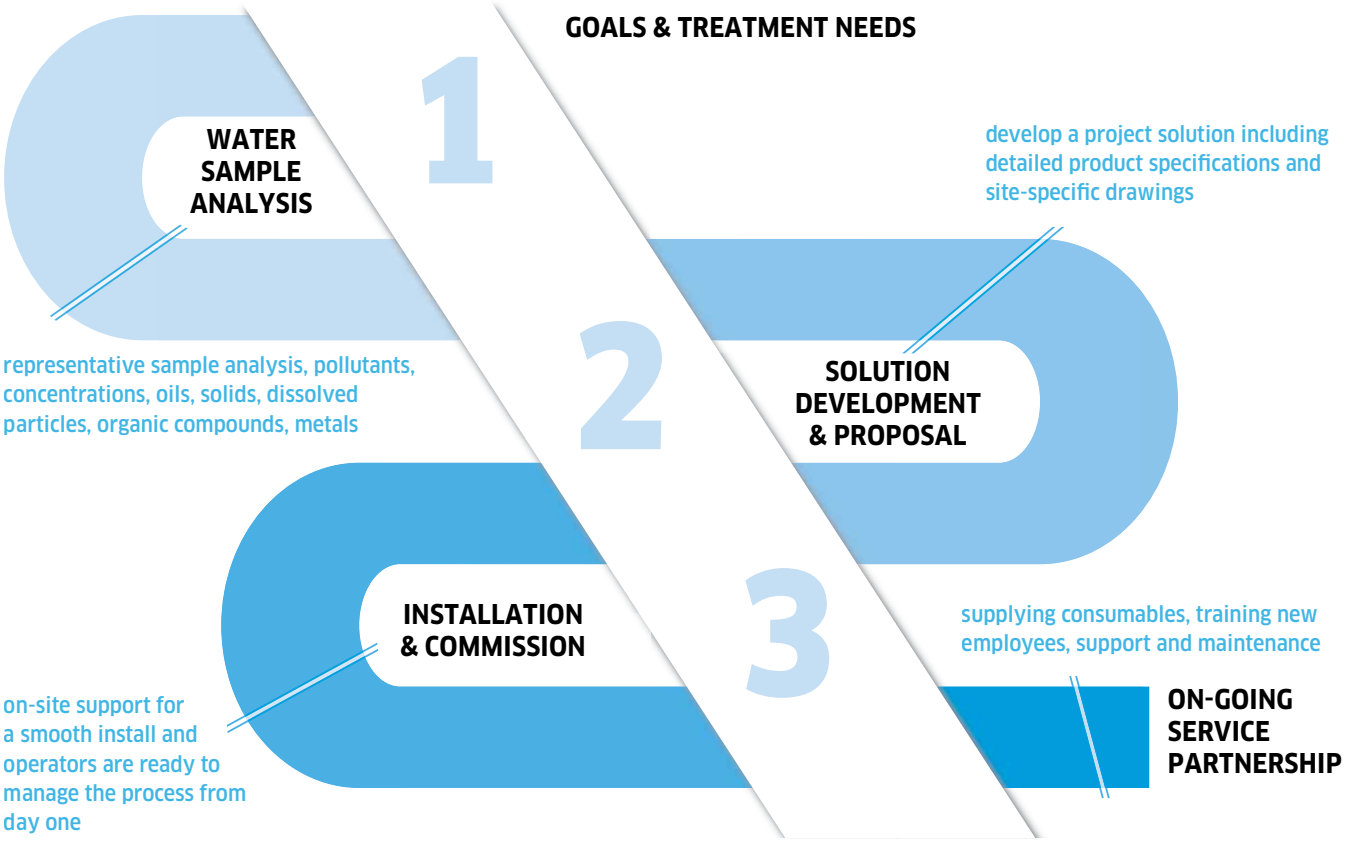
INSTALLATION SUPPORT AND TRAINING

With experienced local dealer support, we can guide your team through the installation process, provide start-up services, and train your technicians to have your system operating efficiently starting on day one.

Every treatment system is optimized to produce the required effluent quality at the lowest operating cost.

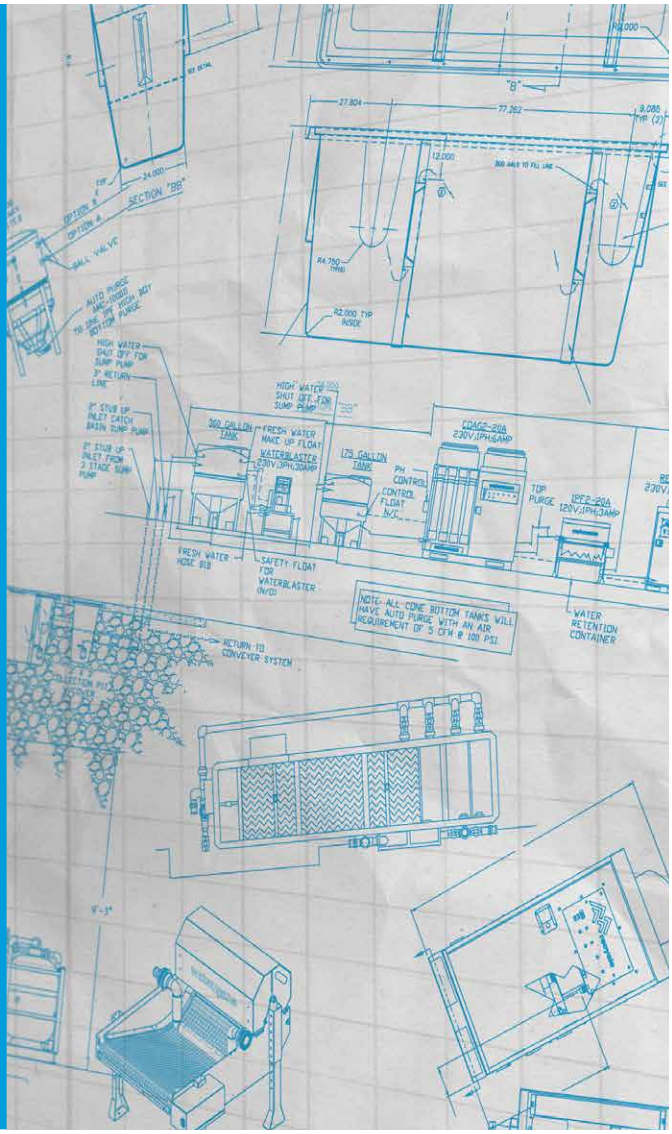
We evaluate treatment requirements against best available technologies and select the optimum combination to meet required objectives. Systems can be designed to permit reuse/recycle, discharge to sewer* or evaporation of your waste stream – often resulting in virtually zero-discharge systems.

HOW WE DEVELOP YOUR SOLUTION



*Subject to local regulations and permits

WATER MAZE OFFERS A WIDE RANGE OF WATER TREATMENT TECHNOLOGIES



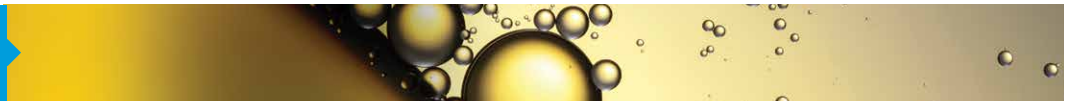
PRE-TREATMENT

PRE-TREATMENT IS A VITAL PART OF ALL WATER TREATMENT SYSTEMS

All water treatment systems should include “adequate” pre-treatment. The definition of “adequate” may vary depending on the site specific application conditions and the physical and chemical properties of the influent water.

The primary objective of pre-treatment is to prepare the water for additional downstream treatment. For some applications, simply adjusting the pH of the water will effectively change the physical characteristics of the water and perhaps will provide easier downstream treatment. A well designed pit system that removes settleable heavy solids will reduce the burden the downstream equipment from being overwhelmed. If changing or adding the pit system is not feasible, perhaps adding an above-ground cone-bottomed clarifier tank is an option. For some applications, where there is an abundance of free-floating oils in the water, pre-treatment to remove excessive amounts of free-floating oils prior to addressing the emulsified oils may be required.

OIL/WATER SEPARATION



OILS: FREE-FLOATING, EMULSIFIED, AND SOLUBLE

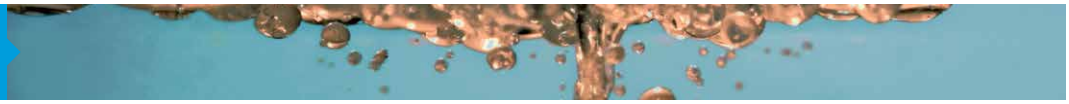
Oil/water separators are generally capable of separating free-floating oils, rather than chemically emulsified oils, or soluble oils from water. Many unaware buyers will request an oil/water separator, without knowing the physical characteristics of the oils as they exist in the water. This can result in a costly mistake.

Are the oils free-floating?
Traditional oil/water separators are applied to applications where the oils are buoyant and floating on the surface.

Are the oils chemically emulsified and dispersed within the water?
Instead of traditional oil/water separators, a “de-emulsifying” water treatment technology should be considered for your application.

Are the oils water soluble ?
Traditional oil/water separators are not normally applied. Rather, reducing the water volume prior to off-site disposal (using evaporation technology) should be considered for treatment.

COAGULATION / FLOCCULATION



REMOVE SUSPENDED SOLIDS, EMULSIFIED OILS, AND HEAVY METALS

Coagulation/flocculation water treatment technology is used to remove suspended particles and/or emulsified oils. Particles are suspended due to natural ionic charges that are present in the water. For emulsified oils, the use of cleaning agents create similar ionic charges around oil droplets. In either case, these common charges create repelling forces to suspend matter.

COAGULATION | Neutralizes the repelling charges and to allow the matter to gather (agglomerate). For most applications, coagulation can be accomplished by mixing a chemical coagulant into the water, or by applying Electro-coagulation.

FLOCCULATION | Creates an additional adhesion between the agglomerated mater by mixing a flocculent chemical into the water. Creating larger agglomerations and adds molecular weight to the matter, which enhances the separation and removal process of the contaminants from the water.

ADVANTAGES
Chemical coagulation or electro-coagulation, combined with other systems, can produce exceptional water quality with minimal maintenance and can successfully treat broad ranges of waste streams.

AFTER COAGULANT APPLIED | AFTER CHEMICAL FLOCCULENT APPLIED | AFTER FILTER WITH IPF MEDIA PAPER

MECHANICAL FILTRATION

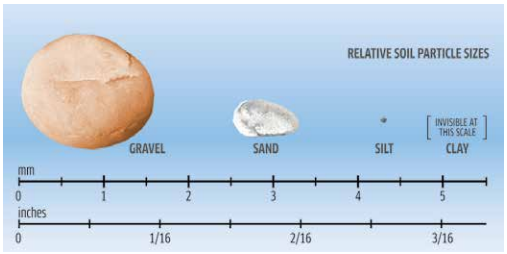
MECHANICAL FILTRATION REMOVES PARTICULATE MATTER FROM WATER

Filtration is the removal of solids from water. Solids in water are normally classified and measured as either suspended (Total Suspended Solids – TSS), or as dissolved (Total Dissolved Solids – TDS). Water Maze offers products with filtration capabilities that range from 5 to 20 micron.

When selecting a mechanical filtration system, it is important to confirm: What are the water quality requirements for the intended use of the water? Does the selected filter or system remove enough of the particles to achieve the needed water quality requirements?

FACTORS TO CONSIDER WHEN SELECTING A SYSTEM:

- Total spectrum (range) of particle sizes
- Total amount of particles contained in the water (e.g., percentage of total solids)
- Required maintenance by the filtration system
- Process flow rate requirements



BIOREMEDIATION

MODULAR BIOREMEDIATION FOR WASH WATER & INDUSTRIAL WATER

Bioremediation is the process of applying living organisms (microbes) for the purpose of breaking down organic carbon based molecules. The process renders the organic compounds into harmless carbon dioxide and water.

BioSystem products, in some cases, can be applied as a stand alone system. Typically bioremediation is a component within a system.

Water Maze BioSystem employs the latest aerobic bio-technology for treating a broad range waste streams such as: water generated from washing golf and turf equipment; water from washing trucks and trailers; and wash water with emulsified hydrocarbons (oils).

As with all our systems, pre-treatment is also an important element to any bioremediation system.

ADVANTAGES
Bioremediation can be user friendly, cost effective, and be a low cost method of treating certain types of water. However, if misapplied, bioremediation can result in poor water quality, malodorous conditions, and become an overall unpleasant experience for the end-user.

ANALYSIS
Bioremediation applications require a base-level water analysis to assure that the elements for design criteria have been considered before a recommendation for a BioSystem can be determined.

EVAPORATION

EVAPORATION, KEY TO ENHANCE ENERGY EFFICIENCY AND COST SAVINGS

Water volume reduction using evaporation technology can be an economical alternative to the high costs of off-site disposal of water, which can exceed $1 USD per gallon. Evaporation costs can be a fraction of off-site disposal costs. Wastewater being hauled off-site is mostly water. Our evaporation systems may achieve up to a 95% volume reduction. This can translate into major costs savings and a quick return on investment for the purchase of the equipment.

Evaporator applications normally have smaller volumes of wastewaters with characteristics that are too complex and expensive for traditional treatment methods. The process of evaporation is a thermal exchange of heat into the body of water. Water Maze offers a variety of evaporators that employ different thermal transfer technologies that engage various power sources, natural gas (NG), liquid propane (LP), or electricity, to custom fit each solution.

ANALYSIS
Evaporator applications require a base-level water analysis to assure that the elements for design criteria have been considered before a recommendation for an evaporation can be determined.

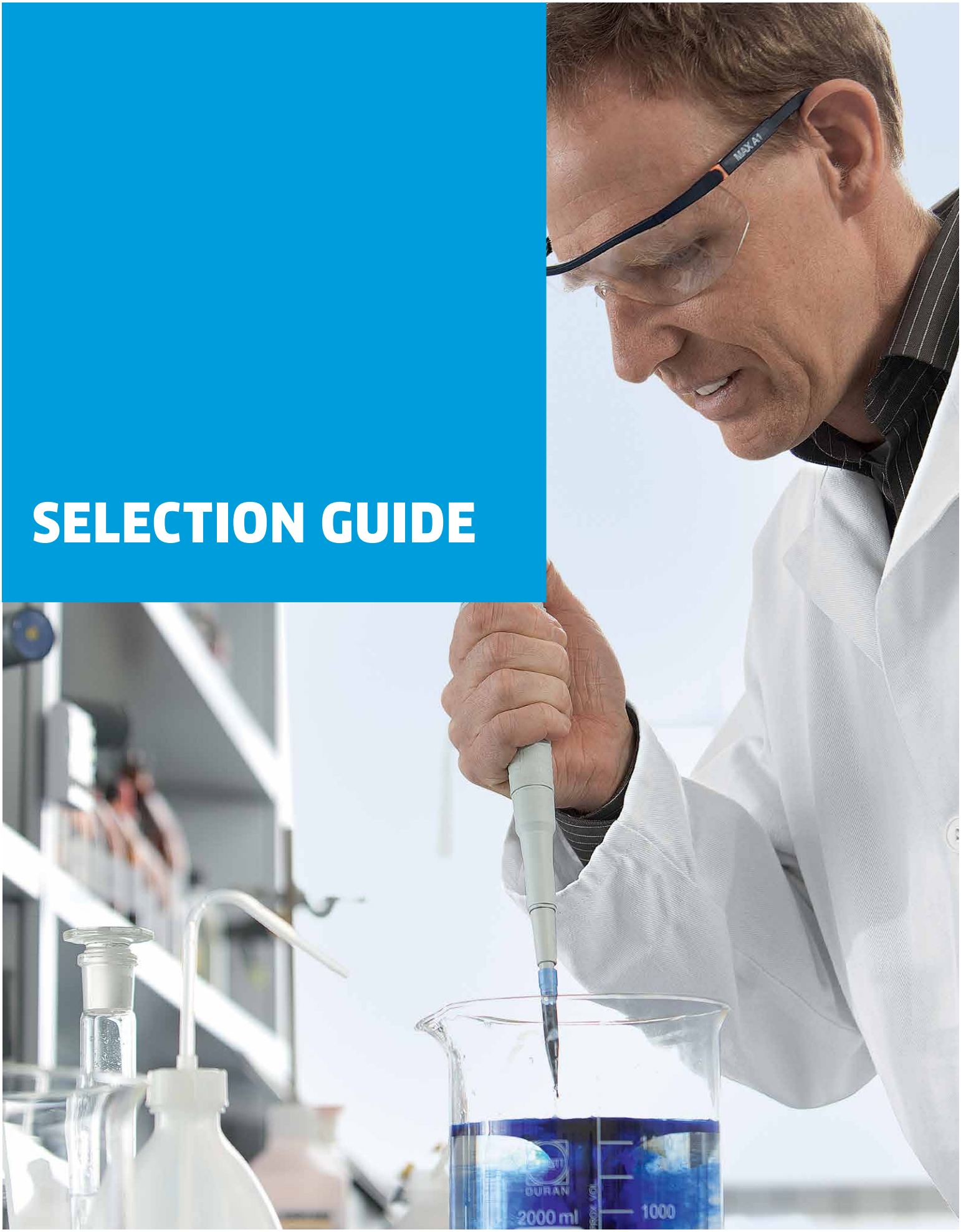
CUSTOMERS THAT BENEFIT FROM EVAPORATORS:

- Have been paying for off-site wastewater disposal
- Want to reduce disposal cost by as much as 95%
- Want to reduce liability exposure related to off-site disposal
- May achieve a return on investment (ROI) within 2 years

CRITICAL ISSUES TO CONSIDER:

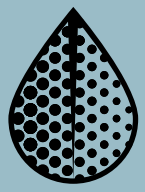
- How clean is the water? Is pre-treatment required? Dirty water will concentrate inside of the evaporator, which will reduce efficiency and higher maintenance
- The pH of the influent water should be balanced
- The influent water must not be flammable

SELECTION GUIDE



STEP 1

WATER CONSTITUENTS

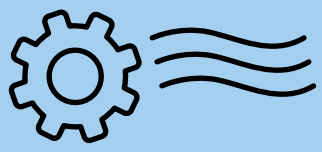


What are the constituents in the water that need to be removed?

- Constituents are foreign materials, such as oils, metals, solids or chemicals, in your wastewater
- Your needed system is dependent on what the water quality requirements are for the intended use of the water being treated
  SEE STEP 2

STEP 2

WATER QUALITY REQUIREMENTS



What are the water quality requirements for the intended use of the water?

- Treat & discharge to the city sewer (POTW)

  Determine the discharge limits and regulations in your area.

  A POTW is not required to accept the discharge of industrial water.

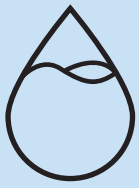
- Treat and discharge for the purpose of recycling

  How long can you recycle the water?

  The life of the water is limited, but is subject to the water quality produced by the water treatment system installed.

STEP 3

CONSTITUENT CHARACTERISTICS



What are the characteristics of the constituents?

- Constituents characteristics in the water are the primary determining factors for selecting the correct water treatment technologies to achieve the treatment objectives.

STEP 4

TECHNOLOGIES & COMPONENTS

What technologies and components are required to achieve the treatment objectives?
REFER TO THE SELECTION GUIDE CHART ON PAGES 10-11

- Pre-treatment – Below-ground
- Pre-treatment – Above-ground
- Primary treatment components
- Post treatment components

SELECTION GUIDE CHART

1 What are the constituents in the water that need to be removed?

2 What are the water quality requirements for the intended use of the water?

3 What are the characteristics of the constituents in the water?

4 What technologies and components are required to achieve the treatment objectives?

	Page Number	SOLIDS		SUSPENDED SOLIDS	
		Heavy Settling Solids	Debris & Floating Matter	Inorganic	Organic
PRE-TREATMENT TECHNOLOGY					
PRE-TREATMENT | BELOW-GROUND					
Fiberglass Pit, Gratings, Covers	13	■	■		
Wash Pad & Pit Systems	15	■	■		
PRE-TREATMENT | ABOVE-GROUND					
Steel Wash Racks	18	■	■		
CLT-300 / CLT 600 Tanks	19	■	■		
Self-Cleaning Screen	25		■		
pH Permissive (dual controller - up & down)	20				
HydroScreen	41		■		
PRIMARY TREATMENT TECHNOLOGY					
Alpha-1500D Oil/Water Separator	22				
UNIVERSAL CLARIFIER | CLT-300 OR CLT-600	23				
pH Control	26			■	■
Coalescing with Oil/Water Separator (OWS)	24				
Belt-mop Skimmer (OWS)	24				
CoAgulation/Flocculation (integrated on CLT)	26 27			■	■
Internal Mixing Manifold (solids settling)	24	■		■	■
UV Ozone (odor control) – in lieu of BioSystem	26				■
Eofill for Bioremediation	25				■
Self-Cleaning Screen (inside CLT)	25		■	■	■
CoAgulation/Flocculation (Compact CoAg module)	26 27			■	■
POST TREATMENT TECHNOLOGY					
PM-1000D BioSystem (Bioremediation)	36				■
Filtration (IPF-20D or ZCF Media Filtration)	33			■	■
Water Evaporation (HBG and WB models)	43 44			■	

DISSOLVED SOLIDS		pH	OILS			METALS	VOCS
Inorganic	Organic	High / Low pH	Free-floating Oils	Emulsified Oils	Coolants / Soluble Oils	Metals	Volatile Organic Compounds
		■				■	
			■				
	■	■	■	■		■	
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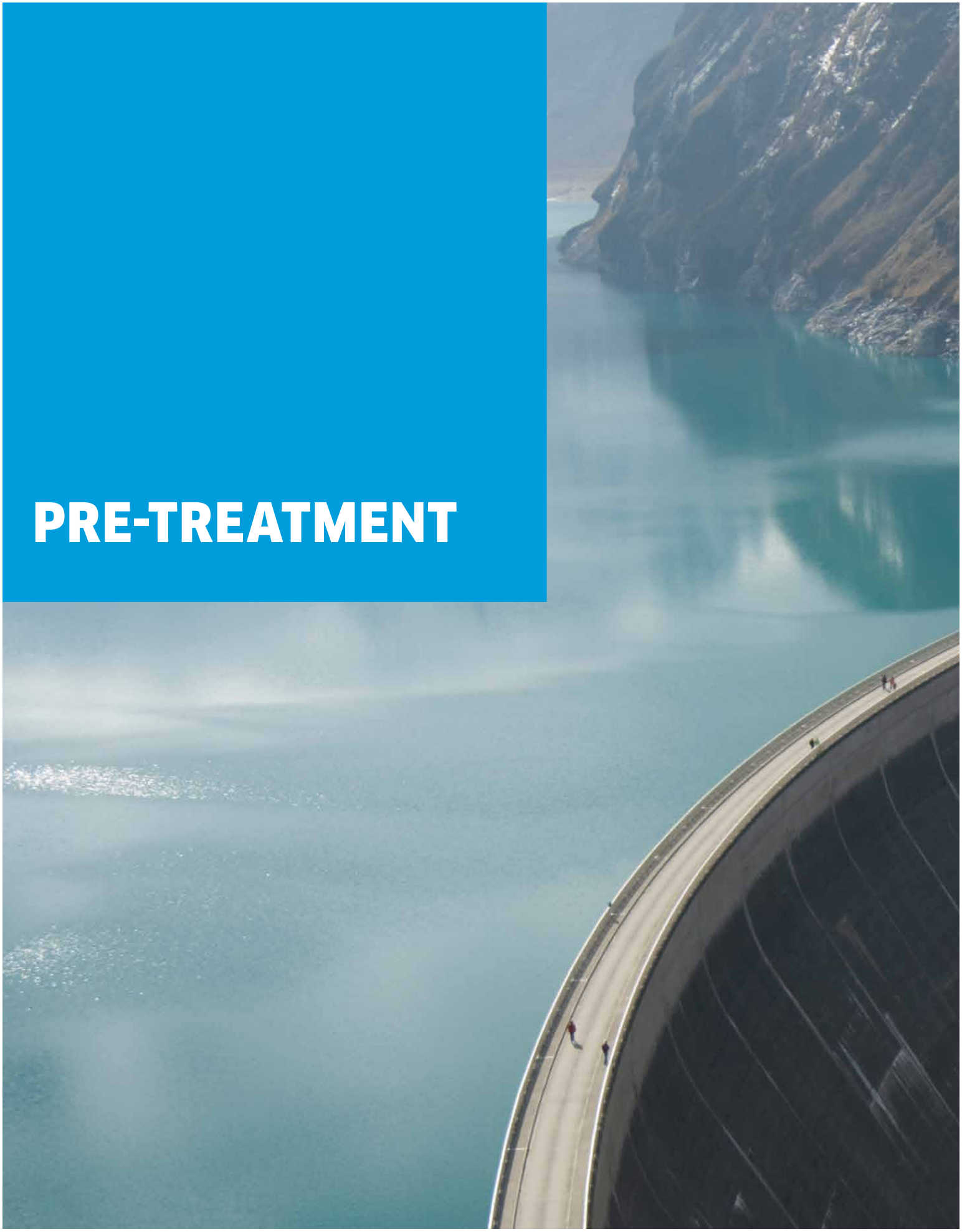
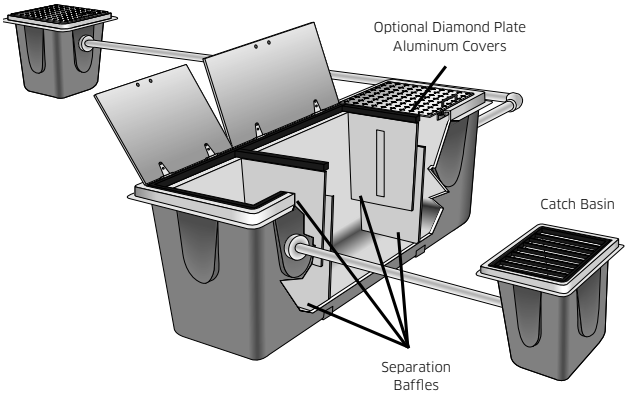
PRE-TREATMENT

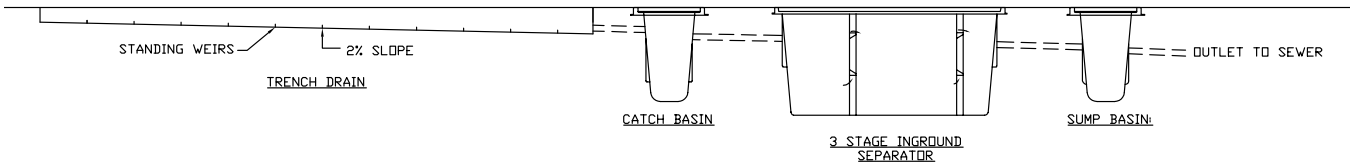


In-ground Fiberglass Pit Systems



Water Maze offers in-ground fiberglass pits, which are easy to install at the job site. As compared to poured-in-place concrete pits that may eventually crack and allow water to leach into the ground, our fiberglass pits immersed into concrete can provide double containment. We offer three sizes of pits. The In-ground Separator (IGS) is uniquely designed with two sets of standing weirs that force solids to the bottom of the pit.

- Below ground pre-treatment of wash water
- Reinforced, pre-fabricated fiberglass
- Easier and less expensive to install concrete
- Chemically resistant fiberglass inhibits the growth of bacteria



Typical installation of Fiberglass Pit System

Technical data

Model	Part No.	Description	Material	Inside Dimensions	GPM
Collection Pit	8.903-657.0	In-ground Oil Separator Pit	Fiberglass	3' x 9' x 5	60
Catch Basin	8.709-333.0	In-ground Basin	Fiberglass	3' x 3' x 4.5'	–
Sump Pit	8.709-334.0	In-ground Sump Pit	Fiberglass	2' x 2' x 3'	–

Optional Accessories

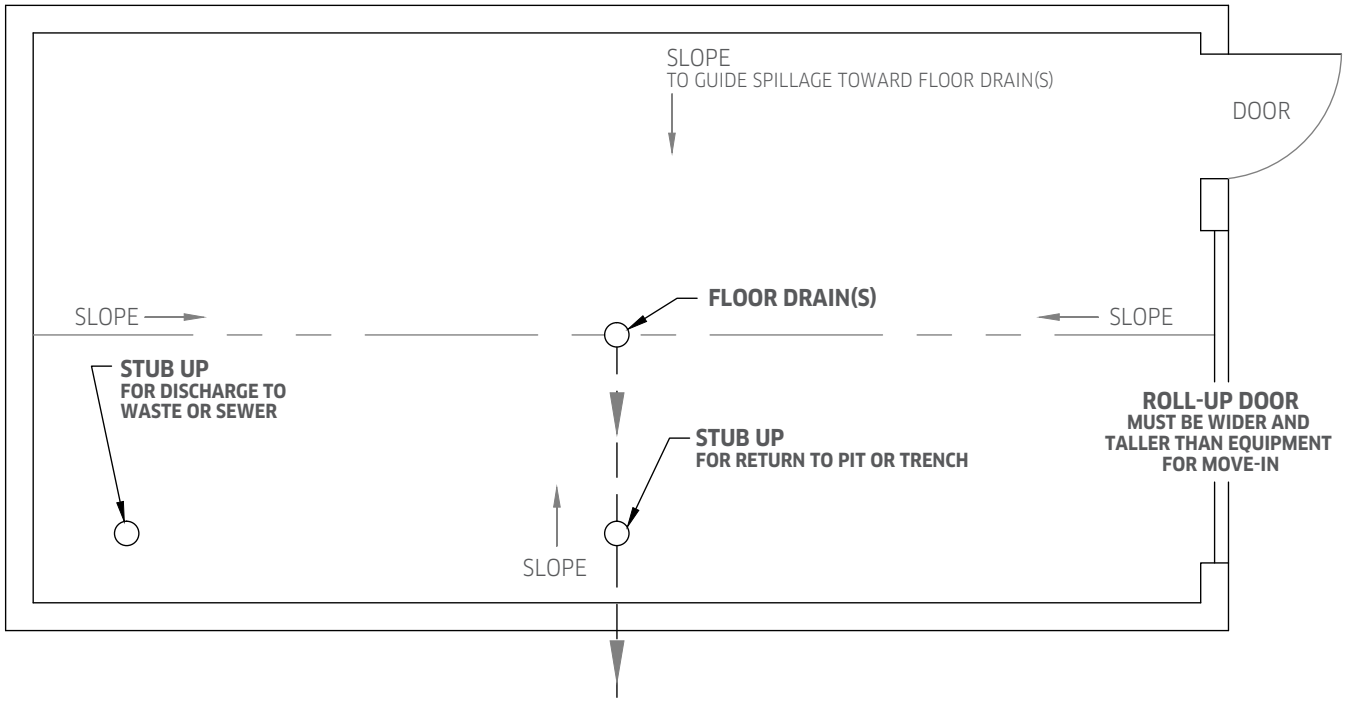
Part No.	Description
COLLECTION PIT ONLY	
8.903-674.0	Cover, Hinged Aluminum, Diamond Tread Plate with Steel Tube Frame, 3' x 9'
8.903-673.0	Coalescing Grid Packs, 58 Plates, 1,700 sq ft Surface Area
8.712-023.0	Wood Brace Kit (bracing to reinforce fiberglass while pouring concrete, required for installation of Collection Pit #8.903-657.0)
CATCH BASIN ONLY	
8.903-678.0	Cover, Aluminum Diamond Tread Plate, 3' x 3'
8.903-677.0	Grating*, Hot Rolled Steel, 1/2" x 2" Flatbar, 1.5' x 3' (includes 2 grates)
SUMP PIT ONLY	
8.903-675.0	Cover, Aluminum Diamond Tread Plate with Steel Tube Frame, 2' x 2'
8.903-676.0	Grating*, Hot Rolled Steel 1/2" x 2" Flatbar, 2' x 2'

*Gratings meet H-20 truck load rating. Note: Sump pumps are sold separately.

EQUIPMENT ROOM GUIDELINES

A properly designed equipment room will consider and/or incorporate the following:

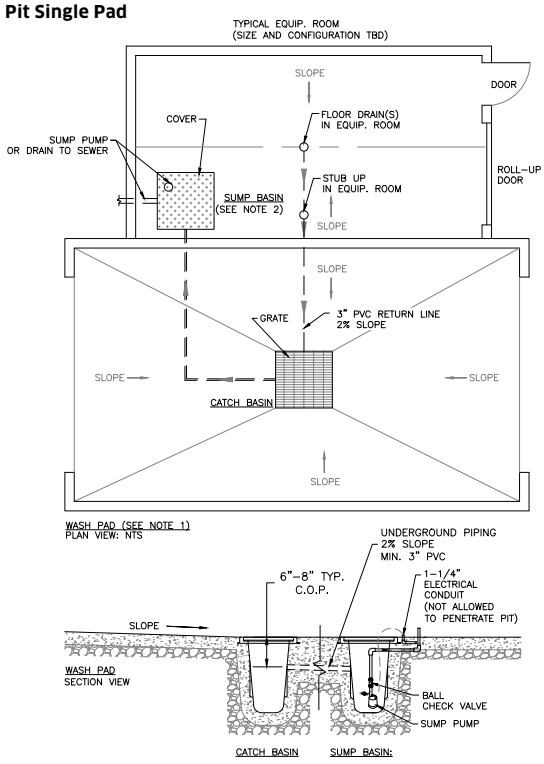
- Allow room for water treatment equipment plus site and owner equipment (pressure washers, compressors, etc.)
- Electrical and control panels require 30" clearance
- 18-20" maintenance access clearance around equipment recommended
- See Equipment Detail Drawings for equipment specifications (size, utility requirements, electrical/control panel locations, etc.)
- Floor should slope towards floor drains to contain any spillage
- A Stub Up should be available for overflow to return to pit or trench and discharge to waste or sewer
- Door should be sized to allow equipment move-in
- Ventilation: Required top and bottom (based on specific equipment requirements)



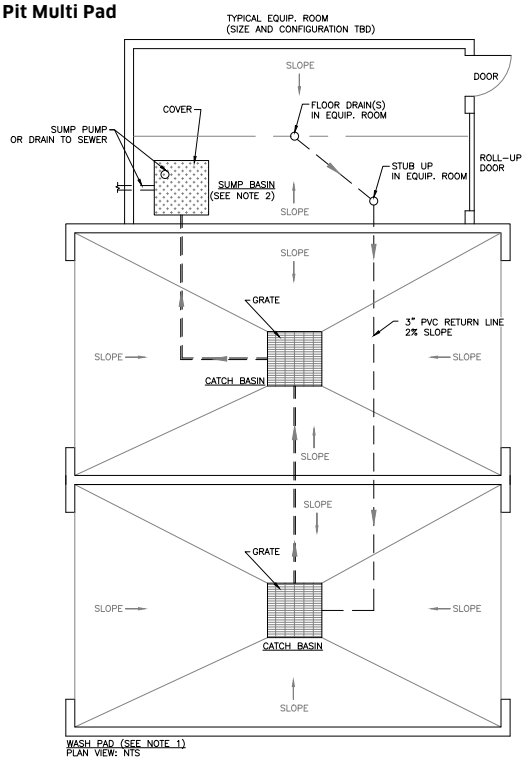
In-ground Wash Pad Concept Drawings

- The primary purpose of an in-ground pit system is to retain heavy settleable solids and debris that will impact the sump pump
- Excessive amounts of water volumes in the pit system will create an anaerobic microbial environment (e.g. stagnant water) that will contribute to malodorous conditions in the wash area

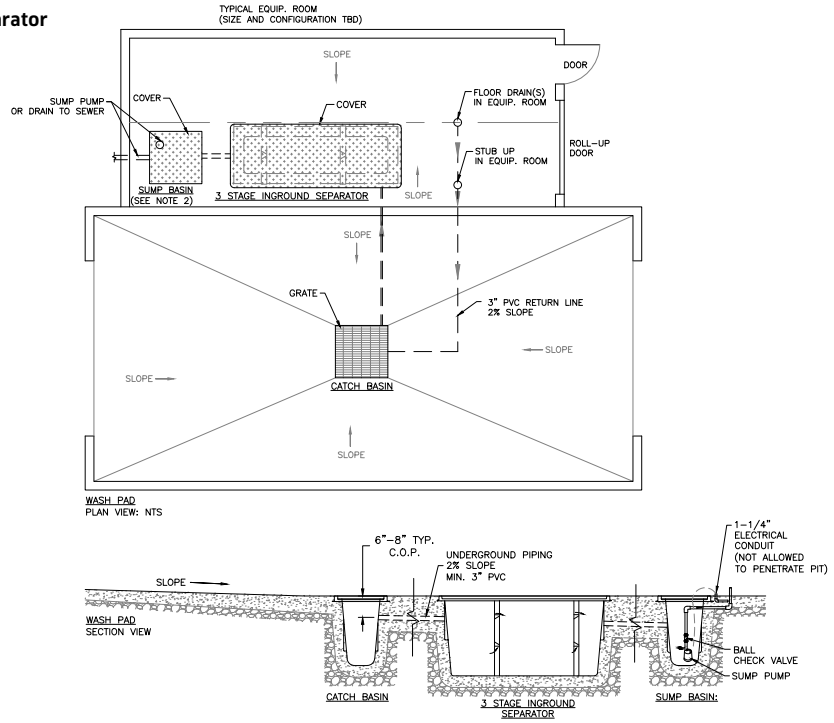
1 Pit Single Pad



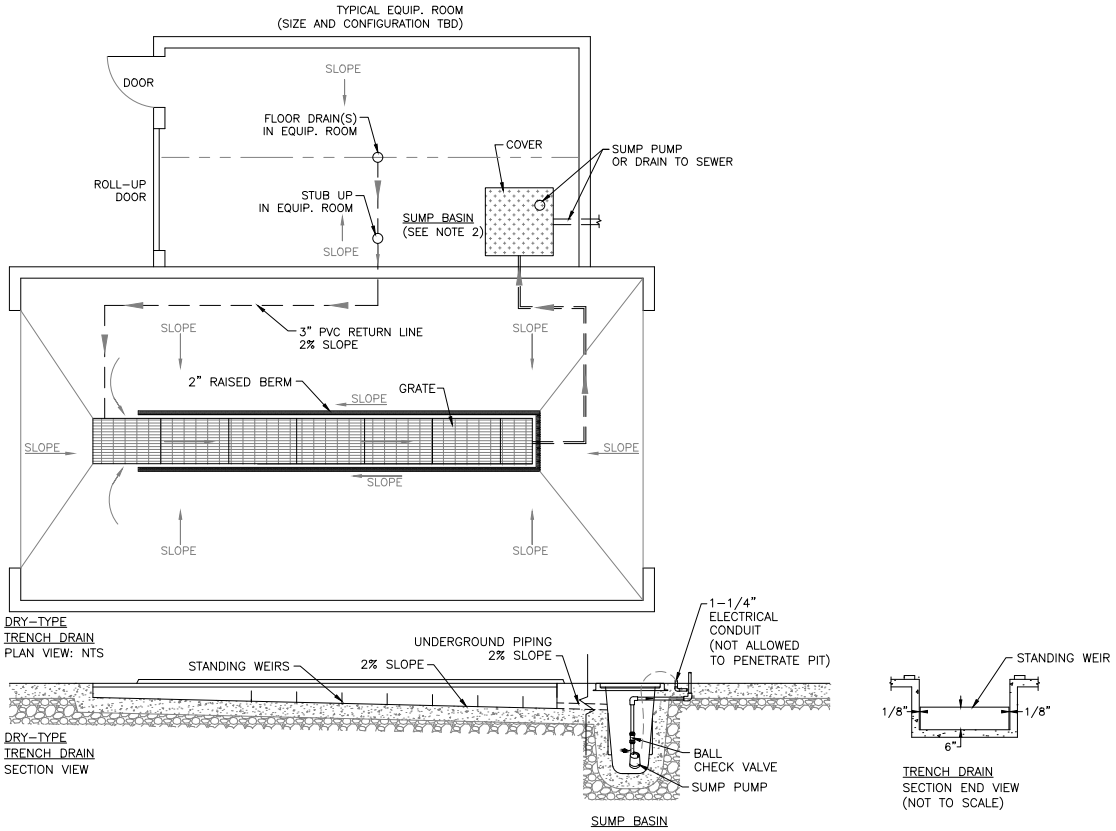
2 Pit Multi Pad



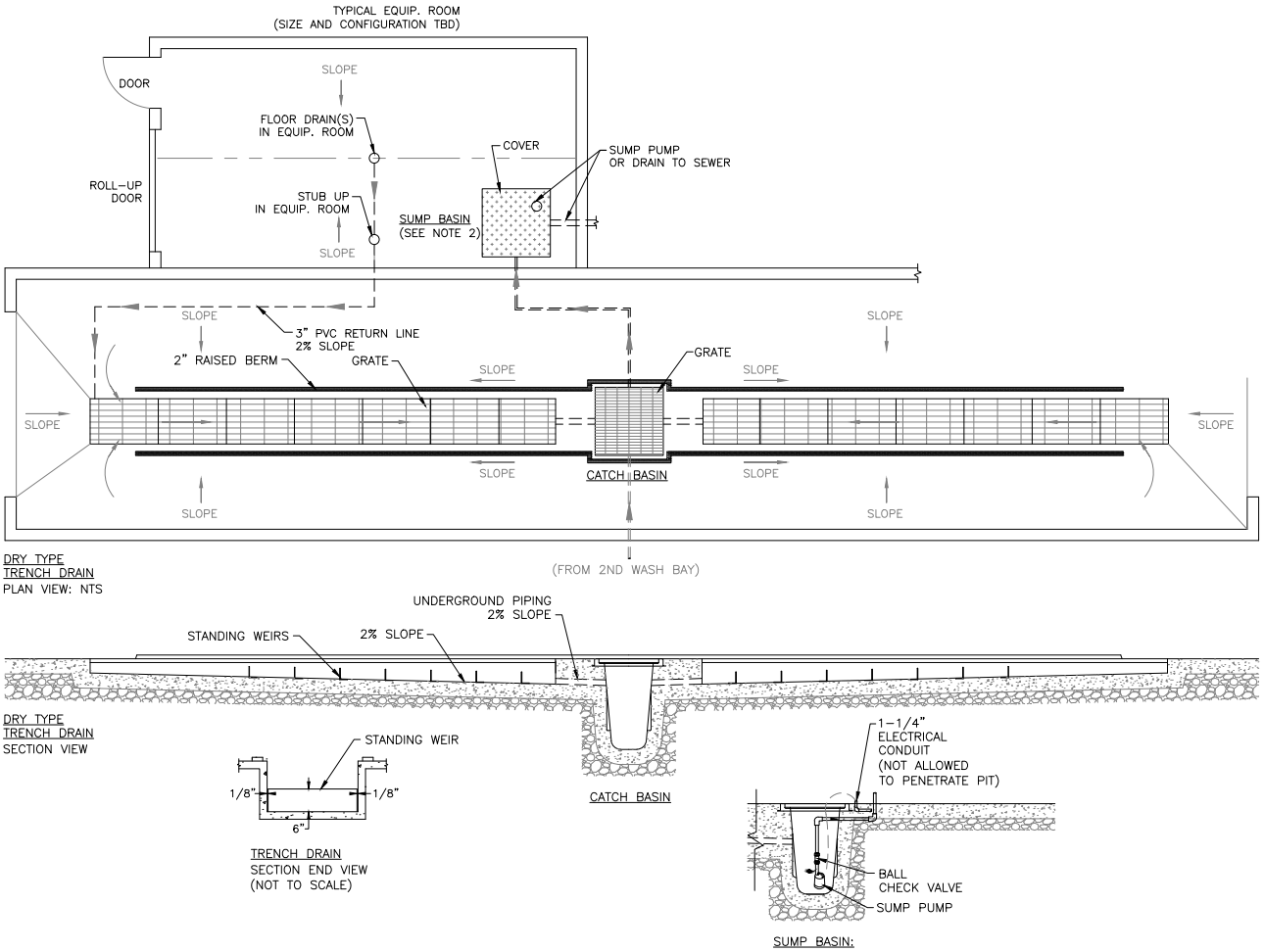
3 Pit Single Pad Inground Separator



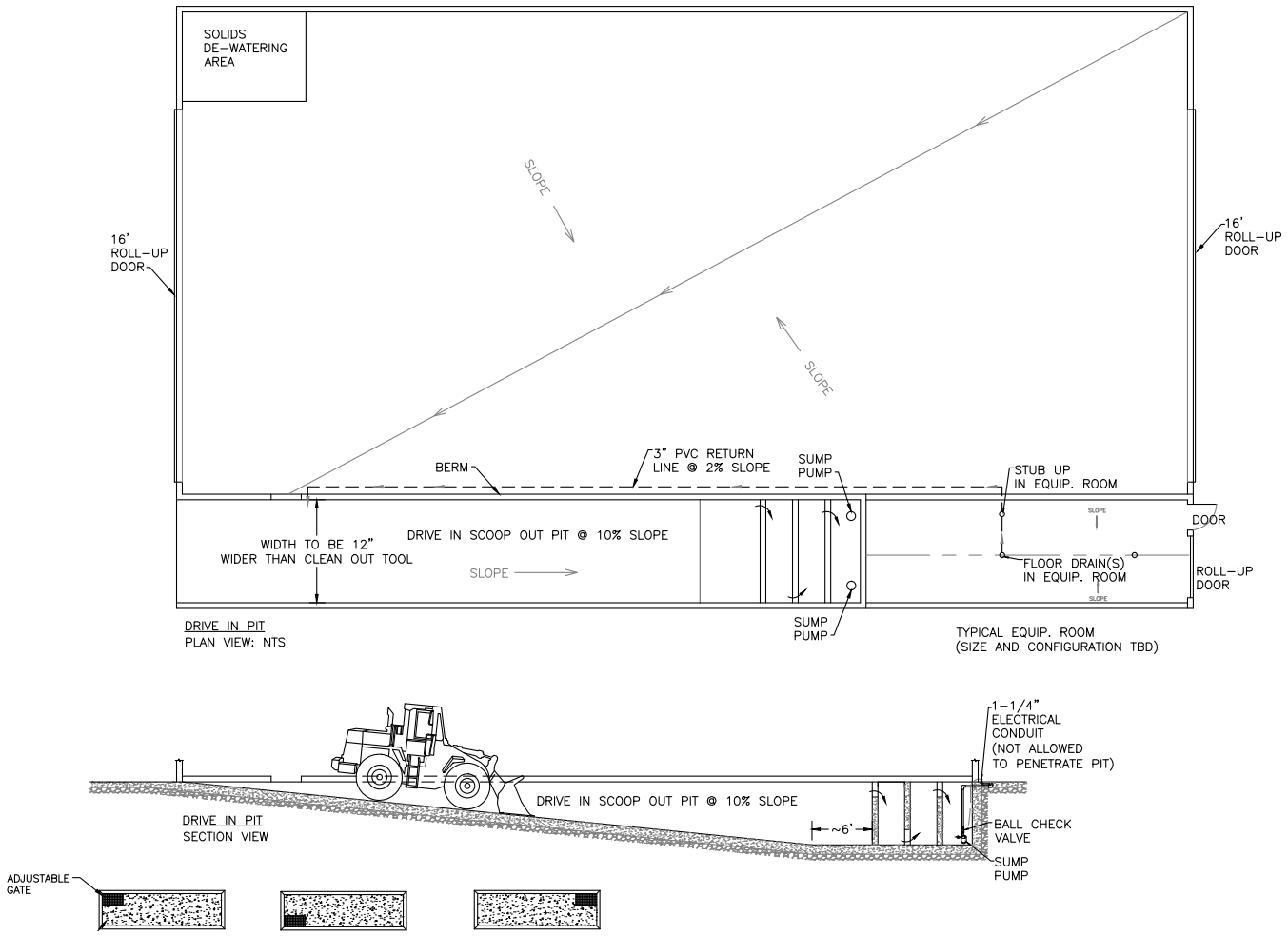
4 Pit Long Pad Trench



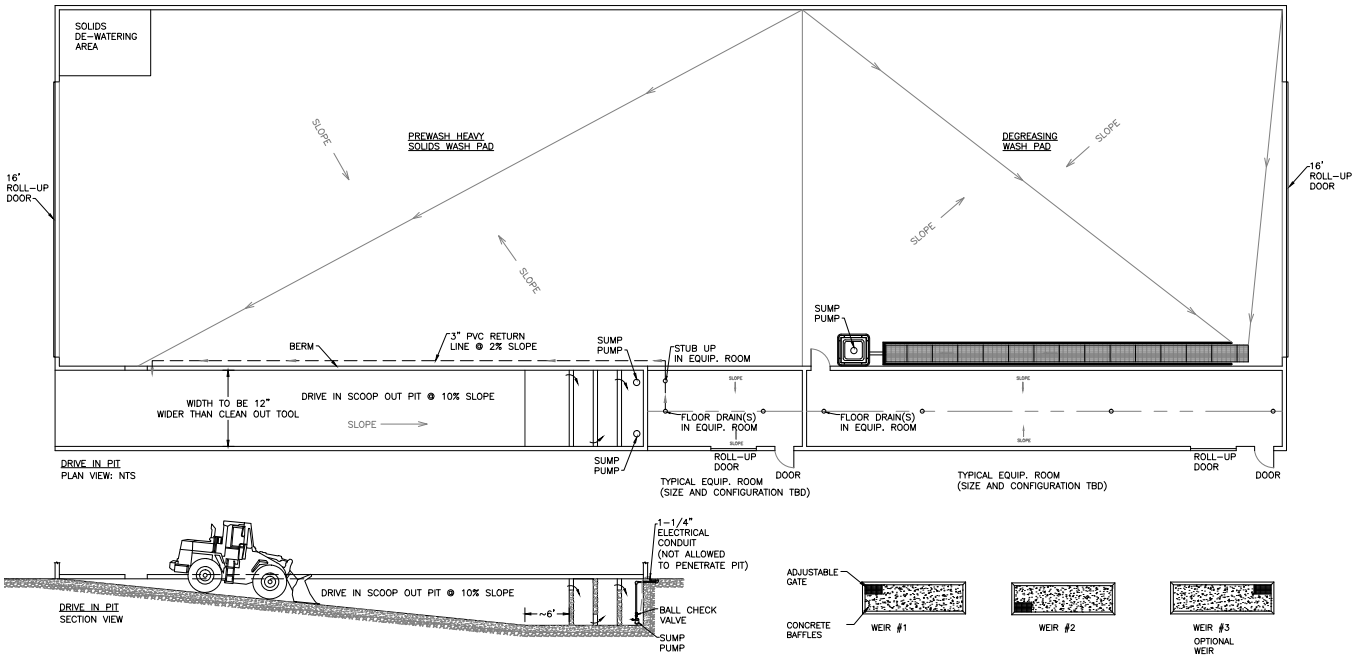
5 Pit Long Pad Trench Center Catch Basin



6 Heavy Solid Pad Drive in Scoup Out Pit



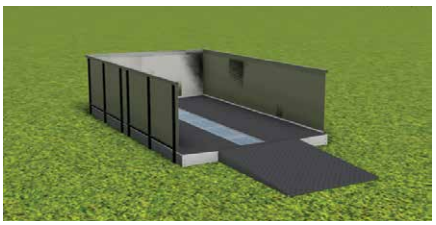
7 Heavy Solid Final Wash Pad



Above-ground Environmental Containment Racks / Steel Wash Pads

- Drive-On / Back-Off and Drive-Through options available
- 9-feet wide and 18-feet wide models
- Diamond plate desk surface
- Low profile modular design with maximum deck height 6-inches

Drive-On / Back-Off
18' Wide



Drive-On / Back-Off
9' Wide

Drive-On / Back-Off with Optional Canopy
18' Wide

Conveyor option (for 18 feet wide or greater containment racks)

Drive-Through
18' Wide

Technical data

Part No.	Description	Inside L x W*	Load Capacity (LBS)	Through Size	Access Ramps
Special	Above-ground Steel Wash Rack	9'x7' (one section)	15,000	2' wide	1 or 2
Special	Above-ground Steel Wash Rack	18'x7'(two sections)	60,000	2' wide	1 or 2

Optional Accessories

Part No.	Description
Special	Custom Deck Widths
Special	Integrated Undercarriage Rinse System: 60 GPM @ 100 PSI; includes 10' Spray Bar System with 10 Sub Surface Nozzle Pockets Embedded into One Set of Desk Sections and a Centrifugal Booster Pumping System with Enclosed Impellers
Special	Dual Diaphragm Pump Recovery System: Includes 2 Heavy Duty Suction Pumps; Hoses and Hose Connections from One End of Drain Trough to Pump Rack
Special	Integrated Conveyor System: Automatically Removes Solids from the Center Trough System (available only for 18' wide or greater containment racks)
Special	Canopy Covers (available to fit all models)
Special	Treatment and Discharge Systems
Special	Recycle Systems

*Length customized in 7' increments.

Above-ground Cone-bottom Tanks

310 gal Tank with Stand | CLT-600 | CLT-300 | 150 gal Tank with Stand

Water Maze CLT-600 and CLT-300 models can be applied as pre-treatment, post treatment, or as a stand alone treatment system. These models utilize cross-linked polyethylene cone-bottom tanks with steep slopes (up to 55 degrees) for maximum solids separation. Each tank has a full open top with removable lid and includes heavy duty metal stand with cradle. These base models are also incorporated into other clarifier models within this products catalog with features and benefits to match your application requirements.

- Expand system capacity
- UV- and corrosion-resistant
- Provides cushion in handling high volumes of wash water

Technical data

Model	Part No.	Description	Stand	Material	Capacity (gal)
CLT-600	1.103-435.0	Polishing Tank	■	–	600
CLT-300	1.103-434.0	Polishing Tank	■	–	300
Storage Tank	8.719-172.0	Intermediate Flat Bottom Tank	–	Polyethylene	165
Storage Tank	8.719-173.0	Cone Bottom Tank	■	Polyethylene	310
Storage Tank	8.725-510.0	Cone Bottom Tank	Optional	–	150

Tank Stand	8.751-972.0	Tank Stand, 36" (45 degree) (Fits Cone Bottom Tank #8.725-510.0 Only)
Tank Stand	Special	Stainless Steel Tank Stand (Fits CLT-300 and CLT-600 Tanks)

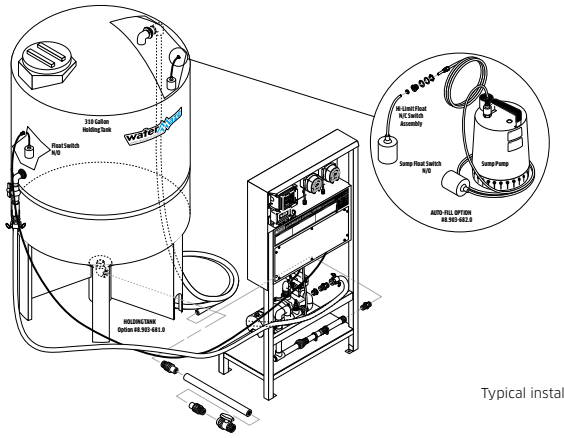
NOTE: CLT-300 and CLT-600 Tanks are propriety to Water Maze and can be customized through our Specials Department to satisfy specific application requirements.
See Page 23 for Universal Clarifier Systems and configuration options. Consult CL Quick Start Guide for full system options.

PH-3020D

Holding Tank | Auto Fill PH-3020

The PH-3020 system incorporates: a digital (dual) pH controller that monitors and adjusts both base and acid pH ranges; a circulation pump; and chemical peristaltic pumps. Once the pH set points (high or low) is satisfied, the permissive interlock system of the controller will provide an output signal for the purpose of downstream release and/or post processing of the water.
(For additional details, refer to the pH Permissive product sheet)

- Balances water pH
- A balanced pH promotes: solids to settle out quicker; emulsified oils to become more buoyant; and some metals to precipitate.
- Automatic adjustment recommended
- Stand alone systems
- Factory installed options incorporated into a base product



Typical installation of PH-3020D

Technical data

Model	Part No.	Description	Voltage	AMPS
PH-3020D	1.103-458.0	pH Permissive Control System	120	9

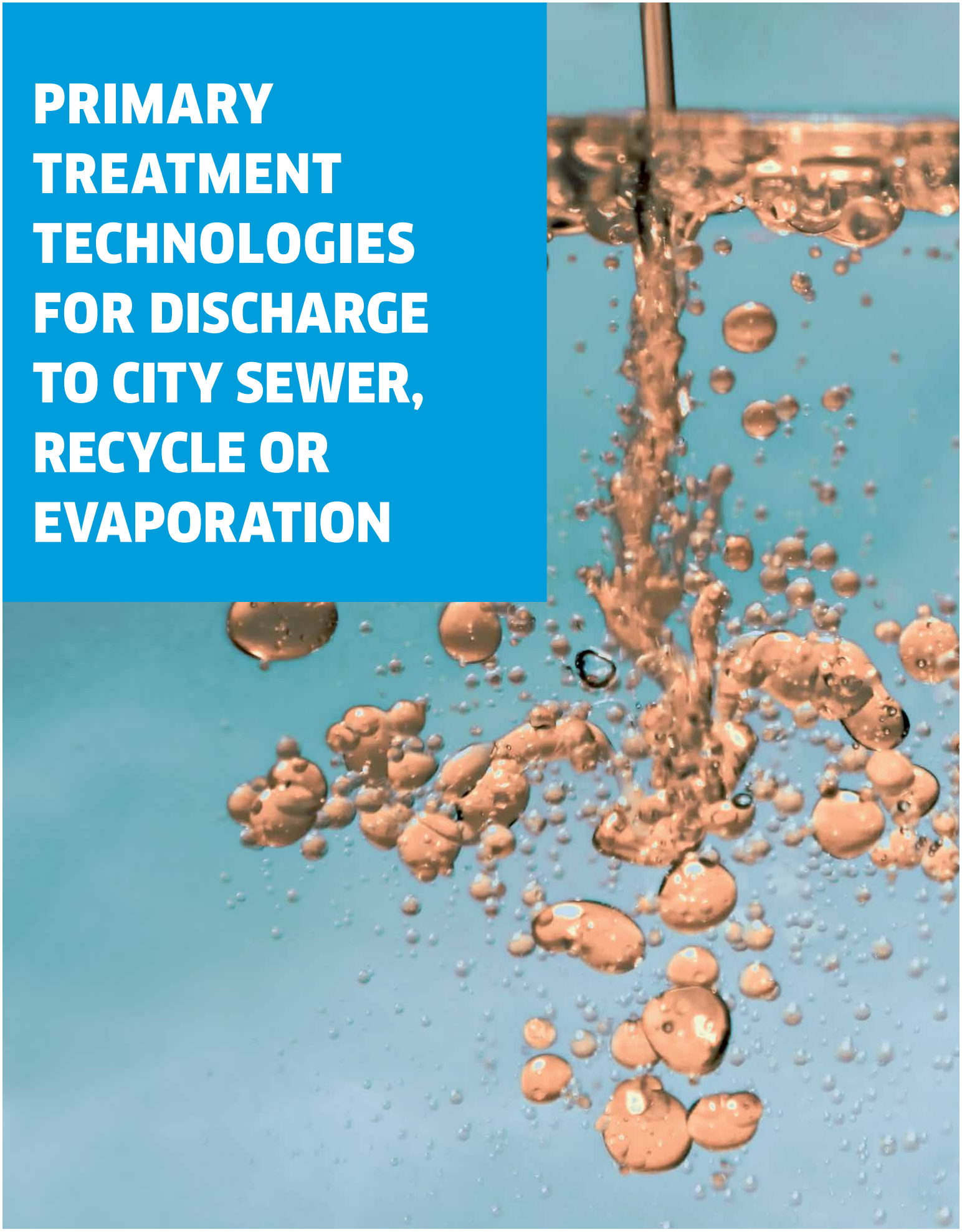
Optional Accessories

Part No.	Description
8.903-682.0	Auto Fill (SS sump pump, fittings and floats) ‡
8.903-681.0	Holding Tank, 300 gal. (valves and hose)

‡ Factory Install Only

HIgh Boy Index Polishing Filter
See Page 37

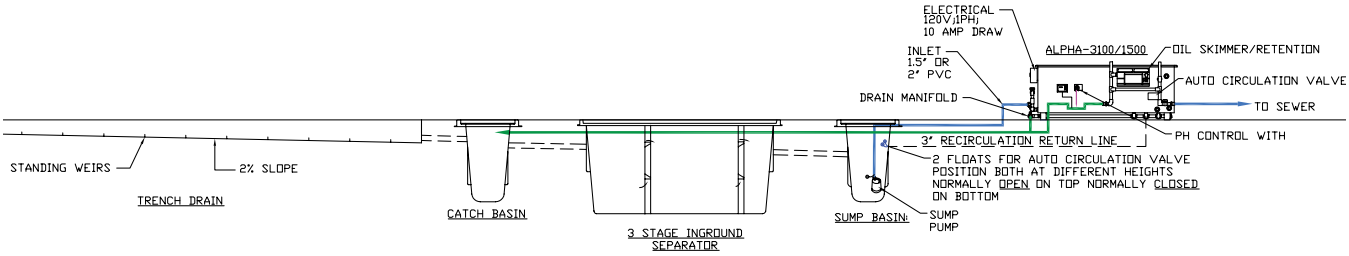
PRIMARY TREATMENT TECHNOLOGIES FOR DISCHARGE TO CITY SEWER, RECYCLE OR EVAPORATION



ALPHA

The ALPHA-1500D model is a highly effective above-ground oil/water separator and is designed to discharge wash water at rates of up to 15 GPM. The ALPHA-1500D incorporates: a low-profile stainless steel tank; stainless steel baffles positioned for optimizing the water flow; proprietary coalescing "Maze" grids that maximize the oil coalescing process; ultra-violet ozone generator for odor control; automatic oil skimming and decanting; NEMA control center for automatic operation.

- Up to 15 GPM
- 125-gallon stainless steel tank
- Ultra-violet ozone generator uses special mixing procedure to ensure up to 99% contact of bacteria-killing ozone in wash water
- Stainless steel baffles direct water flow for optimum treatment
- Automatic oil removal and disposal
- Specially designed sheen filter polishes the water before discharge
- Water-resistant control box for automatic operation of pumps



Typical installation of ALPHA

Technical data

Model	Part No.	Description	Coalescing Area	Capacity (gal)	Flow GPM	Voltage	Phase	AMPS
ALPHA-1500D	1.103-401.0	Above-ground Separator	500 Sq Ft	125	1 – 15	120	1	10

Optional Accessories

Part No.	Description
8.903-694.0	Auto-Water Discharge ‡ (automatically switches between recycle and discharge modes)
8.903-647.0	ORP/pH Digital Controller, Model 250, 2 Pumps ‡
8.913-332.0	Lid, Aluminum

‡ Factory Install Only

150-Gallon Cone Tank (P/N 8.725-510.0)
150-Gallon Tank Stand (P/N 8.751-972.0)
with Special Belt Mop Skimmer.
See Page 23

Universal Clarifier System

CLT-600 Special

Inside of CLT-600 Special with Belt-Mop Skimmer

Customized clarifiers can incorporate many options tailored to your unique situation. Start with a bare tank and add the options to optimize the treatment of your water. The CLT models are capable of pre-treatment, sewer discharge or recycling of wash water with flow rates of up to 30 gallons per minute. Not limited to but may include, belt-mop skimmer, auto-purge systems, auto-circulation systems, pH (only) controller, ORP/pH controller, dual pH Controller, and Bioremediation.

- Customizable to fit unique water treatment needs
- Flow rates at up to 30 GPM (6.8 cubic meters/hour)
- Expand system capacity
- UV- and corrosion-resistant

Technical data

Model	Step	Part No.	Description	Stand	Capacity (Gal)	Flow GPM
CLT-600	1	Special	Modular Clarifier System Base Unit	■	600	1 – 30
CLT-300	1	Special	Modular Clarifier System Base Unit	■	300	1 – 15

Modular Clarifier Options

Part No.	Step-Base Unit	Description
Special	3A-600, -300	Belt Mop Skimmer, 120 V/6 Amp, with Oil Decanter Container (CLT-600, -300, or -150)
Special	7B-600, -300	AMC-1000D Auto-purge System (85 PSI), 120 V/2 Amps ‡*
Special	7D-600, -300	pH (only) Controller, Peristaltic Pump, 120 V/1 Amps ‡*
Special	7G-600, -300	Auto-water Discharge/Circulation Valve System, 120 V/2 Amps ‡*
Special	7E-600, -300	Integrated Compact CoAg (in lieu of stand-alone Compact CoAg module) ‡
Special	7F-600, -300	MetalR+ Chemical Injection Package (option to be used only with CoAg modules) ‡
8.906-478.0	7H-600, -300	Sludge Tub with Lid
Special	6-600, -300	Self Cleaning Screen (mounted inside CLT)
CLT-600 ONLY		
Special	7A-600	600-gallon Mounting Shield ‡
Special	3B-600	Coalescing cones (2) with Funnel Oil Skimming, without Oil Decanter Container
Special	4B-600	8 Additional Coalescing Cones (for a total of 10)
Special	7C-600	UV Ozone System (4 bulb), 120 V/9 Amps ‡*
Special	2-600	CoAg Mixing Chamber (inside CLT tank)
Special	5-600	Biomedia Kit (EoFill)
CLT-300 ONLY		
Special	7A-300	300-gallon Mounting Shield ‡
Special	3B-300	Coalescing cones (2) with Funnel Oil Skimming, with Oil Decanter Container
Special	4A-300	4 Additional Coalescing Cones (for a total of 6)
Special	2-300	CoAg Mixing Chamber (inside CLT tank)
Special	7C-300	UV Ozone System (2 bulb), 120 V/9 Amps ‡*

‡ Factory Install Only. * Requires Rain Guard and Bracket option. NOTE: Sump pumps sold separately. Consult CL Quick Start Guide for full system options.
Extended lead times apply to all orders placed through our Specials Department.

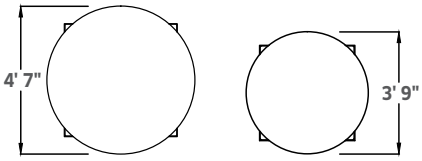
Universal Clarifier System Configuration

STEP 1
SELECT TANK SIZE

CLARIFIER TANKS

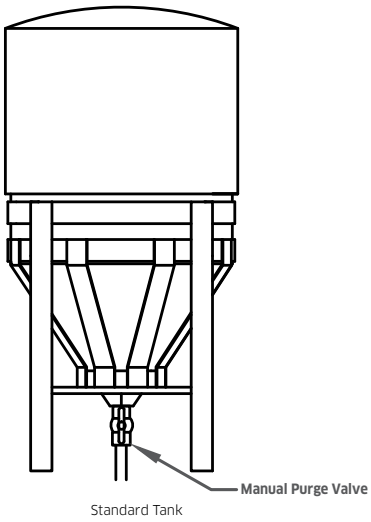
Water Maze offers two sizes of clarifier tanks: 300 gallon and 600 gallon. Both models have cone bottoms which have better purging characteristics than flat bottom tanks. Water Maze offers these tanks with a large variety of options to meet many different water treatment needs.

We start with a standard tank and a manual purge valve.



CLT-600 Standard Diameter

CLT-300 Standard Diameter

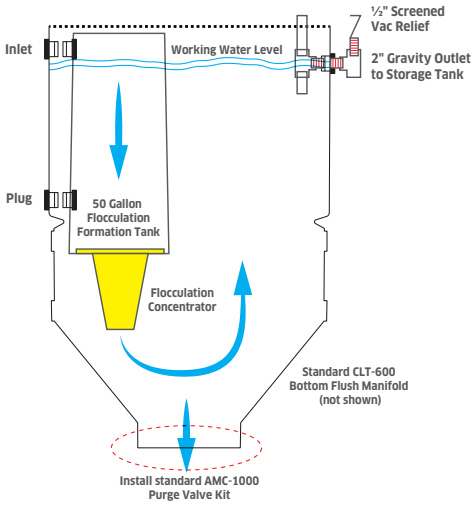


Standard Tank

STEP 2
SELECT INTERNAL PIPING MANIFOLD

COAGULATION / FLOCCULATION / SOLIDS SETTLING

For applications that require settling of solids (especially for final mixing of chemical coagulants and flocculants), select this factory installed internal chamber and discharge piping for either the CLT-300 or CLT-600 configurations. The piping manifold provides a gentle (low velocity) settling of solids and the discharge manifold reduces the potential for carry over floating matter.



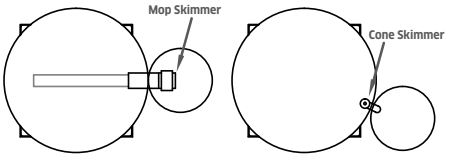
STEP 3
SELECT OIL SKIMMER (Free Floating Oils)

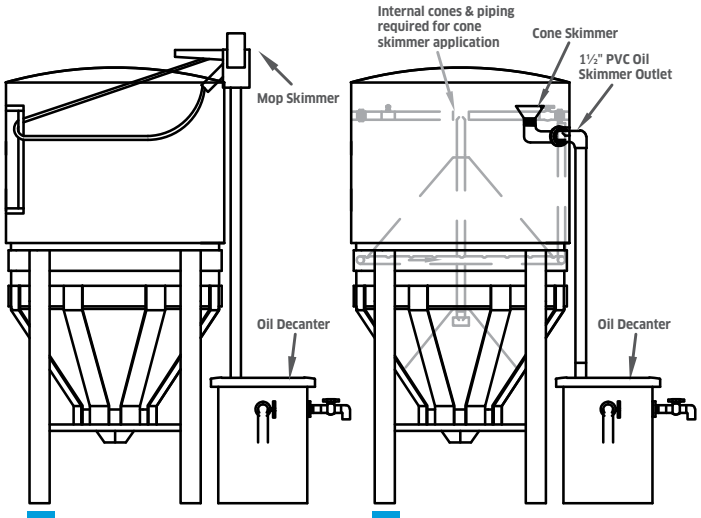
OIL WATER SEPARATION

Two styles of free-floating oil removal systems are available for the CLT-300 or CLT-600 modules.

A **Belt-mop Type Skimmer** An electrically powered (120 volt @ 6 amps) stainless steel squeegee head roll assembly; 3" diameter tail roll assembly; a polypropylene fibrous belt.

B **Funnel Type Skimmer** Two cones positioned inside of the CLT tank (one midway and one lower).





A Belt-mop Type Skimmer

B Funnel Type Skimmer

Note: Both skimmers include a **26-gallon oil decanter container** with internal piping. Additional coalescing cones can be added to Type B (see Step 4).

STEP 4
SELECT OIL COALESCING / SEPARATOR CONES

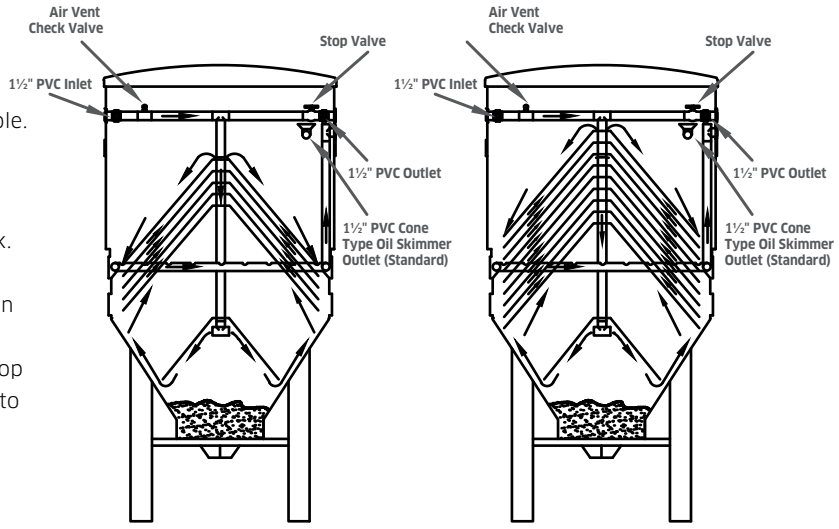
OIL COALESCING

3 configurations of oil coalescing cones are available.

A CLT-300 can have 2 or 6 cones, and a CLT-600 can have 2 or 10 cones. Water is pumped through factory installed piping into the bottom of the tank. Heavy solids will fall out when the water changes direction and starts to flow upward. The water then flows up between and out of the top center of the coalescing cones. Oil will coalesce and rise to the top to be skimmed off. The water will then flow down to a perforated pipe and then up to the outlet.

A **6 Coalescing Cones** 4 more cones can be added to the included 2 cones with the CLT-300.

B **10 Coalescing Cones** 8 more cones can be added to the included 2 cones with the CLT-600.



A CLT-300 shown with 6 cones

B CLT-600 shown with 10 cones

STEP 5
BIO-DIGESTER OPTION
CLT-600 ONLY

BIO-DIGESTER

Convert a CLT-600 tank into a Bio-digester tank – package includes:

1 (6) six bags of Eofill (6 lbs. each bag) with bag hangers
2 (1) one inverted separator cone with drainage holes
3 Manual purge valve at bottom of tank
1 Stainless steel support tubing for Eofill bags

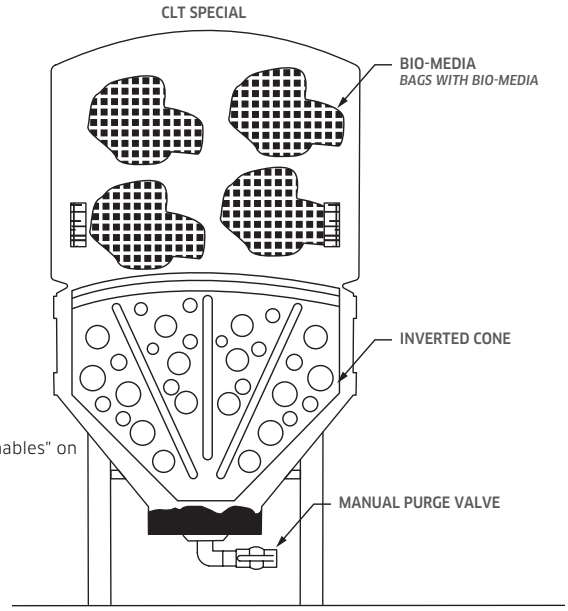
Note: Inlet / outlet piping is not included.

Air Stones supplied with standard PM-100D module.

For recycle applications, integrate an REC3-30A recycle module (P"Accessories, parts & Consumables" on page 49)

Additional components may be required (Page 41):

- For additional digestive dwell time, multiple Bio-digester modules may be required.
- Integrate a PM-1000D BioSytem module (page 39)
  STANDARD: Air pump with 2 Air Stones; Microbe & Nutrient Injection
  SPECIAL: Regenerative blower with 10 Jetter Diffusers; Microbe & Nutrient Injection

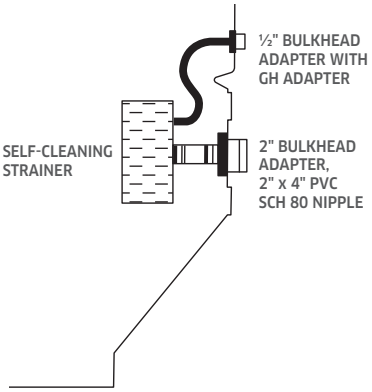


STEP 6
SELF CLEANING STRAINER OPTION

SELF CLEANING STRAINER

Factory installed in either CLT tank

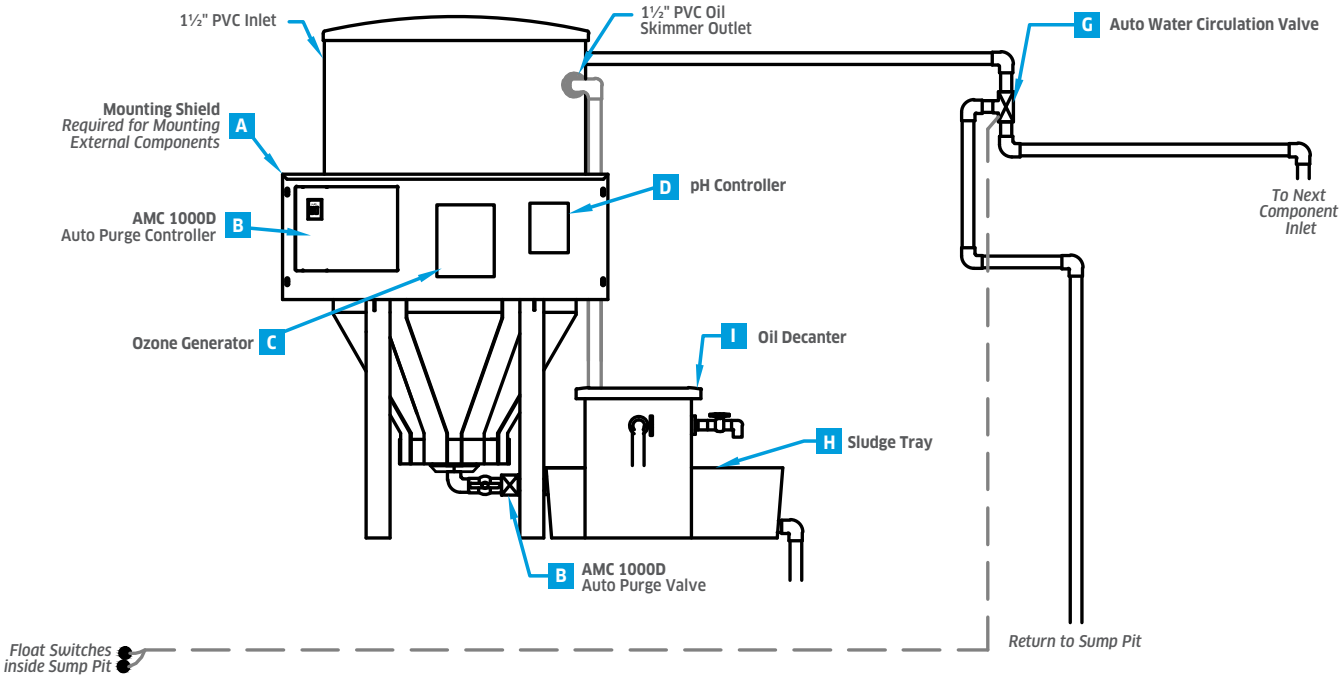
A small amount of water is returned from the discharge side of the down steam pump to the strainer. Inside, two special nozzles spray against the screen, causing it to revolve. Any debris attracted to the screen is blasted off every half revolution. The strainer operates in any position, and requires only about 4 gpm and 35 PSI to operate.



STEP 7
SELECT EXTERNAL OPTIONS

ADDITIONAL UNIVERSAL CLARIFIER (SPECIAL) OPTIONS

Water Maze offers a large number of options for our clarifier tanks. Customers can configure by adding factory installed options for specific application needs.



E **Integrated Compact CoAg with Enhanced External Mixing Manifold**

A **Mounting Shield** A simple way to mount external options, this bracket and shield is required when selecting any combination of options B–F.

B **AMC-1000D Auto Purge Controller** Control the AMC 1000D Auto Purge Valve. (highly recommended).
INCLUDES: Controller Housed in a NEMA Panel, Timers, and Air-actuated Purge Valve
Utility Requirements: Compressed air (3 cfm @ 85 PSI activated), and 120 volt @ 3 amps

C **Ozone Systems** Creates ozone and mixes it for sterilization of water.
CLT-300: 2-bulb Generator / CLT-600: 4-bulb Generator
INCLUDES: Circulation Pump, Timer, Mazzei Injector, and Manifold
Utility Requirements: 120 volt @ 9 amps

D **pH Control System** Controls pH of the water with a peristaltic pump.
Includes: Controller with Inline Manifold with Probe and Injector, Peristaltic Chemical Feed Pump with Flow Switch
Utility Requirements: 120 volt @ 3 amp.

E **Integrated Compact CoAg** Integrates the same chemical coagulation / flocculation technology as stand-alone Compact CoAg module (Page 27)
INCLUDES: Enhanced External Mixing Manifold, Chemical Feed Pumps, and Control Panel Housed in a NEMA Box

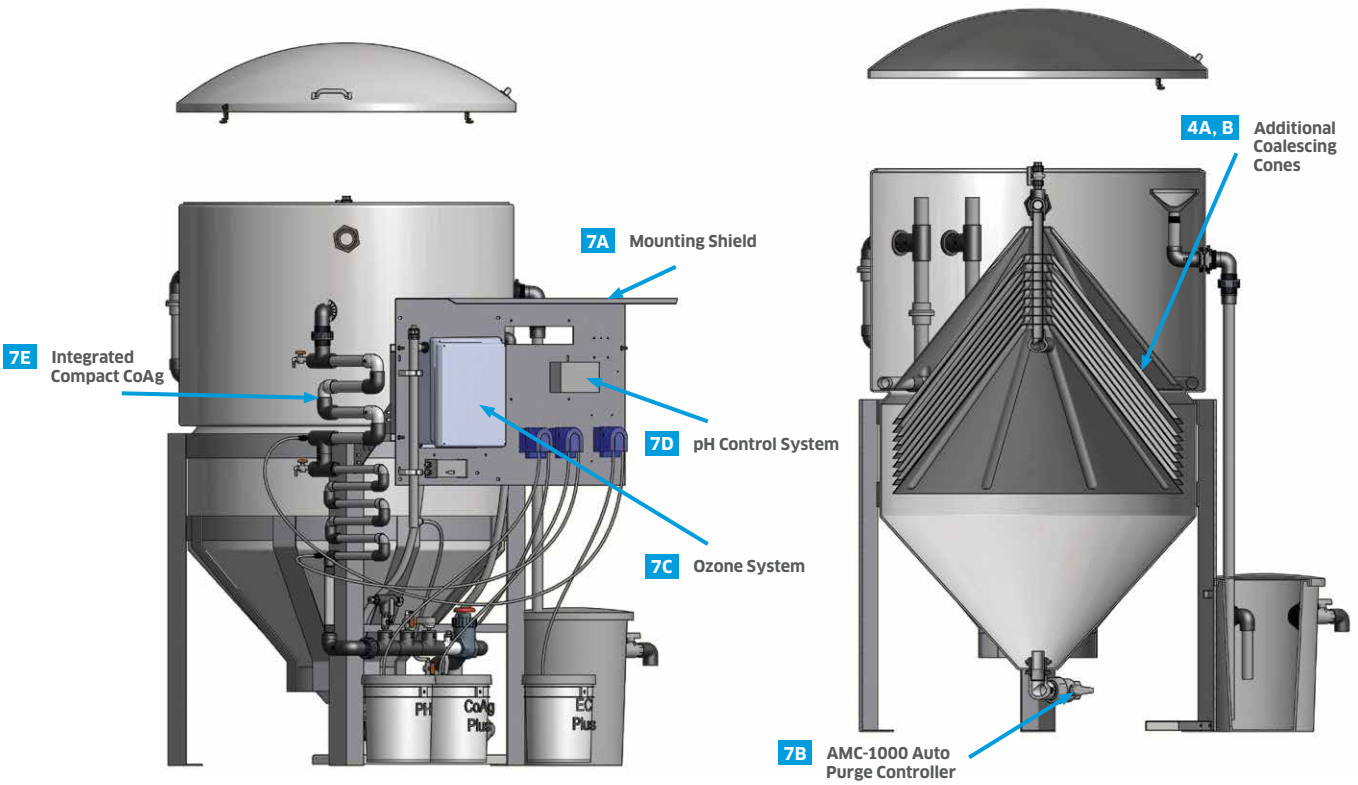
F **MetalR+ Chemical Injection System** Utilized when applying MetalR+ chemical for removal of metals. (included with Integrated Compact CoAg)
INCLUDES: Chemical Feed Pump; Injector, and Feed Port in the above Piping Manifold.

G **Auto Water Discharge / Circulation Valve System** Allow water to flow (24/7) back to the pit system reducing stagnant water issues.
Utility Requirements: 120 volt @ 1 amp.

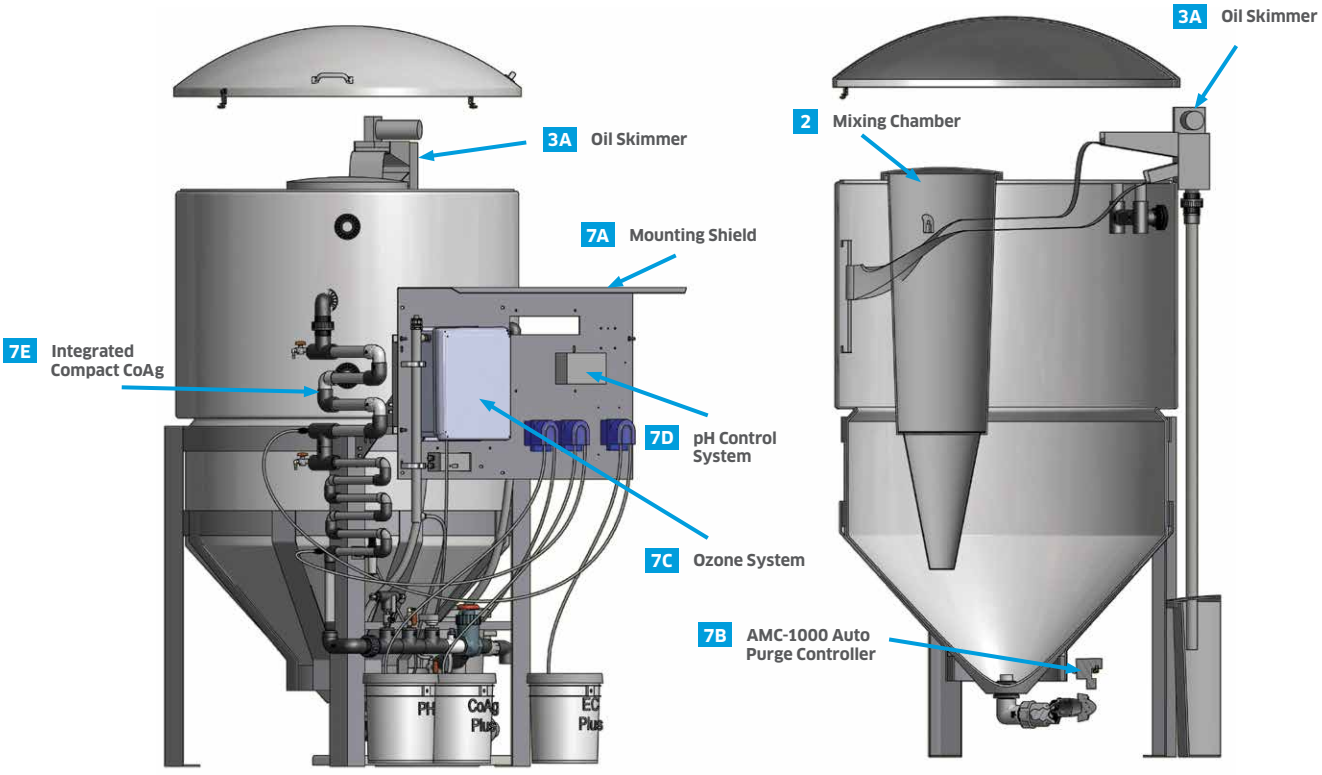
H **Sludge Tray** Dewatering sludge tray with lid; stainless steel riser; and 5 sludge bags (supplied as a loose item)

Universal Clarifier System Concept Drawings

1 **Universal Clarifier System with Coalescing Cones and Funnel Skimmer**

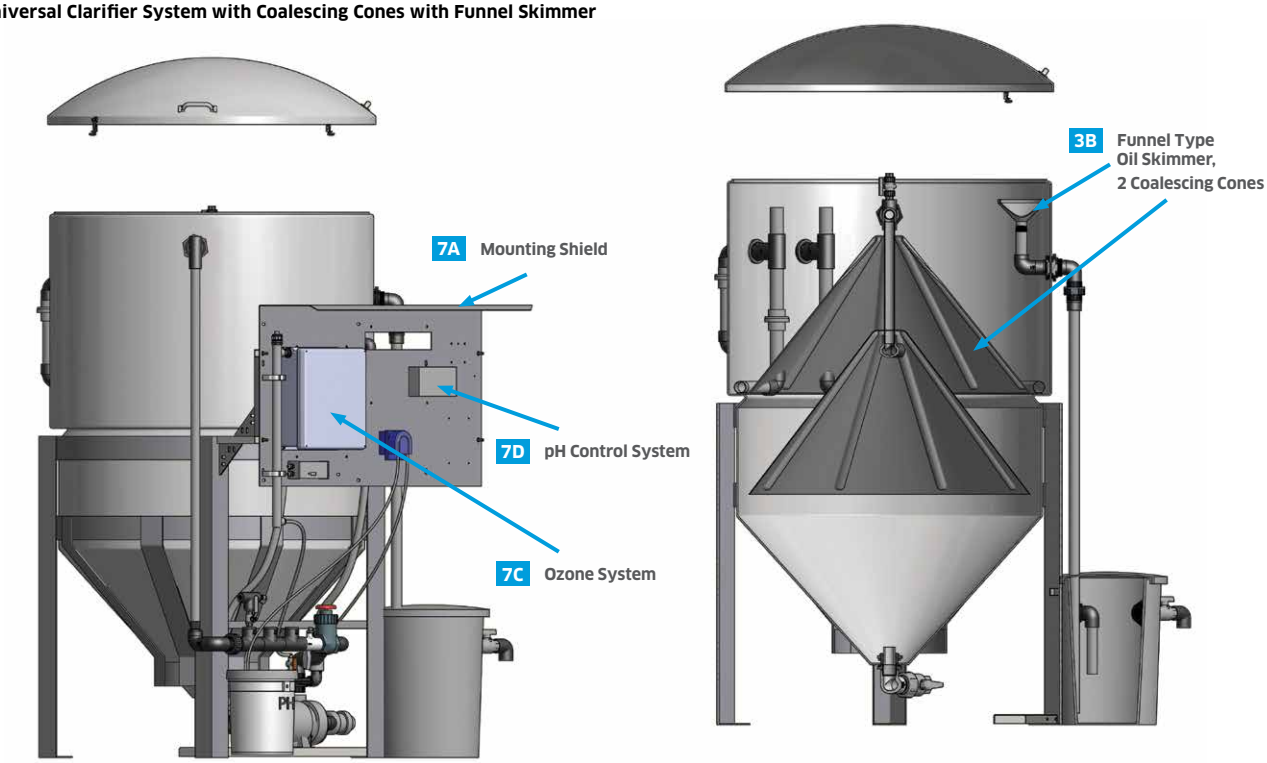


2 **Universal Clarifier System with Beltmop Skimmer Integrated CoAg and Mixing Chamber**



Universal Clarifier System Concept Drawings

3 **Universal Clarifier System with Coalescing Cones with Funnel Skimmer**



Modular System Comparison Chart

OBSOLETE MODEL	STEP / PART NO.	EQUIVALENT MODULAR SYSTEM
CLP-7034A		**CLT-600 Universal Clarifier w/ factory installed options:**
	STEP 1-600	CLT-600 Tank, Lid, Cradle, Manual Purge Valve
	STEP 3B-600	Coalescing cones (2) with funnel skimmer system
	STEP 4B-600	8 Additional Coalescing Cones (total of 10)
	STEP 7A-600	Mounting Shield
	STEP 7B -600	AMC-1000D Auto-Purge
	STEP 7C-600	UV Ozone System with Timer (applied to clarifier tank)
	STEP 7D-600	pH (only controller)
	8.906-478.0	Sludge Tub with Lid
	8.719-170.0	65 Gallon Tank
	1.103-512.0	ZCF2-30D Automatic Filtration Module
	1.103-511.0	REC3-30A Water Management & Pumping Module
	8.928-603.0	Ozone Kit (applied to storage tank)
	NPN	Processed Water Storage Tank (size TBD)
NOTE: REC-ZCF3-30A can also be selected as one module, rather than separate ZCF2-30D & REC3-30A		
CLP-5024A		**CLT-300 Universal Clarifier w/ factory installed options:**
	STEP 1-300	CLT-300 Tank, Lid, Cradle, Manual Purge Valve
	STEP 3B-300	Coalescing Cones (2) with Funnel Skimmer System.
	STEP 4B-300	4 Additional Coalescing Cones (total of 6)
	STEP 7A-300	Mounting Shield
	STEP 7B -300	AMC-1000D Auto-Purge
	STEP 7C-300	UV Ozone System with Timer (applied to clarifier tank)
	STEP 7D-300	pH (only controller)
	8.906-478.0	Sludge Tub with Lid
	8.719-170.0	65 Gallon Tank
	1.103-512.0	ZCF2-30D Automatic Filtration Module
	1.103-511.0	REC3-30A Water Management & Pumping Module
	8.928-603.0	Ozone Kit (applied to storage tank)
	NPN	Processed Water Storage Tank (size TBD)
NOTE: REC-ZCF3-30A can also be selected as one module, rather than separate ZCF2-30D & REC3-30A		

OBSOLETE MODEL	STEP / PART NO.	EQUIVALENT MODULAR SYSTEM
CL-304A		**CLT-300 Universal Clarifier w/ factory installed options:**
	STEP 1-300	CLT-300 Tank, Lid, Cradle, Manual Purge Valve
	STEP 3B-300	Coalescing Cones (2) with Funnel Skimmer System.
	STEP 4B-300	4 Additional Coalescing Cones (total of 6)
	STEP 7A-300	Mounting shield
	8.906-478.0	Sludge Tub with Lid
	SPECIAL	ZCF2-30D Automatic Filtration Module with (1) one media housing and 65-gallon tank installed
	8.928-603.0	REC3-30A Water Management & Pumping Module
	NPN	Processed Water Storage Tank (size TBD)
NOTE: The above listed components includes features and benefits far greater than the original CL-304A model)		
CL-600D		**CLT-600 Universal Clarifier w/ factory installed options:**
	STEP 1-600	CLT-600 Tank, Lid, Cradle, Manual Purge Valve
	STEP 3B-600	Coalescing Cones (2) with Funnel Skimmer System.
	STEP 4B-600	8 Additional Coalescing Cones (total of 10)
	STEP 7A-600	Mounting shield
	STEP 7C-600	UV Ozone System with Timer (applied to clarifier tank)
	8.906-478.0	Sludge Tub with Lid
CL-30 (without 165-gallon tank and pump)		**CLT-600 Universal Clarifier w/ factory installed options:**
	STEP 1-600	CLT-600 Tank, Lid, Cradle, Manual Purge Valve
	STEP 3B-600	Coalescing Cones (2) with Funnel Skimmer System.
	8.906-478.0	Sludge Tub with Lid

Compact CoAg Module

The Compact CoAg Module employs chemical coagulation and flocculation water treatment technology to enhance and speed up the process of removing suspended solids and most types of emulsified oils. This product utilizes a patented process for applying and mixing proprietary blends of chemical coagulant (CoAg+) and flocculant (EC+) to effectively de-emulsify oils and to agglomerate suspended solids. The Compact CoAg Module is typically combined with a separator/final blending tank that has unique internal piping, along with an auto-purge system that results in very little standing water within the system at the end of the day.

- Four mixing chambers and chemical injection ports
- Integral electrical control center with automatic shut-down system
- Skid mounted steel chassis

Technical data

Model	Part No.	Description	Coagulation	Flocculation	Flow GPM	Voltage	Phase	AMPS
Compact CoAg	1.103-510.0	Compact CoAg Module	Chemical	Chemical	1 – 20	120	1	14
Compact CoAg	Special	Integrated Compact CoAg*	Chemical	Chemical	1 – 20	120	1	14

Optional Accessories

Part No.	Description
8.921-729.0	pH (only) Controller with one peristaltic pump electrically interfaced with the infeed pump / sump pump circuit ‡
8.921-730.0	AMC-1000D, Auto-Purge System ‡ Includes: mounting of control center on the chassis of the Compact CoAg and the air actuated auto-purge valve supplied as a loose item (compressed air required 3 cfm @ 85 PSI)
Special	MetalR+ Chemical Injection Package ‡

Chemical CoAg Treatment Kits and Consumables

Part No.	Description
Special	CoAg Bench Scale Test Kit
8.720-009.0	Chlorine Test Strips
8.753-577.0	pH Test Strips
8.725-445.0	CoAg+ Coagulant – 5 Gallons
8.725-446.0	CoAg+ Coagulant – 55 Gallons
8.940-586.0	EC+ Flocculant (Polymer) – 5 Gallons
8.725-508.0	EC+ Flocculant (Polymer) – 55 Gallons
8.750-280.0	Metal R+ Coagulant – 5 Gallons
8.750-281.0	Metal R+ Coagulant – 55 Gallons
8.749-550.0	Liquid Alum (Aluminum Sulfate) – 5 Gallons (pH control)
8.749-549.0	Liquid Alum (Aluminum Sulfate) – 55 Gallons (pH control)

‡ Factory Install Only. NOTE: Sump pumps sold separately. Compact CoAg must have a separator tank downstream.
* Integrated Compact CoAg Special requires CLT-600 (sold separately), see page 23 for ordering options.

COMPACT COAG MODULE
Ideal to retro-fit system for chemical coagulation and focculation

INTEGRATED COMPACT COAG
The same chemical coagulation / flocculation technology as the stand-alone Compact CoAg module. The Integrated Compact CoAg includes an enhanced mixing manifold, along with chemical feed pumps and control panel housed in a NEMA box. More details on page 26.

POST TREATMENT, WATER POLISHING & RECYCLED WATER MANAGEMENT

Filteration Modules

Standard Water Maze System for filtration and recycle

Filtration technologies take care of the wash water, mud, chemicals and grime that is rinsed off of equipment during cleaning. These systems on the folliwing pages are tailored to purify wash water for reuse by removing harmful contaminates. Field installations and other heavy duty applications often require mechanical separation systems as an upstream process prior to further treatment.

Technical data

Model	Part No.	Description	Filtration Rate GPM	Transfer Rate GPM	Voltage	Phase	AMPS
REC-ZCF3-30A	1.103-513.0	Pumping & Filtration System	up to 20	up to 30	230	1	20
REC-ZCF3-30A Special	Special	REC-ZCF3-30 with 2 HP Self-priming pump	up to 20	up to 40	230	1	20
REC3-30A	1.103-511.0	Water Management Pumping System	-	up to 30	230	1	20
REC3-30A Special	Special	REC3-30A with 2 HP Self-priming pump	-	up to 40	230	1	20
ZCF2-30D	1.103-512.0	ZCF Filter Pac	up to 20	-	120	1	5

Optional Accessories

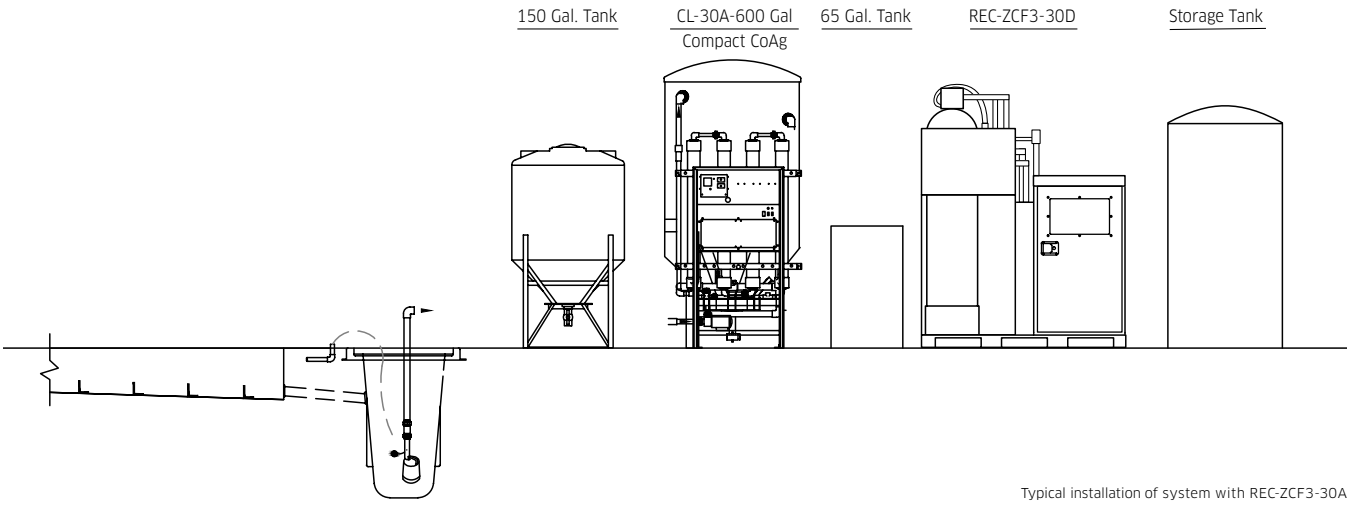
Part No.	Description
8.928-603.0	Ozone Generator Kit for REC-ZCF3-30A & REC3-30A ONLY

‡ Factory Install Only. NOTE: Each media housing includes 50 lbs of Gravel, 75 lbs of Garnet, and 250 lbs of Zeolite Media

REC-ZCF3-30A

The REC-ZCF3-30A is a major advance in filtration performance. Delivering superior recycled water quality with fully automatic operation, the plug-and-play unit is pre-piped and wired, ready for connection to tanks and wash process. Flexible programming and self-cleaning backwash cycles enables large volumes of waste water to recycle while generating a minimum amount of waste volume. Using robust, industry-standard components built into a highly functional structural steel frame with a stainless steel base. As a powerful and flexible pumping and filtration system that can serve as the hub of a wide range of treatment system processes.

- Plug and play filtering
- Standard stainless steel skid
- Two media filters with automatic back washing
- Two automatic control valves



Typical installation of system with REC-ZCF3-30A

REC3-30A

A compact water management control center, the REC3-30A is an upgrade to the REC2-20A module. It is a versatile water management module that pumps water from upstream pre-treatment tanks or pit system to downstream reuse storage tanks. When combined with the ZCF filtration module, it pumps influent water through the filters to remove particulate, as well as provides pressurized water for backwashing and for recycling purposes. It provides makeup water, as well as discharges any excess water volume.

- Designed to interface with pretreatment & post treatment modules
- Stainless steel skid with painted carbon steel enclosure
- Lockable front door
- Easy access to components (pump, piping, and electrical)

ZCF Filter Pac

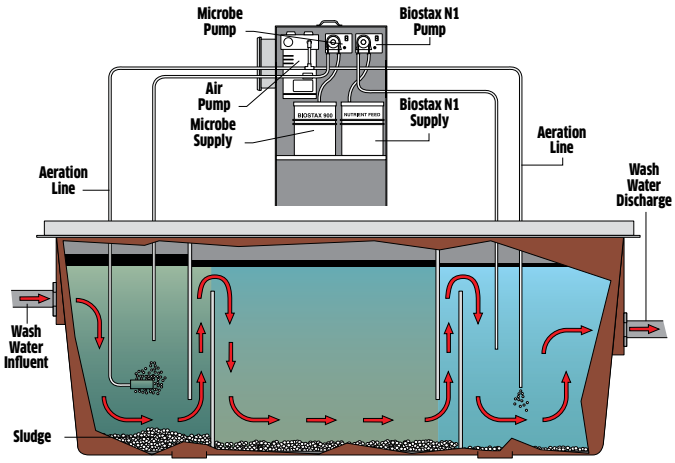
Specifically designed to pair with the REC series module, the ZCF Filter Pac delivers a major advance in filtration performance, delivering superior recycled water quality with fully automatic operation. Flexible programming and self-cleaning backwash cycles enable the ZCF to recycle large volumes of waste water while generating a minimum amount of waste volume. The ZCF uses robust, industry-standard components built into a highly functional structural steel frame with stainless steel base.

- Flexible programming and self-cleaning backwash cycles
- Effective recycling system in a small footprint
- Designed to fit through 36" man doors for maximum installation flexibility
- Specifically designed to pair with the REC series module

PM-1000D

The PM-1000D provides a fully automated, environmentally friendly and low-cost way to manage standing wash water found in collection pits, tanks or sump drains. A module that incorporates: an air pump; diffuser stones, microbes and nutrients injection system with timer, it is designed to be integrated into most wash waster treatment systems utilizing aeration and automatic injection of a highly effective microbial agent (BioStax 1800) for eliminating oils, greases and other hydrocarbons and organics typically found in collection pits or sump drains.

- Easy in-field installation
- Fits most brands of water treatment systems
- Effectively reduces odor
- Biology consumes oils, grease, hydrocarbons, etc.
- Steel cabinet protected by epoxy powder coat finish



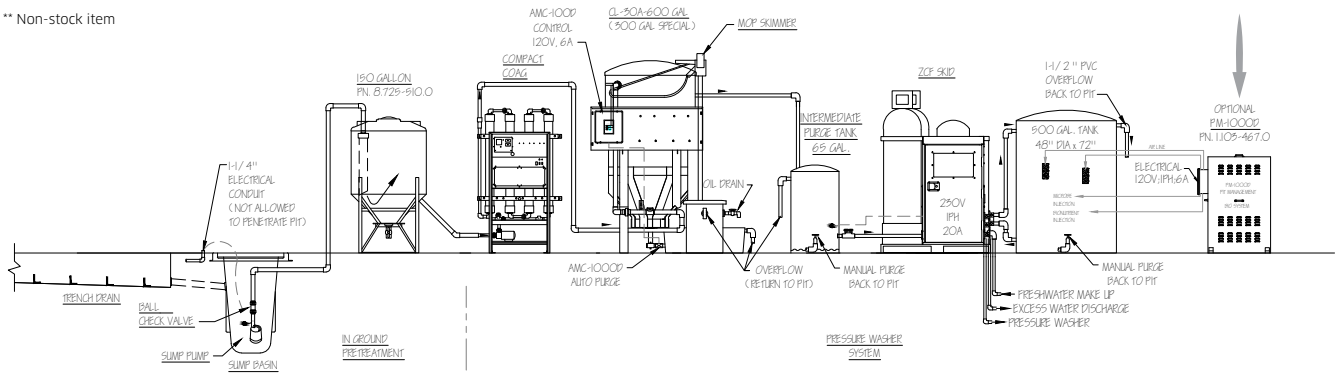
Technical data

Model	Part No.	Description	Type of System	Voltage	Phase	AMPS
PM-1000D	1.103-467.0	Automatic Pit Management System	BioStax	120	1	4
PM-1000D	Special	Pit Management System with Regenerative Blower and 10 Jetter Diffusers	BioStax	120	1	6

Consumables

Part No.	Description
8.718-918.0	BioStax 1800, liquid, 2 containers A&B (concentrate makes 55 gallons)**
8.718-917.0	BioStax 100 Hawaiian Blend, liquid, 8 oz. vial
8.718-919.0	BioStax 1800, Two 8 oz vials (A & B) makes 5 gallons
8.718-916.0	Bio-Nutrient, 8 oz bottle

** Non-stock item



High Boy

The IPF solids dewatering unit utilizes inexpensive fabric media to filter out solid particles. Fabric paper, which is supplied in 5, 20, and 50 micron sizes, is automatically indexed onto a recessed conveyor belt made of high tensile, non-metallic material. As water and solid particles drain through the fabric paper, solids are retained by the fabric paper. As the fabric paper blinds over, the water level will rise, a float will actuate a drive motor and gear system, the conveyer belt will index forward allowing the spent paper to fall into a collection container and new paper to index onto the conveyor belt. The IPF can be applied for pre-treatment, post treatment, or as a stand alone treatment system.

- Carbon steel exterior with a stainless steel interior
- Includes a collection container for spent paper and sludge
- Exterior mounted drive motor with a covered housing
- 82-gallon tub Included

Technical data

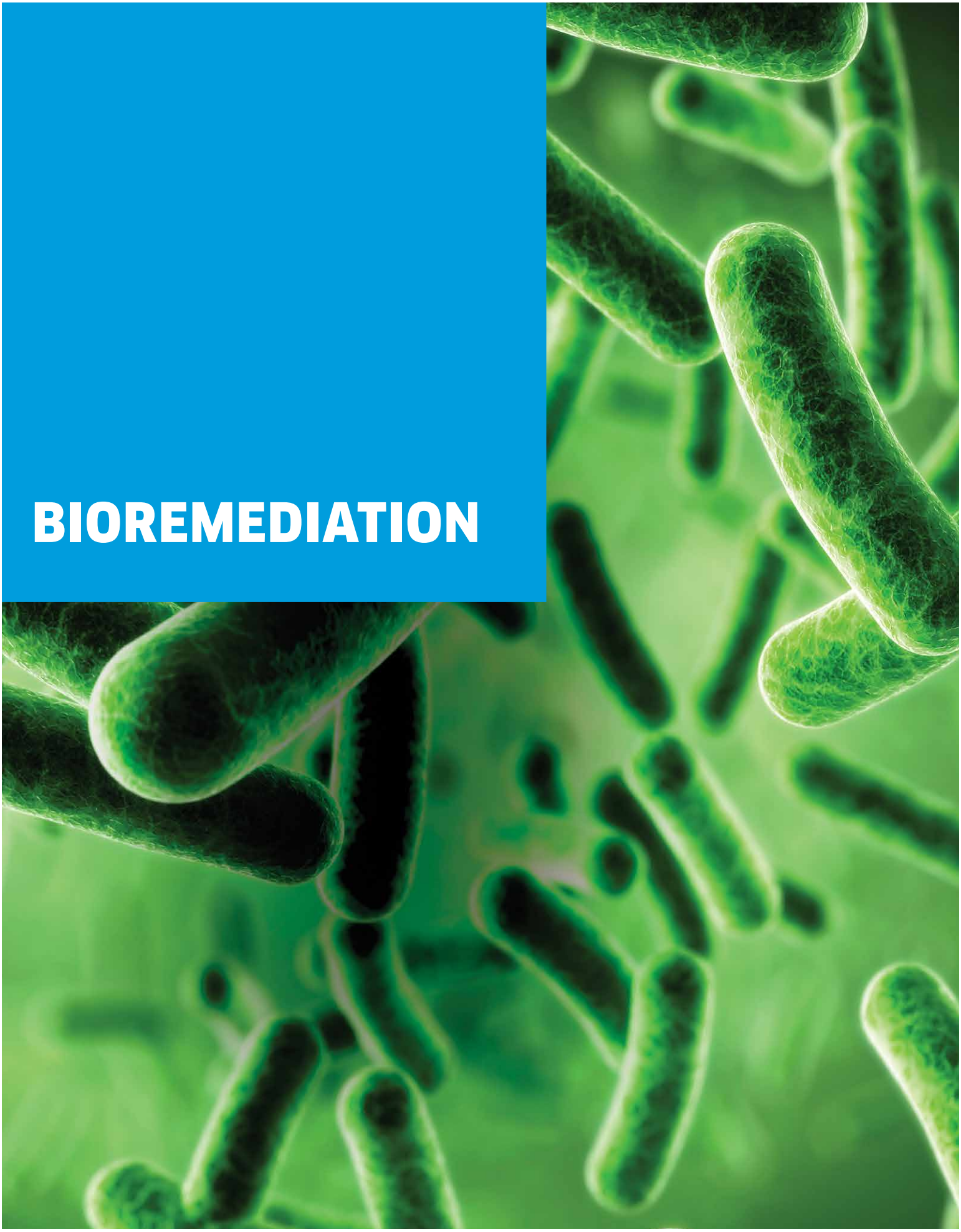
Model	Part No.	Description	Flow GPM	Height (Inches)	Container (Gal)	Voltage	Phase	AMPS
High Boy	1.103-488.0	High-Boy Indexing Polishing Filter	1-20	47.56	optional	120	1	3
High Boy	Special	High-Boy Indexing Polishing Filter with 82-gallon tub	1-20	47.56	82	120	1	3
High Boy - SS	Special	High-Boy Indexing Polishing Filter with all carbon steel components made of Stainless Steel	1-20	47.56	82	120	1	3

Optional Accessories

Part No.	Description
8.752-171.0	Fabric Media, Filter – 50 Micron x 1100 Yards
8.752-173.0	Fabric Media, Filter – 20 Micron x 650 Yards
8.752-172.0	Fabric Media, Filter – 5 Micron x 500 Yards
8.929-152.0	Water Retention Container (approximately 82-gallon capacity)
8.917-279.0	Water Retention Container (approximately 40-gallon capacity)

High Boy Stainless Steel

BIOREMEDIATION



PM-1000D

The PM-1000D provides a fully automated, environmentally friendly and low-cost way to manage standing wash water found in collection pits, tanks or sump drains. A module that incorporates: an air pump; diffuser stones, microbes and nutrients injection system with timer, it is designed to be integrated into most wash waster treatment systems utilizing aeration and automatic injection of a highly effective microbial agent (BioStax 1800) for eliminating oils, greases and other hydrocarbons and organics typically found in collection pits or sump drains.

- Easy in-field installation
- Fits most brands of water treatment systems
- Effectively reduces odor
- Biology consumes oils, grease, hydrocarbons, etc.
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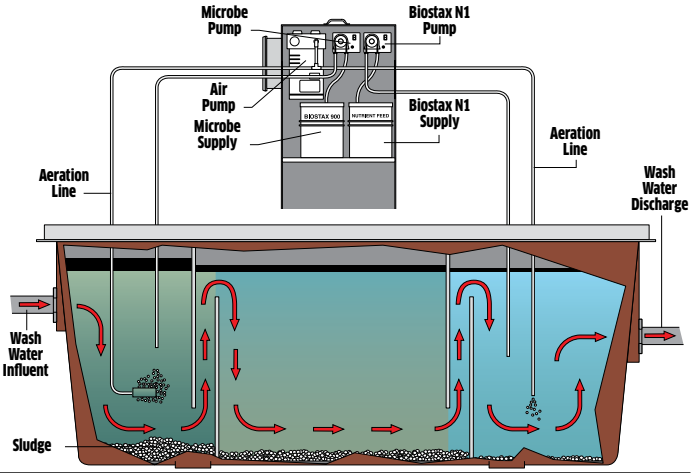

Technical data

Model	Part No.	Description	Type of System	Voltage	Phase	AMPS
PM-1000D	1.103-467.0	Automatic Pit Management System	BioStax	120	1	4
PM-1000D	Special	Pit Management System with Regenerative Blower and 10 Jetter Diffusers	BioStax	120	1	6

Consumables

Part No.	Description
8.718-918.0	BioStax 1800, liquid, 2 containers A&B (concentrate makes 55 gallons)**
8.718-917.0	BioStax 100 Hawaiian Blend, liquid, 8 oz. vial
8.718-919.0	BioStax 1800, Two 8 oz vials (A & B) makes 5 gallons
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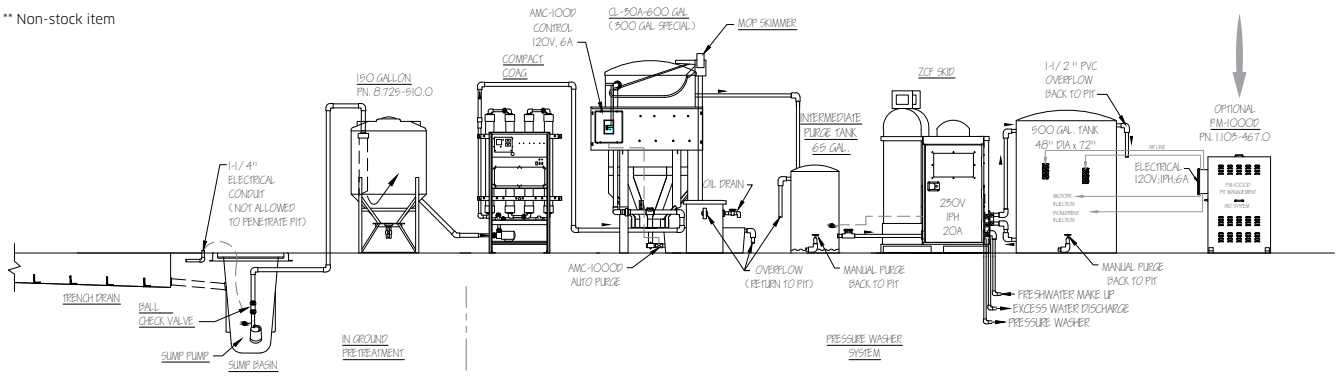
** Non-stock item



REC Series for Recycle Purposes

A compact water management control center, the REC3-30A is an upgrade to the REC2-20A module. It is a versatile water management module that pumps water from upstream pre-treatment tanks or pit system to downstream reuse storage tanks. When combined with the ZCF filtration module, it pumps influent water through the filters to remove particulate, as well as provides pressurized water for backwashing and for recycling purposes. It provides makeup water, as well as discharges any excess water volume.

- Designed to interface with pretreatment & post treatment modules
- Stainless steel skid with painted carbon steel enclosure
- Lockable front door
- Easy access to components (pump, piping, and electrical)

Technical data

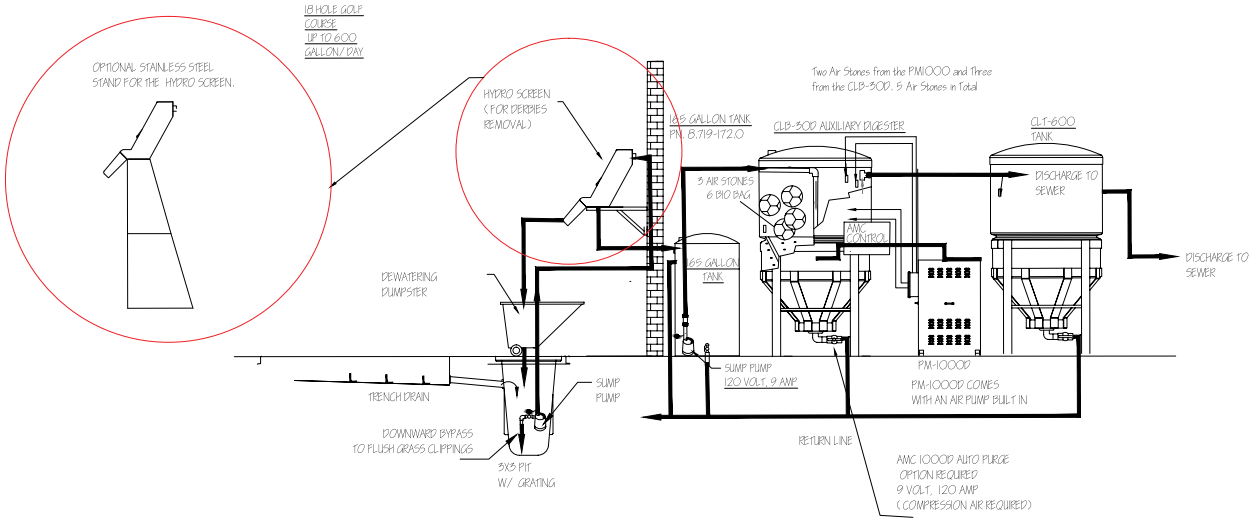
Model	Part No.	Description	Flow GPM	Voltage	Phase	AMPS
REC3-30A	1.103-511.0	Water Management Pumping System	up to 30	230	1	20
REC3-30A Special	Special	REC3-30A with 2 HP Self-priming pump	up to 40	230	1	20

Optional Accessories

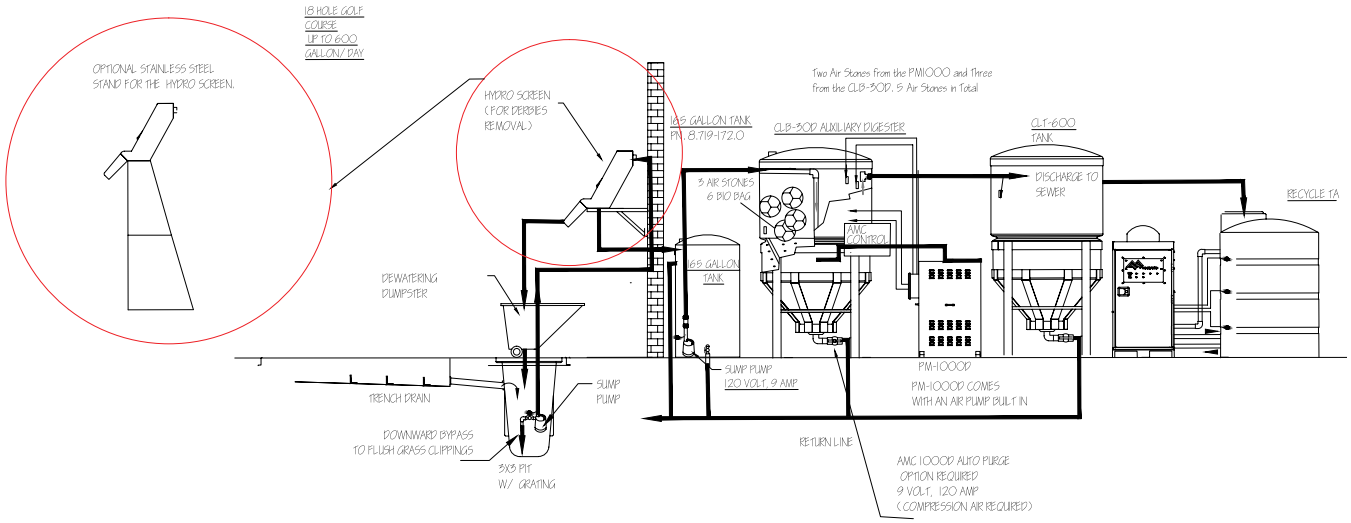
Part No.	Description
8.928-603.0	Ozone Generator Kit for REC3-30A
1.103-467.0	PM-1000D BioSystem – Bioremediation to consume dissolved organic matter
PM-1000D Special	Pit Management System with Regenerative Blower and 10 Jetter Diffusers

Golf & Turf Wash Water Applications

Treatment & Discharge



Treatment & Recycle



Module Options

Grass Catcher

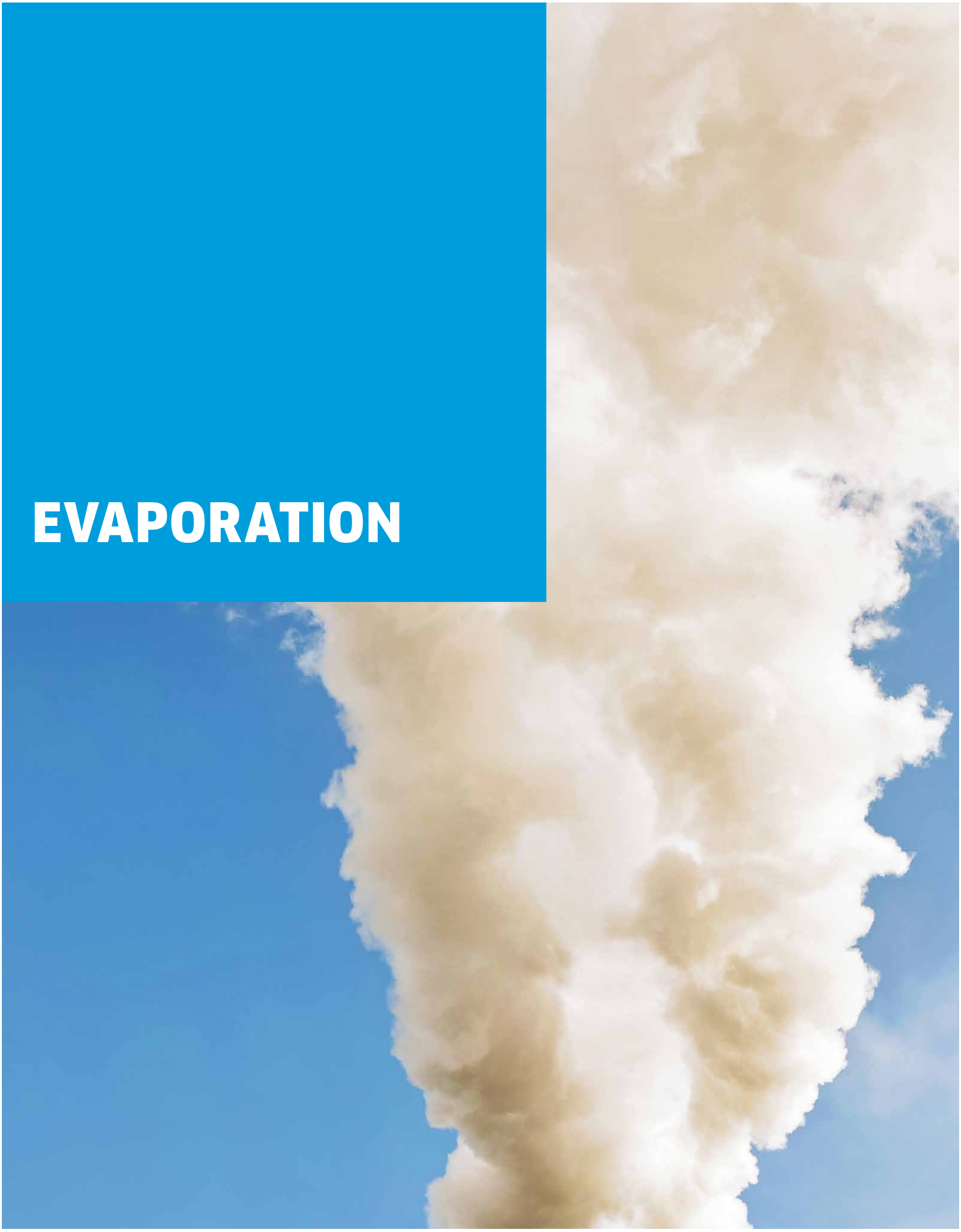
CLT-300

PM-1000D (special)

Universal Clarifier

REC3-30A

EVAPORATION



WB

The WB series is the first to use the extra-high efficient submerged combustion technology to deliver 100% heat exchanger efficiency sending the heat directly into the water, not up a vent stack, creating significant operational and energy cost savings. There are two models for handling waste streams at 60 and 120 gallons per hour. Featuring top-of-the-line immersion tube jet burner components, with a solid-state flame control monitor, the WB models are capable of creating temperatures of up to 2000˚F, releasing hot flue gases directly into the water.

- Waste streams up to 120 gallons per hour
- Temperatures up to 2000˚F
- Top-of-the-line immersion tube jet burner components
- Auto purge, auto start/stop and auto fill come standard
- Heat-resistant, heavy-duty stainless steel sparger tube

Technical data

Model	Part No.	Description	BTU	Evaporation Technology	Flow Rate GPH	Exhaust Stack	Capacity (Gal)	Voltage	Phase	AMPS
WB-120A	1.103-473.0	Wastewater Evaporator	1,142,000	Combustion	1 – 120	12"	170	230	1	22
WB-50A	1.103-474.0	Wastewater Evaporator	571,000	Combustion	1 – 60	10"	76	230	1	11

Optional Accessories

Part No.	Description
8.906-066.0	Conversion from Natural Gas to Propane ‡ (Requires Qty 2 for WB-120A)
8.903-762.0	Foam Detection System ‡
WB-120A ONLY	
8.903-729.0	Tank and Tube Conversion to AL-6XN ‡
8.903-767.0	Wastewater Flame Injection System ‡
8.717-743.0	12" Flue Pipe Rain Shield
WB-50A ONLY	
8.903-725.0	Tank and Tube Conversion to AL-6XN ‡
8.903-766.0	Wastewater Flame Injection System ‡
8.717-742.0	10" Flue Pipe Rain Shield

Water Analysis and Kits for Evaporation Systems

Part No.	Description
8.750-241.0	Metal Analysis (includes Ag, As, Ba, Cd, Cr, Pb, Se Hg, Cu, Zn, Ni)
8.750-242.0	Base Analysis for Evaporators (includes analysis of pH dissolved and suspended solids, Total Oils & Greases, NP [Non-Polar] Oils & Greases, Anions [Cl, NO3, o-PO4, SO4], Flashpoint, Viscosity, Cations [B, Ca, Fe, K, Mg, Na])
8.750-243.0	VOC Analysis (includes 67 VOC compounds by EPA 8260) for Evaporation Systems
8.719-146.0	Evaporator Waste Stream Sampling Kit

‡ Factory Install Only. † Net price – no dealer discounts; to expedite processing time of wastewater analysis, multiply net price by a factor of 1.5

HBG

The natural gas-heated HBG system is capable of evaporating wastewater at up to 30 gallons per hour. The combustion box in the HBG is made of advanced heat reflective material and features a unique energy-efficient design for reflecting the heat directly onto the floor of the evaporation tank for energy cost savings. A high-efficiency burner shoots a flame, fueled by natural gas or propane, into the combustion chamber for unusually high energy efficiency. The unit is made of heavy-duty steel, insulated and double lined for both energy efficiency and safety.

- Evaporates waste water up to 30 gallons per hour
- Natural gas-heated system
- Combustion box made of advanced heat reflective material

Technical data

Model	Part No.	Description	BTU	Evaporation Technology	Flow Rate GPH	Exhaust Stack	Capacity (Gal)	Voltage	Phase	AMPS
HBG-30D	1.103-449.0	Wastewater Evaporator	390,000	Hot-Plate	1 – 30	10"	100	120	1	3

Optional Accessories

Part No.	Description
8.903-740.0	Air Diaphragm Fill Pump & Level Controls for Auto Fill (compressed air required, 3 cfm at 60-100 PSI) ‡
8.903-753.0	Electric Centrifugal Fill Pump & Level Controls for Auto Fill ‡
8.903-741.0	Motorized Belt Oil Skimmer, 316L Stainless Steel ‡
8.906-074.0	Chemical Injector, Defoamer, Air-Injected ‡
8.906-073.0	Inline Chemical Injector for Anti-foam or Rust Inhibitor, Electric-Powered ‡
8.903-749.0	Tank Conversion to 316L Stainless Steel ‡
8.903-750.0	Tank Conversion to AL-6XN ‡
8.906-077.0	Conversion from Natural Gas to Propane ‡
8.717-742.0	10" Flue Pipe Rain Shield
SPECIAL	Convert All Carbon Steel Parts to Stainless Steel ‡

Water Analysis and Kits for Evaporation Systems

Part No.	Description
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8.750-242.0	Base Analysis for Evaporators (includes analysis of pH dissolved and suspended solids, Total Oils & Greases, NP [Non-Polar] Oils & Greases, Anions [Cl, NO3, o-PO4, SO4], Flashpoint, Viscosity, Cations [B, Ca, Fe, K, Mg, Na])
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8.719-146.0	Evaporator Waste Stream Sampling Kit

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HBG-30D Stainless Steel

Evaporator Belt

Evaporation is achieved by electric-power with indirect heat through standard steel storage containers, making the evaporator belt an easily implemented and adaptable option when low-volume evaporation is needed. An economical alternative, the Evaporator Belt is ideal for evaporating very low volumes of wastewater. The electric-powered belt wraps around a standard 55-gallon steel drum and slowly heats non-flammable liquids to temperatures of 70° to 250°F. The heavy-duty aluminized steel belt includes thermostatic control and weighs only 14 pounds.

- Low volume wastewater evaporation
- Heats liquids to temperatures of 70° to 250°F
- Aluminized steel belt

Technical data

Model	Part No.	Description	Evaporation Technology	Flow Rate GPH	Capacity (Gal)	Voltage	Phase	AMPS
Evaporator Belt	8.707-034.0	Wrap-It-Heat Water Reduction Belt	Electric	1.4	55**	230	1	12.5

Water Analysis and Kits for Evaporation Systems

Part No.	Description
8.750-241.0	Metal Analysis (includes Ag, As, Ba, Cd, Cr, Pb, Se Hg, Cu, Zn, Ni)
8.750-242.0	Base Analysis for Evaporators (includes analysis of pH dissolved and suspended solids, Total Oils & Greases, NP [Non-Polar] Oils & Greases, Anions [Cl, NO3, o-PO4, SO4], Flashpoint, Viscosity, Cations [B, Ca, Fe, K, Mg, Na])
8.750-243.0	VOC Analysis (includes 67 VOC compounds by EPA 8260) for Evaporation Systems
8.719-146.0	Evaporator Waste Stream Sampling Kit

** Drum not included † Net price – no dealer discounts; to expedite processing time of wastewater analysis, multiply net price by a factor of 1.5

GENERAL EQUIPMENT

Accessories enhance the effectiveness of Industrial Wastewater Treatment Systems

Water Maze offers a broad selection of add-ons, accessories, parts, and consumables that support the performance of your water treatment systems.

Water Blaster

- 25 GPM and 500 PSI
- 2 Electrical Configurations
- Rugged self-priming, high-pressure diaphragm pump

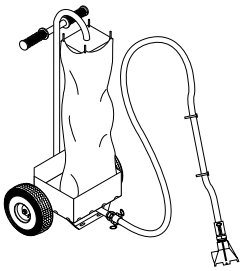
Technical data

Model	Part No.	Description	GPM	PSI	HP	Voltage	Phase	AMPS
Water Blaster	1.103-484.0	High Pressure Cleaning	25	500	10	230	3	30
Water Blaster	1.103-472.0	High Pressure Cleaning	25	500	10	460	3	15

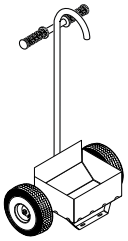
Optional Accessories

Part No.	Description
8.711-863.0	Hose Reel, Cox ½"-100' 1175-6-100-CVXX

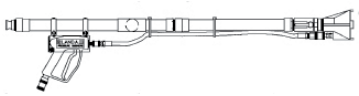
Pit Cleaner



Shallow Pit Cleaner



Sludge Cart



Pit Cleaner Assembly

- Easy sludge removal
- Capable of suctioning mud and sludge from the bottom of a pit or pond

Technical data

Model	Part No.	Description	Suction Flow GPM	Discharge Hose	Pressure Washer Requirements*	
					PSI	GPM
Pit Cleaner	8.903-601.0	Shallow Pit Cleaner, up to 2 Feet Deep (includes 1 bag)	15-40	8' x 1.25"	1000-3000	2.0-5.2
Pit Cleaner	8.903-600.0	Pit Cleaner Assembly	15-40	8' x 1.25"	1000-3000	2.0-5.2

Optional Accessories

Part No.	Description
8.709-206.0	Sludge Cart Only (includes 1 bag)
8.719-191.0	Sludge Bag, Biodegradable, cotton fiber (includes 1 bag)

*Pressure washer not included.

DETERGENTS & TREATMENT CHEMICALS

Detergents

Part No.	Size	Description
Enviro-Clean+Plus		**DETERGENT | WASH WATER APPLICATIONS – QUICK RELEASE, LOW PHOSPHATE, ALL PURPOSE**
8.916-589.0	5 gal	Combines both the cleaning power of other detergents with oil-release properties to enhance the effectiveness of a wash water recycling system or oil-water separator. In addition to being biodegradable, it has low-foaming and low-phosphate characteristics and contains no caustics or butyls. Safely on many surfaces, including aluminum, stainless steel, glass, plastic, paint and even fine automotive paint finishes. It is ideal for cars, trucks, machinery, exterior walls, heavy equipment, farm implements, RVs, drilling rigs, mining equipment, buses, and other items that may require use of a recycling system or oil-water separator.
Enviro-Degreaser		**DETERGENT | WASH WATER APPLICATIONS – QUICK RELEASE, PHOSPHATE FREE, DEGREASER**
8.916-590.0	5 gal	A potent degreaser that also has quick-release properties so it is ideal for use when water is being treated by a wash water recycle system or oil-water separator. Besides being biodegradable, it is phosphate free and does not react photochemically so it's enviro-safe. Water Maze Enviro-Degreaser can be used safely on many surfaces, including aluminum, stainless steel, glass, plastic, paint and even fine automotive paint finishes. It is ideal for use on vehicles, engines and other objects exposed to high amounts of grease and grime. It is especially effective as a pre-spray for cleaning engines, white-wall tires, vinyl tops and metal tops.
8.916-593.0	55 gal	
5600 Defoamer		**DEFOAMER | EVAPORATION APPLICATIONS – EVAPORATION, DEFOAMER CONCENTRATE**
8.719-138.0	1 gal	A fast-acting defoamer concentrate that quickly suppresses froth and suds often found in waste streams bound for processing through a waste water evaporation system. Water Maze 5600 can also be used in aqueous-based waste water treatment systems.
8.719-139.0	5 gal	
8.719-140.0	55 gal	

Water Treatment Chemicals

pH Plus Liquid		**pH ADJUSTERS | ALL WATER TREATMENT SYSTEMS – PH ADJUST CHEMICAL, ALL WATER TREATMENT SYSTEMS**
8.698-046.0	5 gal	Use as a pH adjust chemical in water treatment applications to raise the pH. It is ideally suited for use with Water Maze water treatment systems, but is also suitable for use in a wide variety of waste water treatment applications where the pH needs to be raised. Best results are obtained when Water Maze pH Plus Liquid is injected directly into the waste water stream on an automatic basis.
pH Minus Liquid		**pH ADJUSTERS | ALL WATER TREATMENT SYSTEMS – PH ADJUST CHEMICAL, ALL WATER TREATMENT SYSTEMS**
8.698-049.0	5 gal	Use as a pH adjust chemical in water treatment applications to lower the pH when a powder form is preferred. If dissolved in warm water, this 45 lbs container will make 15 gallons of a liquid RTU pH adjust product. It is ideally suited for use with Water Maze water treatment systems, but is also suitable for use in a wide variety of waste water treatment applications where the pH needs to be lowered.
EC+ Plus Flocculant		**ADDITIVES | CHEMICAL FLOCCULANT FOR SUSPENDED SOLIDS, EMULSIFIED OILS, AND GREASES**
8.940-586.0	5 gal	An anionic flocculant for use with the Water Maze Innovator Series water treatment systems. It is extremely effective in wash water clarification and solids removal. When added continuously, after the water has been treated by electro-coagulation or the Water Maze CoAg+, EC+ PLUS promotes agglomeration of the coagulated suspended solids into larger particles, which are then easily removed from the water by settling and filtration.
8.725-508.0	55 gal	
CoAg+ Coagulant		**ADDITIVES | CHEMICAL COAGULANT FOR SUSPENDED SOLIDS, EMULSIFIED OILS, AND GREASES**
8.725-445.0	5 gal	A proprietary and uniquely formulated coagulant, containing highly reactive polyaluminum chloride and polyamine. The CoAg+ is highly effective at coagulating suspended solids and emulsified oils and greases from a variety of applications. It is cost and performance effective when compared to other metal salts and polymer based treatment programs.
8.725-446.0	55 gal	
Metal R+ Coagulant		**ADDITIVES | CHEMICAL COAGULATION – REDUCE METAL CONCENTRATION**
8.750-280.0	5 gal	Provides an easy, flexible and cost efficient solution to reduce metal concentration. It is effective against a wide array of metals and removes various co-existing heavy-metals at the same time. The chelating power of the dithocarbamate group allows the direct precipitation of complex or chelated metals. Chemically stable sludge is generated avoiding any secondary pollutions. It is extremely cost effective and will remove Cu, Zn, Hg, Pb, Cd, Ag, Ni, Co, Fe+2, Cr+3, Au, Pt and Sn.
8.750-281.0	55 gal	
Liquid Alum pH		**ADDITIVES | LIQUID ALUMINUM SULFATE SOLUTION – WATER TREATMENT SYSTEMS**
8.749-550.0	5 gal	A 20% liquid aluminum sulfate solution for use as a pH adjust chemical or a coagulant in water treatment. It is ideally suited for use with Water Maze wash water treatment systems but is also suitable for use in a wide variety of waste water treatment systems and applications. Best results are obtained when Water Maze Liquid Alum is injected directly into the waste water stream on a continuous basis.
8.749-549.0	55 gal	
No Rust		**ADDITIVES | CONCENTRATED CORROSION INHIBITOR – CARBON STEEL TANK EVAPORATORS**
8.749-782.0	5 gal	A concentrated corrosion inhibitor that is designed to provide rust protection in Water Maze industrial waste water evaporators. When added continuously this unique blend of chemicals will prevent corrosion to the wetted metal surfaces of a waste water evaporator. Water Maze No Rust also acts as a dispersing agent, which helps prevent deposit build-up in the evaporator tub and facilitates removal of the concentrate at the end of the evaporation cycle. This helps maintain energy efficiency during the evaporation process and adds to the ease of evaporator cleaning and concentrate removal.
OxiMaze+*		**ADDITIVES | OXIDIZER – ALL WATER TREATMENT SYSTEMS**
8.750-499.0	5 gal	A powerful oxidizer to be used as a sanitizer for very effective odor control within waste water treatment systems. OxiMaze+ is a much safer and more effective alternative to chlorine (sodium hypochlorite). Non-toxic, non-corrosive and has a much higher reactivity rate than chlorine, OxiMaze+ also stays in the wastestream much longer than other sanitizers (like ozone gas), making it a very effective treatment, long term. OxiMaze+ kills pathogens in wastestreams, and the required ORP (Oxidation Reduction Potential) level is much less than Chlorine (almost 50% less). Shipped in concentrate form, OxiMaze+ saves shipping costs allowing you to offer a better solution to your customer.
8.750-500.0	55 gal	

*Cannot Ship Via UPS

ACCESSORIES

Filter Tanks and Elements

- Roto-molded for strength
- Corrosion and UV Resistant
- Self cleaning laterals
- Patented water distribution system

Media Filter

Filter Tank with Element

Part No.	Description
8.726-028.0	Media, 3.1 sq ft, CrystalFlo II
8.726-029.0	Media, 4.9 sq ft, Tagelus 100D
8.723-204.0	Filter Tank, 125 sq ft, with element, StaRite
8.723-205.0	Filter Tank, 200 sq ft, with element, StaRite
8.723-206.0	Filter Tank, 300 sq ft, with element, StaRite
8.723-215.0	Cartridge Element, 125 sq ft, StaRite
8.723-216.0	Cartridge Element, 200 sq ft, StaRite
8.723-217.0	Cartridge Element, 300 sq ft, StaRite
8.716-840.0	Element, 200 sq ft, 20 Micron, Jacuzzi*
8.716-847.0	Element, 250 sq ft, 20 Micron, Jacuzzi*
8.716-871.0	Element, 200 sq ft, 5 Micron, Jacuzzi*
8.716-872.0	Element, Filter, 100 sq ft, Jacuzzi*

*Limited supply; contact Customer Service for availability

Filter Media

- Virgin coconut shell activated carbon
- Multi-media provides solids separation

Sand

Gravel

Carbon

Part No.	Description
8.757-147.0	Zeolite, 50 lb Bag*
8.718-920.0	Sand, 20-40 Size, 50 lb Bag
8.718-921.0	Gravel, 50 lb Bag*
8.718-922.0	Anthracite #1 .60-.80mm, 50 lb Bag
8.718-923.0	Garnet, 30 x 40, 100 lbs per Bag
8.718-924.0	Garnet, 8 x 12, 50 lbs per Bag*
8.718-933.0	Carbon, Virgin Coconut, 8 x 30 55 lb Bag

*Media Included in ZCF Filter Housing

Clay & Filter Paper

- Virgin coconut shell activated carbon
- Multi-media provides solids separation

Clay

Part No.	Description	
8.718-927.0	Clay, BC-77 DKG (50 lb Bag)	Ideal for treating oils, metals, detergents
8.718-928.0	Clay, BC-77 KAG (50 lb Bag)	Ideal for treating oils, metals, detergents and to lower the pH
8.718-930.0	Clay, BC-77 JSG (50 lb Bag)	Ideal for treating recycle water
8.718-931.0	Organoclay, OC-77 (50 lb Box)	Organophille blend with anthracite to remove emulsified oils and organics
6.295-164.0	Kärcher Clay RM-847 (44 lbs)	Ideal for treating heavily mineral oil contaminated water

Sludge Containment

- Biodegradable
- Natural fiber material

Grass Catcher

Part No.	Description
8.906-478.0	Tub, Sludge, with Lid (Black)
8.903-602.0	Grass Catcher Sludge Containment

Bioremediation Consumables

- Exclusive to Waterstax
- Biodegradable
- Store in cool location or refrigerator
- Convenient packaging


Biostax 1800


Bio-Puck

Part No.	Description
8.718-913.0	Bio-Puck HC, 4-pack with BioNutrient and 4 pit socks
8.749-853.0	Bio-Puck HC, box of 20 pucks
8.718-914.0	Bio-Puck GT, 4-pack with 4 pit socks
8.718-918.0	Biostax 1800, makes 55 gallons
8.718-917.0	Biostax 100 Hawaiian Blend (8 oz Vial), makes 5 gallons
8.718-916.0	Bio-Nutrient, 8 oz bottle
8.718-919.0	Biostax 1800 (Two 8 oz Vials)

Air Valves

- Simple design
- Maintenance free
- Self cleaning


3 Way Ball Assembly

Part No.	Description
8.716-422.0	Gemu Silverline, Threaded Ends & 2" Female Tail Piece
8.749-845.0	3 Way Ball Assembly, CLP Automatic
8.716-426.0	Solenoid, Air, Gemu Type 322

WB Blowers & Draft Inducer

- External motor
- Aluminum fan


Draft Inducer

Part No.	Description
8.715-192.0	Draft Inducer D-3, HBG/HBE

Alpha Coalescing Parts

- Oil-Loving polypropylene grids
- Proprietary maze design for optimum oil-water separation


Coalescing Grid

Part No.	Description
8.706-666.0	Grid, Vertical Coalescing, Large, 20.5" x 32.5"
8.706-668.0	Grid, Mini Coalescing, Small, 17" x 16"
8.706-671.0	Grid, Horizontal Coalescing
8.706-672.0	Suitcase Only For Pom Pom Filters (filters not incl.)
8.706-673.0	Pom Pom, Sorbaid (order 2 per suitcase)
8.706-675.0	Grid, Horizontal Coalescing (Delta 500)
8.709-338.0	Strap, Coalescing Grid, 60"
8.709-339.0	Strap, Coalescing Grid, 112"
8.709-342.0	Strap, 84", Filter

HBG Burners

- Industrial duty
- Simple operation

HSG-400

Part No.	Description
8.717-099.0	Wayne, P250 AFEP, 115V, HBG-15 NG
8.717-100.0	Wayne, HSG-400, HBG-30
8.717-101.0	Wayne, P250 AFEP, 115V, HBG-15 LPG

HBG Burner Parts & Elements

- Industrial applications

Part No.	Description
8.717-990.0	Ignition Module, HBG-15
8.717-991.0	Valve, Gas Burner HBG-15
8.717-992.0	Valve, Gas White Rodgers HBG-30
8.718-006.0	Control, Primary Safety, w/ 30 Sec Pre-Purge HBG-30

Exhaust Stacking

- Rain protection
- Back pressure reduction

Rain Shield

Part No.	Description
8.717-738.0	Flue Adapter, 6" HBG-15, No Flange
8.717-739.0	Flue Adapter, 10" HBG-30, No Flange
8.717-740.0	Shield, Rain, 6" Flue Pipe, Water Blaze
8.717-742.0	Shield, Rain, 10" Flue Pipe, HBG
8.717-743.0	Shield, Rain, 12" Flue Pipe, WB-120

Flow Meters & Gauges

- Simple design
- High impact plastic

Flow Meter

Part No.	Description
8.712-136.0	Flow Meter 1.5"
8.712-154.0	Pressure, 0-100 ¼" Bottom
8.712-155.0	Pressure, 0-10 PSI

ORP/pH Controller Parts

- ORP/pH probes resistant to fouling
- Original replacement parts

ORP/pH Digital CH250 Controller

Part No.	Description
8.711-736.0	Tubing, 1/4" ID x 7/16" OD, Norprene
8.716-970.0	Fitting, Compression 1/2"
8.716-974.0	Collar VSP-20, for ORP/pH Control
8.716-979.0	Kit, VSP-20 Parts, Suction/ Discharge Kit
8.716-984.0	Tubing, ORP/pH Controllers 15 ft Opaque
8.716-986.0	Injector, I.P.F. ORP/VSP 20 Metering
8.716-990.0	Controller Only, ORP/pH Digital CH250
8.709-144.0	Chlorinator, Model #910
8.716-989.0	pH-only Controller w/ probe, 120V, stand alone

Ozone Generators

- High output ozone for effective oxidation of bacteria and control of odor
- Ultra-violet ozone generation
- 1-, 2-, 4-bulb configurations


Ozone Generator

Part No.	Description
8.905-714.0	Series 200 (120V)
8.905-715.0	Series 200 (220V)
8.905-716.0	Series 400 (120V)
8.905-717.0	Series 400 (220V)

Above models require power supply and/or circulation system

Ozone Generator Parts

- Direct replacement UV lamps
- CD maintenance kit


Lamp, Ozone Replacement

Part No.	Description
8.707-321.0	Valve, Ozone Meter, ¼" Plastic
8.707-355.0	Valve, ⅜" Tubing Check, Kynar
8.709-431.0	Injector, Ozone w/o Check Valve
8.712-138.0	Flowmeter, Ozone
8.716-590.0	Ballast, 120V / 220V Ozone Generator
8.716-592.0	Connector, 4 Pin Plug
8.716-600.0	Lamp, Ozone Replacement

Scot Pumps & Repair Kits

- Heavy-duty cast iron body
- Stainless steel impeller


Scot Pump

Part No.	Description
8.715-400.0	1-½ hp 208/230/460V 3PH, 20 GPM/ 50 PSI
8.715-402.0	2 hp 208/230V 1PH, 50 PSI
8.715-404.0	2 hp 208/230/460V 3PH, 32 GPM/ 50 PSI
8.715-357.0	2 hp 115/230V 1PH, Stainless Steel
8.716-814.0	Seal / O-Ring Kit, Filter Pump (Jacuzzi)

Little Giant Pumps

- Heavy-duty cast iron


Little Giant Pump

Part No.	Description
8.715-367.0	Sump, ½ hp 120V
8.715-369.0	Sump, ⅓ hp 220V
8.753-541.0	Pump, Submersive 10S-CIM 208-240V (Requires Part #8.753-542.0)
8.753-542.0	Mech Float Switch 15' Cord (Requires Part #8.753-541.0)

Ebara Pumps

- Heavy-duty impeller
- Stainless steel


Ebara Pump

Part No.	Description
8.715-438.0	Sump, ½ hp 230V / 3PH
8.715-439.0	Sump, ½ hp 460V / 3PH

Peristaltic Metering Pumps

- Roller cam designed
- Hose compression pump


Peristaltic PUMP


VSP20 Metering

Part No.	Description
8.715-378.0	VSP20 Metering, 24V
8.715-379.0	VSP20 Metering 120V
8.749-856.0	Pump, Peristaltic, 1-7 GPD
8.749-855.0	Pump, Peristaltic, 8-45 GPD
8.750-963.0	Squeeze Tube

ARO Pumps

- Heavy-duty air diaphragm
- Corrosion resistant


ARO PUMP

Part No.	Description
8.715-278.0	Air Diaphragm, ½" Polypropylene
8.715-279.0	Air Diaphragm, ½" Stainless Steel

Jacuzzi Cyclone Pumps & Repair Kits

Part No.	Description
8.715-383.0	¾ hp 115/230V 1PH, Cyclone
8.715-382.0	½ hp 115/230V 1PH, Cyclone
8.716-796.0	Repair Kit, Impeller Kit (¾ hp Cyclone)
8.716-793.0	Repair Kit, Impeller Only (¾ hp Cyclone)
8.716-795.0	Repair Kit, Impeller Kit (½ hp Cyclone)

StaRite Pumps & Repair Kits

Part No.	Description
8.723-198.0	2 hp 230V 1PH, StaRite
8.917-759.0	¾ hp 115V 1PH, Ozone
8.917-760.0	¾ hp 230V 1PH, Ozone
8.723-175.0	¾ hp 230V 1PH, With Bakset, StaRite
8.723-219.0	¾ hp 208-230/460V 3PH, Ebara
8.749-351.0	Repair Kit, IShaft Seal Kit (for 8.723-198.0 only)
8.750-017.0	Repair Kit, IMech. Seal Ebara (For 8.723-219.0)

Testing Kits

Part No.	Description
8.753-577.0	pH Test Strips
8.712-138.0	Flowmeter, Ozone

Regulators

- Preset and adjustable available
- Heavy-duty


Regulator

Part No.	Description
8.716-420.0	Regulator, Pressure w/ Gauge
8.716-421.0	Filter, Coalescing
8.717-748.0	Regulator, Rockwell 3/4" 143-80 WB

Tanks & Pressure Tanks

- Internal bladder
- Compact design

Pressure Tank

Part No.	Description
8.719-176.0	Pre-pressurized, 4.4 gal
8.719-178.0	Pressurized, 20 gal

HBG / HBE Tanks / Combustion Box

- Cast in place fiberfrax insulation
- CAUTION: Double check operators manual to verify part numbers for sparger tube as they vary with different models


Firebox

Part No.	Description
8.717-434.0	Insulation, 1" x 2" HBG, /ft
8.913-195.0	Tank, HBG-15/99, Steel
8.913-196.0	Tank, HBG-15, 316L Stainless Steel
8.913-197.0	Tank, HBG-15/99, AL-6XN
8.913-223.0	Tank, HBG 30, Mild Steel
8.913-225.0	Tank, HBG 30, AL-6XN
8.913-198.0	Firebox, HBG-15

Water Blaster Unloader

- Preset and adjustable available
- Heavy-duty


Water Blaster Unloader

Part No.	Description
8.715-513.0	Unloader

Alarm

- 90 decibel
- Piezo design


Alarm

Part No.	Description
8.716-266.0	Alarm, 24V AC, Panel Mount

Electrical Switches

- Waterproof
- Soft rubber feel
- Various designs


Rocker Switch

Part No.	Description
9.802-451.0	Rocker, Carling w/ Green Lens
9.802-453.0	Curvette, HBG 2-position
8.716-051.0	Curvette, 2-position Wide Switch
8.716-052.0	Curvette On-Off-On, HBG 3-position
8.716-091.0	Momentary Push, small
8.716-630.0	Micro Switch, Roller Lever
8.751-912.0	Block, Contact, N/C, CH E22B1
8.751-913.0	Block, Contact, N/O, CH E22B2
8.751-910.0	2-pos, CH E22Vb51, Carling w/ Light
8.718-200.0	Switch/ Gauge, Capsu-Photohelic Press, 0-10"

Float Switches

- Internal bladder
- Compact design


Float


Liquid Level

Part No.	Description
8.716-142.0	Float, N/O Tethered (Black)
8.716-143.0	Float, N/C Tethered (Gray)
8.716-294.0	Liquid Level, M-5000 HBE/HBG
8.716-632.0	Liquid Level, LS1800, Alpha
8.716-300.0	Sensor, Capacitance, 3-point, WB

Fuses

- Various Sizes
- Industry standard design


FNM


FQR


KTK


MDL

Part No.	Description	Max Voltage	AMPS
9.802-463.0	FNM1/2	250V	0.5
8.716-173.0	FNM1	250V	1.0
9.803-977.0	FNM2-1/2	250V	2.5
8.716-194.0	FNM7	250V	7.0
9.802-460.0	FNM8	250V	8.0
9.802-465.0	FNQ-R-3	600V	3.0
9.803-663.0	KTK-R2	120V	2.0
8.716-180.0	KTK-R4	600V	4.0
9.804-050.0	KTK-R5	600V	5.0
8.716-170.0	MDL1/2	120V	0.5
8.716-174.0	MDL2-1/2	24V	2.5

Indicator Lights

- Long lasting
- High intensity bulb


Red Indicator Light

Part No.	Volts	Color
8.716-095.0	125V	Red
9.802-455.0	125V	Green
8.716-408.0	125V	Amber
8.716-409.0	125V	Blue
9.803-650.0	28V	Blue
9.803-652.0	28V	Green

High Temp Cut-Out Switch

- High temperature rated


Thermocouple

Part No.	Description
8.712-172.0	Switch, Manual Reset, 220°F WB
8.754-117.0	Hi Limit Control, 1000°F, HBG (Mild Steel Tank)
8.712-175.0	Thermocouple, SS Sheath, 34" Long, Type K, HBG

Pressure Switches

- Adjustable set point
- Stainless steel body
- Diaphragm design

Pressure Switch

Part No.	Description
8.716-154.0	Square D, N/C Use w/ 2-10893, 2-1072
8.716-156.0	PM11120A-1PF, 1 PSI
8.716-158.0	PM11160X-15PR, 15 PSI
8.716-413.0	Barksdale, Air Proving

Relays

- Din rail mountable

RH2B-UL-AC120 Relay

Part No.	Description
8.752-146.0	Relay Socket, SH3B05*IDEC
9.802-468.0	Relay, 120V, RH2B-UL-AC120
8.752-141.0	Relay Latch 2, RH2LBUAC120*IDEC
8.716-235.0	Relay, Power Omron G4B112T1FDCUSRPAC120
8.716-264.0	Relay, Sky Mfg. 120V # SKHT-1X
9.802-467.0	Base, Relay, SH2B-05, IDEC

Ball Valves

- PVC Schedule 80
- Heavy-duty

1½" Slip x Slip Ball Valve

Part No.	Description
8.707-359.0	1" Slip x Slip
8.707-361.0	1½" Slip x Slip
8.707-362.0	1½" FPT x FPT Molded

Solenoids

- Preset and adjustable available
- Heavy-duty
- Diaphragm seat
- Corrosion resistant

Solenoid PVC 24V

Part No.	Description
8.716-689.0	Coil,120V, Water Side
8.716-690.0	Valve, Parker, Water Side
8.716-691.0	Valve, Parker, Air Side
9.802-533.0	Solenoid Coil, 120V, Air Side
8.716-697.0	Solenoid, Water Maze, PVC 24V Rainbird
8.716-700.0	Solenoid, Valve 120V, Hit 310-100-1

Transformers

- Fuse Protected
- Heavy-duty

Transformer 240/480V

Part No.	Primary Voltage	Secondary Voltage	Size
8.716-873.0	208/120	.500KvA	50/60 Hz
9.802-550.0	240/480V	120/240V	.500KvA
9.802-551.0	240/480V	120V	.050KvA
9.802-553.0	120/240V	24V	.050KvA
9.803-668.0	550V/575/600V	115V	.050KvA
8.716-904.0	120/240V	24V	.100KvA
8.717-985.0	120/24V/30VA HBG-15		
8.718-177.0	Ignition 612-6A020E 120V WB		

Check Valves

- PVC Schedule 80
- Floating ball design

1¹/₂" Ball Check Valve

Part No.	Description
8.707-297.0	1½" Ball, PVC, Slip x Slip
8.707-300.0	1" Ball, PVC, Slip x Slip
8.707-298.0	½" Ball, PVC, FPT x FPT
8.707-299.0	1½" Swing, PVC, Slip x Slip
8.707-239.0	2" Swing, Brass, FPT x FPT
8.707-355.0	⅜" Tubing, Checkvalve
8.707-356.0	¼" NPT, FPT x FPT

Timers

- Various designs
- User Friendly

Counter

Part No.	Description
9.802-283.0	Hour Meter, 115VAC 60hz
8.716-236.0	Timer, Red Lion
8.716-237.0	Counter, Red Lion
8.716-251.0	Timer, Variable Time
8.716-252.0	Base, Timer IDEC Socket
8.716-253.0	Timer, 24 Hour Pin, 120V 20A
8.754-117.0	Controller, Automatic Maint, CLP-7034

Push-On Hose

- Nylon braided
- Heavy Wall
- UV Protected

¾" Push-On Hose

Part No.	Description
9.802-254.0	¼", Push-On, Fuel Line, /ft
9.802-259.0	½", Push-On, /ft
9.802-261.0	¾", Push-On, /ft

PVC Bulkheads

- Easy to install
- Adjustable Seal-Tite design

1½" FPT x FPT

Part No.	Primary Voltage
8.706-479.0	2" NPT, Polypropylene
8.706-480.0	3" FPT x FPT
8.750-743.0	½", Polypropylene
8.706-483.0	3" FT x FT, Polypropylene
8.706-484.0	1", Polypropylene
8.706-486.0	1½" FPT x FPT, 872-015
8.706-490.0	1½", Polypropylene
9.802-052.0	¾", Polypropylene
9.802-515.0	Strain Relief, Straight, Liquid Tite

PVC Adapters

- Heavy-duty
- Schedule 80

1½" Slip x MPT

Part No.	Description
8.706-409.0	1" MPT x Slip
8.706-441.0	1½" Slip x MPT
8.706-442.0	1¼" Slip x MPT
8.706-444.0	Female, 1" Slip x FPT
8.706-445.0	Female, 1¼" Slip x FPT
8.706-451.0	2" Slip x MPT

PVC Bushings

- Heavy-duty
- Schedule 80

2" MPT x ¾" FPT

Part No.	Description
8.706-403.0	2" MPT x 1½" FPT
8.706-404.0	1½" MPT x 1" FPT
8.706-405.0	1¼" MPT x 1" FPT
8.706-407.0	½" MPT x ¼" FPT
8.706-412.0	1" MPT x ¾" FPT, "Speers"
8.706-415.0	1½" MPT x 1¼" FPT
8.706-416.0	2" MPT x ¾" FPT

FILTER CAPACITIES

		Gravel 1/4 x 1/8	Garnet 30 x 40	Garnet 8 x 12	Sand .45-.55 m	Anthracite #1 .60-.80 mm	Carbon Activated	Element 100 sq/ft	Element 200 sq/ft	Element 250 sq/ft 20 micro	Zeolite 50 lbs
Model Number		**8.718-921.0**	**8.718-923.0**	**8.718-924.0**	**8.718-920.0**	**8.718-922.0**	**8.718-933.0**	**8.716-872.0**	**8.716-840.0**	**8.716-847.0**	**8.757-147.0**
CLP-5023	Current	100 lbs	–	–	150 lbs	25 lbs	100 lbs	–	1	–	–
CLP-5024	Current	100 lbs	50 lbs	50 lbs	50 lbs	25 lbs	100 lbs	–	–	–	–
CLP-7023	Current	100 lbs	–	–	200 lbs	30 lbs	150 lbs	–	–	2	2
	Prior to 2-01-00	100 lbs	–	–	200 lbs	30 lbs	150 lbs	–	2	–	–
CLP-7033	Current	350 lbs	–	–	450 lbs	100 lbs	160 lbs	–	–	2	2
	Prior to 4-05-01	400 lbs	–	–	500 lbs	100 lbs	225 lbs	–	–	2	2
	Prior to 2-01-00	400 lbs	–	–	500 lbs	100 lbs	225 lbs	–	2	–	–
	Prior to 2-22-99	100 lbs	–	–	200 lbs	30 lbs	150 lbs	–	2	–	–
CLP-7034	Current	350 lbs	300 lbs	200 lbs	100 lbs	100 lbs	160 lbs	–	–	–	–
CLP-8034	Current	200 lbs	100 lbs	200 lbs	50 lbs	50 lbs	160 lbs	–	–	–	–
	Prior to 8-29-01	300 lbs	–	–	300 lbs	50 lbs	225 lbs	–	–	–	–
CLP-9044	Current	350 lbs	300 lbs	200 lbs	100 lbs	100 lbs	350 lbs	–	–	–	–
	Prior to 8-29-01	400 lbs	–	–	500 lbs	100 lbs	600 lbs	–	–	–	–
CL-304	Current	100 lbs	–	–	200 lbs	30 lbs	–	1	–	–	–
Filter Pac I	30-780	–	–	–	–	–	150 lbs	–	1	–	–
Filter Pac II 30-779	Current	–	–	–	–	–	160 lbs	–	–	2	2
	Prior to 8-31-01	–	–	–	–	–	225 lbs	–	2	–	–
Filter Pac III 30-778	Current	100 lbs	–	–	200 lbs	30 lbs	150 lbs	–	2	2	2
	Prior to 5-20-04	100 lbs	–	–	200 lbs	30 lbs	150 lbs	–	2	–	–
REC-ZCF3-30A	Current	50 lbs/cyl	–	75 lbs/cyl	–	–	–	–	1	–	250 lbs/cyl

COMPATIBLE SUMP PUMPS

	Little Giant 1/2 hp, 120V	Little Giant 1/2 hp, 230V/1ph	Little Giant 1/3 hp, 230V/1ph	Ebara SS 1/2 hp, 230V/3ph	Ebara SS 1/2 hp, 460V/3ph
Model Number	**8.715-367.0**	**8.715-368.0**	**8.715-369.0**	**8.715-438.0**	**8.715-439.0**
CLP-7034A		■			
CLP-7034B				■	
CLP-7034C					■
CLP-5024A			■		
CLP-5024B				■	
CLP-5024C					■
CL-603A		■			
CL-600D	■				
CL-304A			■		
Alpha-1500D					
Alpha-3100D					

SHIPPING WEIGHTS AND DIMENSIONS

	Part #	Shipping Weight*	Shipping Dimensions* L x W x H	Weight	Dimensions L x W x H
Filtration / Recycle Systems					
REC-ZCF3-30A	1.103-513.0	2,000 lbs	84" x 53" x 86"	1,726 lbs	70" x 49" x 81"
ZCF Filter Pac	1.103-512.0	1,450 lbs	66" x 53" x 86"	1,250 lbs	46" x 34" x 81"
Compact Coag	1.103-510.0	200 lbs	45" x 35" x 70.5"	TBD	33" x 19" x 70.5"
IPF2-20D High Boy	1.103-488.0	370 lbs	46.5" x 40.5" x 47.56"	336 lbs	46.5" x 40.5" x 47.56"
REC3-30A	1.103-511.0	525 lbs	58" x 41" x 66"	325 lbs	38" x 31" x 53"
In-ground Pit Systems					
Collection Pit 3 x 9	8.903-657.0	550 lbs	125" x 52" x 66"	302 lbs	120" x 46" x 55"
Collection Pit Cover	8.903-674.0/DP	140 lbs	Ship with pit	140 lbs	113" x 39" x 1"
Catch Basin 3 x 3	8.903-658.0	180 lbs	53" x 47" x 65"	130 lbs	45" x 45" x 58"
Catch Basin Cover	8.903-678.0	50 lbs	Ship with pit	50 lbs	35" x 35" x 1"
Catch Basin Grating	8.903-677.0	150 lbs	Ship with pit	150 lbs	35" x 35" x 2"
Sump Basin 2 x 2	8.709-334.0	110 lbs	39" x 42" x 42"	75 lbs	34" x 34" x 39"
Sump Basin Cover	8.903-675.0	35 lbs	Ship with pit	35 lbs	23" x 23" x 1"
Sump Basin Grating	8.903-676.0	70 lbs	Ship with pit	70 lbs	23" x 23" x 2"
Oil/Water Separators & Clarifier Series					
Alpha-1500D	1.103-401.0	545 lbs	92" x 46" x 34"	325 lbs	80" x 36" x 32"
CLT-300	1.103-434.0	592 lbs	57" x 40" x 87"	560 lbs	45" x 45" x 86"
CLT-600	1.103-435.0	1,000 lbs	65" x 72" x 100"	835 lbs	55" x 55" x 104"
BioSystems					
PM-1000	1.103-467.0	175 lbs	21" x 30" x 46"	165 lbs	35" x 21" x 47"
REC3-30A	1.103-511.0	525 lbs	58" x 41" x 66"	325 lbs	38" x 31" x 53"
Accessories					
Grass Dumpster	8.903-602.0	99 lbs	55" x 28" x 36"	85 lbs	55" x 28" x 36"
Evaporators					
HBG-30D	1.103-449.0	1,430 lbs	65" x 98" x 81"	1,395 lbs	90.5" x 51" x 75"
WB-120A	1.103-473.0	2,240 lbs	80" x 55" x 81"	1,690 lbs	68" x 40" x 80"
WB-50A	1.103-474.0	1,290 lbs	84" x 41" x 83"	895 lbs	75" x 23" x 75"
Water Blaster / Cannon Series					
Water Blaster	1.103-484.0	350 lbs	49" x 27.5" x 48"	600 lbs	49" x 27.5" x 48"

* Shipping weights and dimensions approximate

COMPARISON MATRIX

Applications | Wash Water

Water Treatment Technologies Typically Applied to Application	pH Controller	Clarification/ Mechanical Separation	Filtration / Particle Separation	Coagulation/ Flocculation/ Bentonite Clay	Oil Separation/ Skimming	Coagulation & Flocculation	Coagulation/ Flocculation (Electro or Chemical)	Bioremediation	Water Evaporation	Ozone, Chlorination, Bioremediation for Odor Control
Water Characteristics Typically Generated by Application	Variable pH Control	Heavy Solids Separation	Particles (large and small)	Suspended Solids	Free Oils	Emulsified Oils	Heavy Metals	Dissolved Organics	Dissolved Inorganics	Malodorous Conditions
Page Number	12	21	21	21	21	21	21	38	42	38
Asphalt Paving Equipment	■	■	■	■	■	■		■	■	■
Auto Salvage	■			■	■	■	■		■	■
Automotive | Automatic Wash	■		■	■		■			■	■
Automotive | Detailing	■	■	■	■	■	■	■		■	■
Automotive | Manual Wash	■		■	■				■	■	■
Boat and Shipyard Hull Cleaning Fluids	■		■	■			■	■	■	■
Diesel Engine Repair Ships	■				■	■	■		■	■
Farm Implement Equipment	■	■	■	■	■	■		■	■	■
Golf and Turf Equipment	■		■	■				■	■	■
Machinery | Used	■		■		■	■	■		■	■
Material Handling | Forklifts	■		■	■	■	■			■	■
Material Handling | Wood Products	■	■	■	■				■		■
Mining Equipment	■	■	■	■					■	■
Oil Field Services | Tool Repair	■	■	■	■	■	■	■		■	■
Oil Field Transportation Equipment	■	■	■	■	■	■	■		■	■
Rental Equipment | Heavy Commercial	■	■	■	■	■	■		■	■	■
Rental Equipment | Retail			■	■				■	■	■
Road Construction Equipment | Excavators, Dozers, etc	■	■	■	■	■	■		■	■	■
Solid Waste Transport | Landfill Equipment	■		■	■			■	■	■	■
State Department of Transportation	■	■	■	■	■	■		■	■	■
Trailer Repair	■		■	■	■	■	■		■	■

COMPARISON MATRIX

Applications | Industrial

Water Treatment Technologies Typically Applied to Application	pH Controller	Clarification/ Mechanical Separation	Filtration / Particle Separation	Coagulation/ Flocculation/ Bentonite Clay	Oil Separation/ Skimming	Coagulation & Flocculation	Coagulation/ Flocculation (Electro or Chemical)	Bioremediation	Water Evaporation	Ozone, Chlorination, Bioremediation for Odor Control
Water Characteristics Typically Generated by Application	Variable pH Control	Heavy Solids Separation	Particles (large and small)	Suspended Solids	Free Oils	Emulsified Oils	Heavy Metals	Dissolved Organics	Dissolved Inorganics	Malodorous Conditions
Page Number	12	21	21	21	21	21	21	38	42	38
Transportation | Aircraft	■			■			■		■	
Transportation | Locomotive	■		■	■	■	■	■		■	■
Transportation | Motor Freight	■		■	■	■	■			■	■
Transportation | Truck & Bus	■		■	■					■	■
Truck Dealers | Heavy Duty	■		■	■	■	■			■	
Truck Repair | Heavy Duty	■		■	■	■	■	■		■	■
Utilities Equipment Repair	■		■	■	■	■			■	■
Aircraft Refurbishment Fluids							■		■	
Cooling Tower Blow-down Water									■	
Die Casting Release Agent Fluids						■	■		■	■
Electroplating and Polishing Fluids							■		■	
Floor Scrubbing Water	■		■	■		■	■		■	■
Ground Water Remediation				■			■	■		■
Heat Treating Coolant Fluids							■		■	
Machine Shop Metal Cutting Coolants			■			■	■		■	■
Manufacturing Fluids | Drawing Compounds						■	■		■	■
Metal Cutting Water Table Fluids | Plasma Cutting			■	■			■		■	
Metal Finishing | Surface prep | Phosphate Cleaning Fluids	■		■	■		■	■		■	■
Metal Plating Fluids	■								■	
Metal Stamping Release Agents							■		■	■
Natural Gas Transmission Compressor Condensate					■				■	■
Parts Washing Fluids | Aqueous Based	■		■		■	■	■		■	
Vibratory Bowl | Cleaning and Polishing Fluids						■	■		■	■
Water Jetting and Cutting Fluids			■	■			■		■	

Note: Water contaminates and water characteristics may vary for each application. Please contact the Water Maze factory to discuss your specific water treatment application

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