

Water Management Technologies

WMT, Experts In Water Quality Management

Featured Products

Hydrotech Microscreen Disc And Drum Filters

The MBB, Moving Bed BioFilter

LHO, Low Head Oxygen Systems

Vaki, Fish Counters

Fischtechnik, Fish Graders

OxyHandy Oxygen Meter

Monitrol Controllers

12 Hour Belt Feeder

Committed To Improving Water Quality

Water Management Technologies, Inc. (WMT) offers a comprehensive line of equipment to satisfy a variety of water quality concerns. Whether you are installing a new system or upgrading an old one, our team of specialists will provide solutions that work. With over 300 references from Federal, State and commercial hatcheries, we invite you to put our experience to work for you.

Our broad product line, from the best manufacturers, is well selected to deliver dependable results. Among our many components offered, you will find Hydrotech Disc and Drum Filters, WMT's Moving Bed Bio-Filter, Low Head Oxygen Injection, Low Head Oxygen Generation, Vaki Fish Counters and Biomass Assessment Equipment, Fish Graders, Feeders, Feeding Systems, Chillers/Heaters, Blowers, Pumps, Ozone, Degassing, Monitoring Devices/Alarms/Controls, Fish Transport and more.

Effective October 1, 1998 WMT moved into new offices. Please visit our web site, www.w-m-t.com for a listing of products and a special section on projects we have performed in the past. At WMT, We recycle right!

Hydrotech Microscreen Drum & Disc Filters

Hydrotech Microscreens are mechanical, self-cleaning filters designed to achieve high performance in systems where prevention of particle fragmentation is essential. Solids laden water gravity flows through the filter and solids catch on the inside of the screen. Clean water passes through the screen as a

backwash rinse system backs the solids off the screen and into a sludge trough. Hydrotech Microscreens work without pressure and are designed with few moving parts to ensure long life and low maintenance costs.

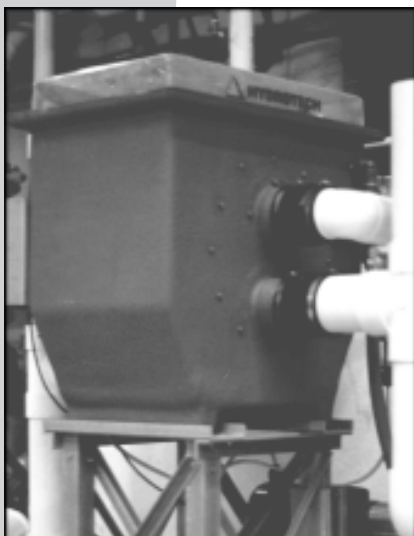
Hydrotech's patented filter elements greatly simplify both the replacement and change out of the filter opening size. WMT carries a complete inventory of spare parts. Hydrotech's construction facilitates maintenance and makes it easily adaptable to your flow capacity needs and other performance requirements. The Hydrotech Drumfilter is effective in fish farming systems and is applicable in both re-circulating systems and flow through systems for intake and outlet water.

Hydrotech has 40 standard sizes of micro-screens with filter openings from 10 microns up. Typical applications:

- Intake water to flow through systems
- Recycle systems
- Effluent polishing to remove fish feces and uneaten feed prior to discharge into the environment.
- Prior to heat exchangers



3 models 1607-2H with flow capacity = 16000 gpm



Hydrotech Filter 501 - Flow Rate= 132 gpm

Hydrotech Discfilters are effective for a wide range of uses including effluent polishing, solids removal and product recovery. The disc design is particularly advantageous when a large filter area is needed. The compactness of the Discfilter configuration results in 2-3 times more filter area compared with drum filters with the same external dimensions.

Over two thousand Hydrotech Microscreens are operating worldwide, over 300 in North America, and 11 state or federal hatcheries have Hydrotech drum or disc filters. Call us for a reference near you.

WMT Moving Bed Biofilter - (MBB)

The heart of any biofilter is the media and WMT's MBB employs patented Kaldnes polyethylene elements providing 500 m² / m³ effective surface area at 100% fill (152 ft²/ft³ at 100% fill). WMT's moving bed process produces optimum biological conditions as



Kaldnes Filtration Media

air circulates and suspends the media in water, feeding the filter oxygen and driving CO₂ out of solution. The moving bed biofilter is a self-cleaning, low maintenance biofilter requiring no

back washing. The compact, simplistic design requires less energy to operate than fluidized sand or bead filters because water gravity flows through the media.

As recently seen in Aquaculture Magazine's Products Issue '98, pg. 115: "WMT recently added an exciting new patented bio-filtration media - Kaldnes. Manufactured of polyethylene these elements density is slightly below that of water. Kaldnes provides a large protected surface for the biofilm and optimal conditions for bacteria when the elements are circulated in water with air. This patented moving bed process employs the advantages of activated sludge and fixed film processes (RBC's, trickling filters) without being restrained by their disadvantages.



The Moving Bed BioFilter (MBB)

The process, already proven in municipal wastewater treatment, food processing, paper and pulp mills is now available for aquaculture. Some advantages of Kaldnes moving bed process are as follows:

- Self-cleaning, so there is no need for back washing,
- Low energy requirements yielding lower operating costs,
- Strips carbon dioxide under aerobic conditions,
- Compact, occupies a small footprint,
- The media can also be applied to de-nitrification.

WMT's moving bed biofilter is cost effective because it offers high surface area, and optimum conditions in a compact design. Operating costs are lower because less energy is required to fluidize the media. Convert a section of your raceway to bio-filtration. WMT can show you how.

The LHO™, Patented Low Head Oxygen System

A direct ratio exists between the amount of oxygen in your system's water and the quantity as well as quality of fish you can raise. More oxygen and fish translate into increased productivity for your operation. The Low Head Oxy-generator (LHO) injects oxygen into your system's water without moving parts or electricity. The LHO is up to 95% efficient in displacing nitrogen for oxygen. The LHO supersaturates water with oxygen without increasing the total gas pressure of the water. The cost of oxygen is the only consumable operating expense. That's why over 250 LHO's are in operation in North America. If your application has twelve inches or more of available head, the LHO may be an economical and "fail safe" solution to low dissolved oxygen levels in your facility.

Two models are available. Designed to fit in raceways and head boxes the original LHO is rectangular and fabricated in stainless steel or aluminum. The newer, round style LHO is more suited to recycle applications and is fabricated in fiberglass. Specify that you wish to employ the LHO as an oxygen/ozone

injection device and WMT can fabricate the LHO with ozone tolerant materials.

**Over 250
installations in the
past 8 years**

The LHO is ideal in a serial reuse raceway where the lower raceways suffer from low DO. By installing the LHO at the head of a raceway, downstream raceways become as productive as upper raceways. Call or visit our web site for an Oxygen Supplementation Data Sheet and WMT can custom design an oxygen injection system for your facility.



Terry McCarthy with The LHO™

Over 200 LHO's are installed in Federal and state fish hatcheries throughout North America. WMT holds the most experience in design and manufacture of the LHO. Put our experience to work for you.

Features: • No moving parts • No electricity required • Predicted and guaranteed results

Benefits: • Removes N₂ gas from the water as oxygen is added • Does not increase total gas pressure • Maintaining DO levels enhances fish health and water quality • Simplicity - ease of installation and maintenance

Fischtechnik Graders & Vaki Fish Counters

Vaki Fish counters and Fischtechnik graders often make a great combination. Fischtechnik graders were first developed for use in the manufacturer's own farms. Their machines are now doing an excellent job in more than 500 fish farms in over 40 countries around the world (1988). The versatility of this equipment can be applied at pond side while harvesting your farmed fish. Presently, nine different models of grading machines are offered. The



Grading machines are available for varying size ranges of fish from 1 g up to 10 kg with many combinations to suit large quantities delivered by Fish-Pump, Airlift or low volume hand netting and other methods. The state of Michigan procured two grader / counting systems from WMT.

Since 1986, Vaki Fish Counters have helped fish farms track and manage inventory worldwide. The



Bioscanner is a fish counter capable of counting up to 60,000 fish per hour with 98–100% accuracy. A three-channel system is featured in the photo. Smaller systems are also available.

The Vaki Submersible Bio-mass Counter gathers information on numbers, average weight, size distribution and condition of the fish; in other words, fundamental data for the profitable operation of your aquaculture enterprise. You can more accurately plan harvesting and shipping. An accurate knowledge of the bio-mass and average weight also makes it possible to control feeding and drug dosage, and to monitor the health and growth of your fish.

Running a Vaki Fish Counter in tandem with a grader will reduce labor and provide vital information you need to maximize efficient management of your operation.

Vaki recently introduced a new product; the Pipeline counter designed to count fish in transit through a pipe. Ideal for use with a fish pump. Contact WMT for more information.



The Fischtechnik FGM4 Grader working in unison with the Vaki Bioscanner System 3

OxyHandy O² Meter

The OxyHandy is a portable dissolved oxygen meter. It measures both PPM (mg/l) and % Saturation. OxyHandy is manufactured by Oxyguard, a company with over 20 years of experience in dissolved oxygen monitoring. Please ask us for references that can attest to the fact that this is the most robust, durable and easy to use DO meter on the market; over 800 in use in USA alone.

The Handy Alpha measures oxygen only. The Handy Beta and Gamma also measure temperature. The Handy Gamma has salinity compensation.

features:

- Galvanic type probe with short response time - ready for immediate use and no need for polarization & stabilization time.
- Measuring Range - 0-50.0 ppm, 0-600% Sat.
- Waterproof - submersible but will float



The OxyHandy with its convenient belt clip

- if dropped in the water.
- Excellent probe stability - one daily calibration check is usually more

than enough.

- Tough membrane - can be wiped clean with cloth or paper towel.
- Long life probe - does not need regular renovation, only change membrane when necessary. Probe can be stored dry.
- Easily exchanged membrane - no more fumbling and struggling to replace a membrane.
- Compact and light weight with a detachable clip for use on a belt or clipboard.
- Display can be illuminated (back lit).
- Power Source - standard 9 volt battery, more than 1000 operating hrs.; Lo Bat indicator
- Standard Accessories: belt clip, service kit which includes spare membrane cap, membranes, electrolyte and tool.

AQUA MONITROL CONTROLLERS

The aqua monitrol product line of fully integrated, programmable controllers was developed specifically for water quality applications.

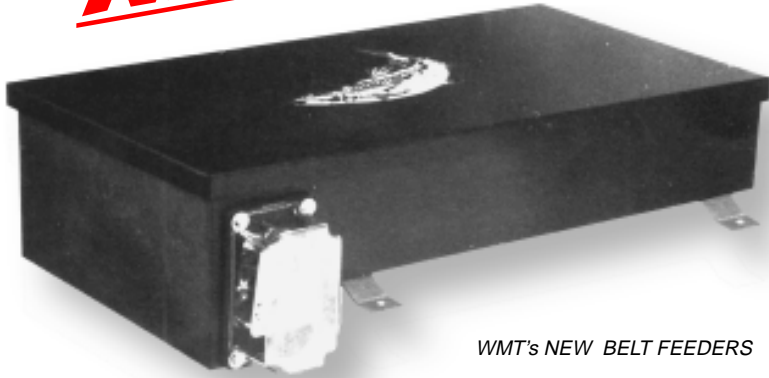


Monitrol Controllers

The controllers can collect analog and digital information from a wide range of sensors such as: Temperature, pH, Conductivity, ORP, Dissolved Oxygen, Flow, Pressure, Level, Motor Current, plus many others. Monitrol Controllers also provide automatic control of your facility's equipment as well as automated dial-out alarm capability.

The advanced yet easy-to-use windows software allows a user to monitor operating conditions, configure system parameters, and control or shut down equipment using a personal computer from a remote location. Monitrol is an affordable, user friendly monitoring system. For a free demo disk packed with monitrol features contact WMT.

NEW



WMT's NEW BELT FEEDERS

Finally, A New Quality Source for your 12 & 24 Hour Belt Feeders

These Hatching Feed Dispensers have been proven over decades and require no electricity to reliably dispense feed to your fish over a 12 or 24 hour period. They are constructed of a sturdy plastic housing to provide weather resistant durability. These feeders feature a stainless steel clock and belt shaft. Two sizes are available to meet your requirements. These affordable feeders are easy to maintain and operate.

FEATURES: STAINLESS STEEL CLOCK

specifications:

WMT's Mini Belt Feeder

Capacity	5 pounds
Length	22 inches
Width	8 inches
Height	6 inches

WMT's Maxi Belt Feeder

Capacity	10 pounds
Length	22 inches
Width	12 inches
Height	6 inches



accepted for
all orders



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