

FREYTECH INC.

CONTROL CORROSION, SCALING, FOULING, & SLUDGE IN PIPELINES

In Any Type of Water
Piping and Oil Pipelines
In Real Time / Continuous /
Long-Term Basis Without
Electricity, Polymers or Other
Consumables

REDUCE BLOWER TIME
BY 50% IN WWTPs



ELIMINATES GHG
AND ODOR

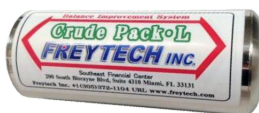


ENVIRONMENTAL
BALANCE DEVICE
(EBD TECHNOLOGY)

EBD Water Pack
45mm x 115mm



EBD Crude Oil Pack
45mm x 115 mm



EBD Ground Pack
110 x 110 x 8 mm



SCIENTIFICALLY VALIDATED

- Certified by the Ministry of Science and Innovation of Spain
- Certified "Safe to Use" by Florida International University (USA)
- Confirmed to reduce dissolved and suspended solids in ground/ surface water.
- Confirmed by Certified laboratories in USA, EU & Malaysia to effectively remediate municipal wastewater & sewage in septic tanks.



EFFICIENT & SCALABLE

- Installs in hours, not months
- Highly scalable for small to large-scale systems
- Service life of 15+ years with minimal maintenance



COST-EFFECTIVE & SUSTAINABLE

- Low-cost solution compared to traditional systems
- Operates without chemicals or electricity
- Saves up to 38% on electricity costs

www.Freytech.com

What it is: EBD systems are readily deployable units that enhance and expedite the bioremediation of accumulated sludge, scaling, fouling and biofilm in pipelines. EBD causes the REMOVAL of accumulated sludge, dissolved mineral deposits, fouling and biofilm in any kind of piping transporting any kind of water (drinking water, wastewater, gray water, sea water for desalination, hard water, well water, irrigation water). It also removes accumulated sludge, asphaltene and paraffin wax in oil pipelines. As these materials are falling out of suspension, and the biologicals are forming, EBD is enabling a supercharged bioremediation process degrading and eliminating them in real time. EBD is already in operation in a number of countries in the EU and North America in various applications and sectors on an industrial scale.

How it works: All matter is made up of atoms - tiny building blocks that include protons, neutrons, and electrons. Many natural and industrial processes depend on how electrons are transferred or shared, especially when it comes to pollution and environmental stress.

When air, water, or soil is polluted by chemicals, heavy metals, GHG or other contaminants, it becomes toxic to the beneficial microbes that help ecosystems stay balanced and self-cleaning. A major culprit behind this damage is something called "oxidative stress", which is often caused by excessive levels of unstable Reactive Oxygen Species (ROS). The unstable ROS molecules behave like microscopic wrecking balls, stealing electrons from other molecules and triggering a chain reaction that harms biological systems.

Much like antioxidants protect our bodies from oxidative stress, the Environmental Balance Device (EBD) system helps neutralize the effects of ROS in the environment, restoring microbial balance and promoting recovery.

EBD works by interacting with Earth's electromagnetic field as well as positively charged particles from the sun which are ever present in the atmosphere and in the ecosystem. These interactions influence the molecular and ionic behavior of material and liquids located within the EBD treatment zone, restoring balance and positively affecting redox reactions and microbial energy exchange. When installed in a polluted environment, EBD systems function to reestablish energy equilibrium, which in turn causes unstable and oxidizing ROS to stabilize thereby converting it back to healthy oxygen at the molecular level in air, water and soil.

Our team perfected the combination and integration of materials built into the EBD systems which reestablish energy equilibrium enabling ROS stabilization as well as resonance enhancement in all substances and liquids located within the EBD treatment zone. Enhanced resonance combined with oxygen stabilization triggers the native, indigenous microbes to secrete specialized and powerful degradative enzymes through biosynthesis. EBD induced enzymes enable the breakdown of the pollutants in the air as well as in the liquids being transported in pipelines into simpler and harmless elements. The EBD treatment zone also attracts native indigenous predatory microbes that feed on naturally occurring iron oxidizing bacteria thereby reducing corrosion on a continuous and long-term basis.

Applications: EBD units have small footprints (see above photos and dimensions) and are easily secured on top of the outer surface of any type and any size of piping made out of any type of material (steel, rubber, copper, PVC, HDPE, concrete, etc.). Working together in unison, they cause the biodegradation and removal of the substances accumulating on the inner walls and thereby clogging the pipe. In municipal wastewater treatment plants, EBD is so effective in causing the biodegradation of excess nutrient concentrations, that operators are able to decrease aeration blower time by half saving 38% in electricity expenditure. Municipalities that suffer from hard water (high levels of dissolved minerals) will see significant improvement in water quality. Residential and commercial water consumers will find that bathing water no longer causes any "itching" and soaps and detergents lather up much better. EBD systems are also used to effectively treat municipal wastewater and farm animal waste slurry while permanently eliminating associated bad odors. EBD technology is effective in removing and controlling the buildup of sludge, scaling & fouling in water piping used in boilers, groundwater wells, agricultural irrigation systems, desalination plants, cooling towers, residential and industrial appliances – in any application using poor quality water. Please contact us for more details and EBD applications.

Service Life: EBD system service life exceeds 15 years.

David F. Roberts, CEO of Freytech Inc., will give a technical presentation at the World Utilities Congress, Abu Dhabi, UAE on May 29, 2025, at 2:40 PM in Theater No. 1, Session No. 25. Will also exhibit in Booth/Stand # 650.
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