Electrocoagulation Technology Fact Sheet

Specific Features

- Turnkey stormwater treatment system with integrated treatment and filtration
- Industry-leading electrocoagulation technology with Wavenetics cell design
- Single-pass, flow-through design
- Scalable electrochemical dosing
- Automated flow-based dose control with voltage and current monitoring
- On-board media filtration system
- Automated management to control anti-scaling & anti-fouling performance

Additional Available Features

- Real-time water quality monitoring and reporting
- System status data logging & alerts via email notification
- EagleEye™ web portal for remote status and site management
- Multiple electrode configurations available
- Integrated pH management
- Solids separation and filtration incorporated into PLC
- Programmable Logic Controller (PLC) with 12" touch-panel display

MANUFACTURING STANDARDS

UL508 Electrical Standards
Class 1 Div, Class 2 Div Available
CSA/CE Available
International Voltage Options

CONFIGURATION OPTIONS

Skidded: 50 to 100gpm

OPERATING RANGES

Temperature: 32 to 140°F
Conductivity: Up to 100,000+ µs/cm
pH: 2 to 12 s.u.


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What is Electrocoagulation?

Electrocoagulation (EC) is a broad-spectrum treatment technology that removes total suspended solids, heavy metals, emulsified oils, bacteria, and other contaminants from water.

**How It Works**

As water passes through the electrocoagulation cell, multiple reactions take place simultaneously. First, a metal ion is driven into the water. On the surface of the cathode, water is hydrolyzed into hydrogen gas and hydroxyl groups. Meanwhile, electrons flow freely to destabilize surface charges on suspended solids and emulsified oils. As the reaction continues, large flocs form that entrain suspended solids, heavy metals, emulsified oils, and other contaminants. Finally, the flocs are removed from the water in downstream solids separation and filtration process steps.

**Treatment Steps for Ultimate Effect**

Electrocoagulation can be integrated into new or existing treatment processes. Depending on the application, the final solids separation steps can be accomplished using settling tanks, dissolved air flotation, media filtration, ultrafiltration and other technologies to achieve water quality goals.