



EXO – GREEN TECHNOLOGIES

(AN ISO 14001:2015 AND MSME CERTIFIED COMPANY)



REDEFINING WATER TREATMENT FOR A SUSTAINABLE TOMORROW

COMPANY PROFILE

Welcome to Exo-Green Technologies Private Limited! 🌿

Formerly known as “Exo-Green Engineering Services” founded in 2022, We are a leading engineering firm specializing in innovative design solutions for wastewater treatment plants, STPs, ETPs, MBR, MBBR, and more. With a strong commitment to sustainability, we strive to create environmentally-friendly and cost-effective solutions that address the pressing challenges of wastewater management.

Our expert team of engineers leverages cutting-edge technology and years of experience to deliver tailor-made designs that optimize resource usage, minimize environmental impact, and ensure compliance with regulatory standards. Collaborating with diverse clients, we foster a cleaner, greener future, ensuring water resources are preserved for generations to come.

Join us in revolutionizing wastewater engineering for a more sustainable world! 🌍 💧

TECHNOLOGIES

1. CLOTMASTER
2. EXO-OXYGENATOR
3. EXODE-SCALER
4. FLOCMASTER
5. EXO-VORTEX COD BUSTER

CLOTMASTER

Advanced Water Treatment Solution

Welcome to the future of water treatment with CLOTMASTER- a revolutionary product designed to address multiple water quality challenges. Engineered for efficiency & effectiveness, CLOTMASTER specializes in -



Color Removal

CLOTMASTER is formulated to eliminate unwanted colorants in water, ensuring a clear and aesthetically pleasing appearance. Say goodbye to discolored water concerns with our advanced color removal technology.

TSS Removal

Combat impurities & suspended particles in water effortlessly with CLOTMASTER. Its powerful filtration system targets TSS, TSS, promoting crystal-clear water quality for various applications

Temporary & Permanent Hardness Removal

Tackle water hardness issues with precision CLOTMASTER not only addresses temporary hardness caused by calcium bicarbonate but also targets permanent hardness resulting from calcium sulfate & magnesium sulfate

Technical Specifications:

pH Range: Optimal performance in the pH range of 2.0 to 8.5

Dosage: Customizable dosage based on water quality and desired treatment outcomes.

Compatibility: Can be seamlessly integrated into existing water treatment systems.

Features and Benefits

Advanced Formulation: Clotmaster incorporates cutting-edge technology for superior performance.

Versatile Application: Suitable for vario water sources, including industrial, municipal & residential.

Rapid Action: Experience quick and effective results, ensuring min minimal downtime in water treatment process.

Usage Guidelines:

1. Determine water quality parameters
2. Calculate the appropriate dosage based on water volume & characteristics
3. Integrate CLOTMASTER into the water treatment process.
4. Monitor & adjust dosage as needed for optimal results

Applications:

1. Municipal Water Treatment
2. Industrial Processes
3. Residential Water Purification
4. Aquaculture and Agriculture



Transform your water treatment approach with EXG-AB- the ultimate solution for color removal, TSS removal and temporary and hardness removal permanent

EXO-OXYGENATOR – Revolutionizing Aeration Systems



We take great pride in unveiling our groundbreaking Exo-Oxygenator, a revolutionary system that goes beyond conventional boundaries, seamlessly integrating aeration, degassing, circulation, and mixing into a single, advanced solution. This cutting-edge technology operates on a unified energy source, providing unmatched versatility and cost-effectiveness across a wide spectrum of wastewater applications.

SPEARHEADING WASTEWATER EXCELLENCE

1. High Dissolved Oxygen Transfer Rate:

The Exo-Oxygenator utilizes nozzles that harness ambient air at 2.5-3 times the water volume pumped, generating micro-bubbles with an unparalleled dissolved oxygen transfer rate.

2. Energy Efficiency at Its Core

Employing an innovative Push-Pull system, the Exo-Oxygenator achieves complete circulation and de-stratification with remarkable energy efficiency. Realize energy savings of up to 50%, surpassing traditional methods by eliminating the need for compressors and diffusers.

3. Customizable Processes

Seamlessly integrate additional processes such as fine-protein removal and water temperature control using the Exo-Oxygenator's unified energy source. This adaptability ensures a comprehensive solution tailored to specific water management needs.

4. Optimal Nozzle Placement:

Placing nozzles at the water's bottom not only enhances dissolved oxygen transfer but also prevents solids buildup, minimizing problematic areas that could generate hydrogen sulfide. This thoughtful design contributes to the overall efficiency of the system.

5. Simplified Operation and Minimal Maintenance

With pumps being the sole moving part, the Exo-Oxygenator ensures straightforward operation and minimal maintenance. The aeration injectors are crafted from non-corrosive materials, guaranteeing durability and reliability.

6. Retrofitting Solutions for Industry Advancement

Retrofitting industrial applications with the Exo-Oxygenator yields substantial energy savings of up to 50% or more. This marks a long-awaited, sustainable solution for a diverse range of water management needs.

EXO-OXYGENATOR TECHNOLOGY VS TRADITIONAL

1. Efficient Oxygen Transfer

Achieve high air/water ratios without blowers or compressors, outperforming diffused air and venturi aeration methods.

2. Fine Bubble Formation

Maintain a fine bubble size (1.5 - 3 mm average) without the need to reduce diffuser pore size, leading to lower energy consumption.

3. Super Saturation Capability

The Exo-Oxygenator can achieve super saturation, providing superior performance in saturating water with air/oxygen/gas.



EXODE-SCALER

Electronic Water Treatment System



Introducing the ExoDe-Scaler, an advanced electronic water treatment system designed to revolutionize water quality management. Powered by cutting-edge electromagnetic technology, the ExoDe-Scaler effectively prevents scale, eliminates bacteria and algae, and provides robust rust resistance and corrosion prevention. Its compact design, energy efficiency, and environmental compatibility make it a superior choice for a wide range of applications.



Applications

1. Refrigeration circulating water systems
2. Air-conditioning industrial cooling circulating water systems
3. Heat transfer and cooling systems in hot water boilers, vegetable stoves, bathing rooms, and swimming pools
4. Automotive Industry: painting, paint, and paint filtration
5. Electronics Industry: process water pre-treatment, tape coating agents, and air pre-filtration
6. Food and Beverage Industry: clarification and filtration of fruit juice, mineral water, milk, wine, vinegar, edible oil, syrup, etc.
7. Petrochemical, Pharmaceutical, and Chemical Industries: particle removal filtration for lubricants, chemicals, oils, hot solvents, phosphate paints, etc.
8. Biopharmaceutical Industry: biology and fermentation, filtration of medical water, flushing water, high viscosity, cosmetics, etc.
9. Environmental Protection: industrial and domestic water, textile and paper wastewater, metal cutting fluid, cleaning agent filtration.
10. Printing, Furniture Industry: ink, paint, resin, wax filtration.

Working Principle

The ExoDe-Scaler utilizes a composite alternating current technology inspired by electromagnetic theory. This physical method alters the physical structure of water without changing its chemical composition. By disrupting calcium carbonate and magnesium carbonate formation, preventing scale buildup, and creating turbulence to destroy cell walls, the ExoDe-Scaler ensures optimal water quality.

Product Features

1. Compact design, cost-effective, easy installation, and operation.
2. Automatic intermittent operation, energy-saving (>60%)
3. Sterilization rate up to 98%, with magnetization health benefits.
4. Anti-scaling and descaling rate $\geq 99\%$
5. No pollution to water quality and the environment
6. Fully automatic operation, stable and reliable working.

PRODUCT PARAMETERS

1. Product Name: ExoDe-Scaler Electronic Water Treatment System
2. Power Supply: 220V/50Hz
3. Scale Prevention: $\geq 99\%$
4. Working Pressure: 1.0Mpa/1.6MPa
5. Water Temperature: ≤ 90 degrees Celsius
6. Sterilization Efficiency and Algae Killing: $\geq 98\%$
7. Water Quality: Hardness $\leq 1000\text{mg/L}$ (for CaCO_3)

FLOCMASTER

The Advanced Flocculation Solutions



Flocmaster is an advanced water treatment solution that combines the benefits of mineral and organic coagulants in a single product. This unique blend enhances overall performance by simplifying treatment processes and reducing complexity. Flocmaster efficiently tackles both organic and inorganic contaminants, offering versatility and potential cost savings. For specific information on composition and application, refer to the product documentation or consult the manufacturer.



Basic Principle of Flocculation

Flocculation is the crucial step where destabilized colloidal particles, formed during coagulation, are assembled into aggregates. It operates on water/wastewater where particles are already destabilized by coagulation.

Flocculation Mechanism

Flocculants, characterized by high molecular weights and charge content, fix destabilized particles and aggregates along the polymer chain. During flocculation, particles in the water phase increase in size, forming flocs.

Bond Types

Ionic bonds and hydrogen bonds play a key role in bonding destabilized particles to the flocculant.

Charge Selection

Anionic flocculant (-) for mineral particles.
Cationic flocculant (+) for organic particles.
Tailored charge selection based on the nature of destabilized particles in the water.



ADVANTAGES

- Lower dosage, reduced sludge volume, no impact on pH or Titration for Hardness (TH).
- Effective coagulation with minimal impact on pH.
- Lower dosage, lower sludge volume, suitable for various water sources.
- Minimal hydroxide formation, pH-neutral operation.

FLOCMASTER FLOCCULANTS RANGE

A. Flocmaster-A

- Anionic and Non-Ionic Flocculants
- Solid Form
- Emulsion Form
- Application: Bring negative (-) charges to the media.

B. Flocmaster-B

- Cationic Flocculants
- Solid Form
- Emulsion Form
- Application: Tailored for positive (+) charges to the media.