

EcoTech

INTERNATIONAL INC.



EcoBeam XL Series

The Science of Magneto Hydro Dynamics

NON CHEMICAL WATER CONDITIONING, TREATMENT, PURIFICATION, MEMBRANE AND FILTRATION TECHNOLOGIES FOR INDUSTRIAL, PHARMACUTICAL, COMMERCIAL, MUNICIPAL RESIDENTIAL AND WASTE WATER SYSTEMS, POLLUTION CONTROL SYSTEMS, PONDS & GROUND WATER RECOVERY SYSTEMS, WATER BASED SCALE REMOVAL AND PREVENTION SYSTEMS, AND HEAT EXCHANGE AND FUEL EFFICIENCY ENHANCEMENT SYSTEMS.

The Micro Chip of the Water Industry

Changes the way crystals form in fluids, preventing the formation of anaerobic bacteria, rust, algae and scaling, thus improving the quality of water and its flow rates while reducing energy waste and expense in your industrial, commercial, municipal and residential water systems. Improves combustion and economizes on fuel.

Ecological Technologies for the 21st Millennium

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Our Vision and Mission

EcoTech operates in the wide range of water treatment and fuel combustion systems with the philosophy of being environmentally friendly and efficient. We have operations in over 26 countries. Recently we have also expanded to Scandinavia and Middle East.

We bring a wide range of technical assistance built around sound scientific expertise with proven track record. Our patented technology of [Magneto Hydro Dynamics \(MHD\)](#), remains at the cutting edge world over.

Through this application we provide non chemical treatment and conditioning of water, other fluids, and their operating systems for industrial and home use. The system is non invasive and requires no energy. It is maintenance free and exponentially reduces recurring costs.

The mainstay of our technology is the Science of Magnetic Beam Optics in which a very strong magnetic flux is focused into a flowing stream of water, fluid, gas and pulverized solid fuels. It changes the way crystals and molecular clusters form, thus preventing the formation of scales, rust, corrosion, biological fouling, algae, bacteria and other forms of contaminants in a fluid or gas.

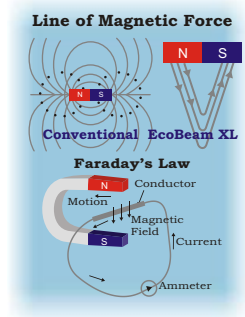
We also specialize in all field of Water Treatment from Multi Media Filtration to selective removal of contaminants like Arsenic, Nitrites, TOC, Municipal Water Supplies to Sea Water Desalination. We also process ultra pure water for pharmaceutical use and Secondary Oil Recovery.



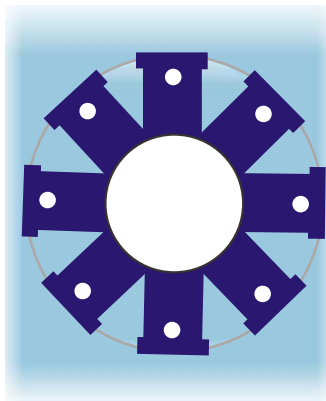
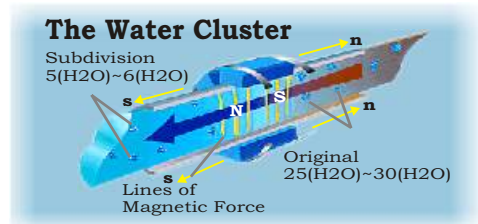
An Oil Mill with EcoBeam XL Treatment System

THE SCIENCE OF MAGNETO HYDRO DYNAMICS

Englishman Michael Faraday and an American, Joseph Henry were pioneers in the field of electromagnetic conduction. Faraday discovered that whenever there is a change in the magnetic field, an electrical current is induced. This principle is utilized in the **Science of Magneto Hydro Dynamics** (MHD) through the presence of a very high gauss and high density magnetic field. While all other magnetic water treatment devices have an elliptical magnetic field in which much of the magnetic energy is lost, **ECOBEAM XL** is always perpendicular to the flow of fluids.



The **ECOBEAM XL** works on the Principles of Physics. By installing the necklace of **ECOBEAM XL** on the outside of a pipe which carries a conductive flow, a force is created through the walls of the pipe and through the existing scale build up within the pipes, that acts on the moving charged particles in the fluid, to separate the negatively and positively charged particles, thereby polarizing them. The high and concentrated levels of induction and variance of each **ECOBEAM XL** creates high ultrasonic frequencies that produce ions. This alters the crystalline patterns of dissolved solids from rhombic to orthorhombic crystals (spiny microscopic soft sludge). During the ion exchange process, scale-forming compounds such as carbonates of calcium and magnesium, sulphates, sulphides, chlorates, chlorides, heavy metal compounds and silicates lose their 'Zeta Potential Bond' and are released as a colloidal suspension in the flow stream.



Also during the ion exchange process a hydrogen atom is released from the water molecule. This hydrogen atom plates out on the adjacent surfaces of the pipe and the equipments to prevent corrosion. As the system is ground negative, hydroxyl ions form precipitable solids, while free oxygen ions are consumed in neutralizing anaerobic bacteria and algae.

What makes **ECOBEAM XL** different from the conventional Magnetic Treatment Devices (MTD) is the extremely high gauss magnetics and flux density focused as a beam in very high concentration, perpendicular to the flow of the liquids.



EcoBeam XL Water Treatment Systems in Japan

A Non-Chemical Water Treatment System

For the prevention and descaling of cooling systems, towers, boilers, heat exchangers, chillers, evaporative condensers, sour and main water lines, household water systems, ponds and ground water recovery systems.

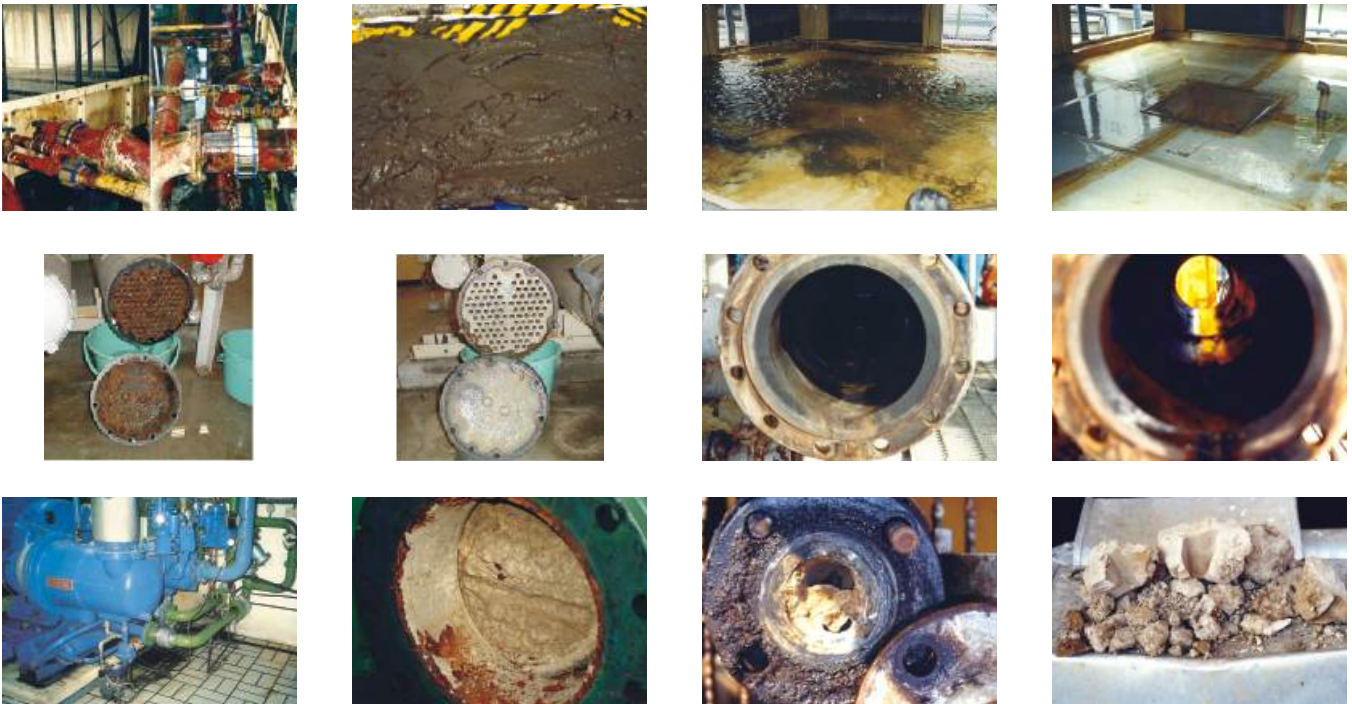
An economic system of structuring water for drinking purposes without compromising the mineral content of potable water. It, gives a softening effect to water by breaking it into smaller molecular clusters making it healthy, hydrating and ideal for endo- porin absorption.

An effective system that breaks up oxides for settlement in multi media, reducing the level of heavy metals and toxins in water.

A system that enhances permeation and salt rejection in reverse osmosis systems.

A system that enhances fuel efficiency on fuel lines and furnaces.

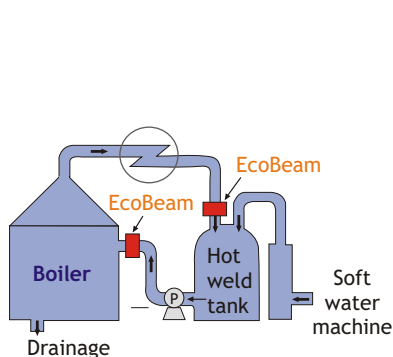
A system that enhances secondary oil recovery.



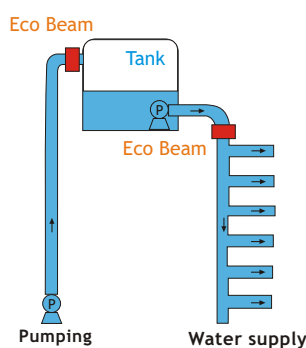
A Heat Exchanger/Cooling Tower System before and after installation of EcoBeam XL

Eco Beam XL Applications

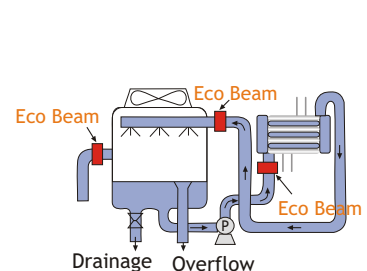
Boiler



Building - Apartment



Cooling Tower Heat Exchanger



A Non-Chemical Water Treatment System



EcoBeam XL Installation on a Jet PackClarifier and Automatic Valvless Gravity Filtration System with Capacity of 60m³ per hour



From Left to Right: An Ultra Filtration Plant with EcoBeam XL, an Arsenic Removal Plant in a Bottled Water Facility, a partially Solar Powered Desalination Plant, a Seawater Desalination Plant a Community Water Filtration Plant and an Exclusive Water Filtration Plant to selectively remove Flouride and Nitrites

Humanitarian



EcoTech provided over 160 tons of Mineral Water to Kashmir and Balakot in Pakistan within day of the October 2005 earthquake. In 2005, Ecotech also sponsored an expedition to Nara Desert (Sarasvati) Pakistan to survey water resources and train locals in improvised filtration techniques.

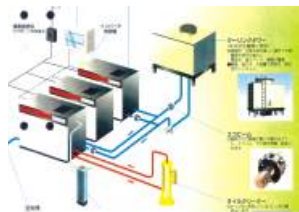
EcoBeam XL Series

The Science of Magneto Hydro Dynamics

Installations in Japan



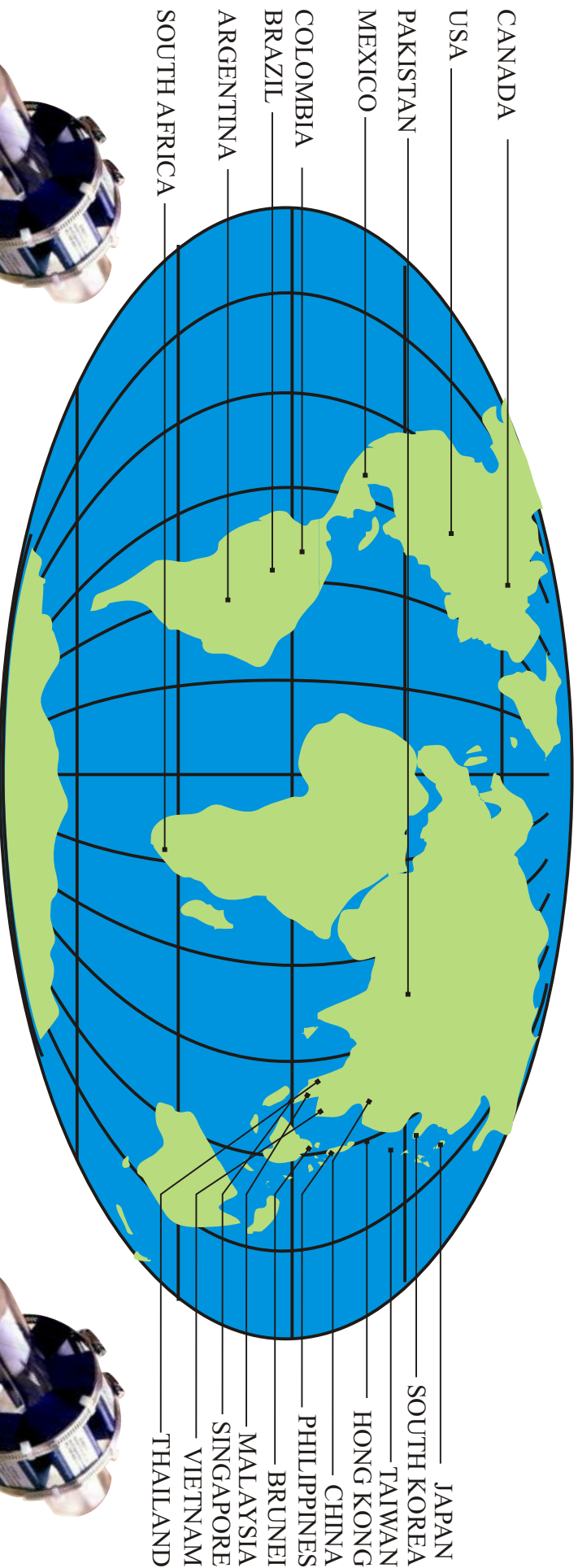
EcoBeam XL Series is the leading Non Chemical Treatment System in Japan, thanks to the efforts of our local Distributors, Koken Ltd, that we have over 5000 installations.



Left to Right: Hitachi regularly advertises our products in their own sales brochures. An Hitachi Co Generation Plant with EcoBeam XL and an environmentally friendly botanical pond installed with EcoBeam XL

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- TAIWAN
- HONG KONG
- CHINA
- PHILIPPINES
- BRUNEI
- MALAYSIA
- SINGAPORE
- VIETNAM
- THAILAND

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