



Compact Waste Water Treatment Plant

VABEC

ELECTRO-COAGULATION UNIT

Low power requirements


High reduction on operating costs

Low maintenance

High efficiency results

Low Chemical additions

CE CE Certified

 Possibility of Water Recovery

\$ Low Cost



TECHNOLOGY

Electrocoagulation Technology is an electro-chemical process that removes suspended, emulsified or dissolved contaminants from water by using an electrical current instead of expensive chemical reagents. It utilizes a direct current to cause a split off or free metal ions into the liquid medium from sacrificial anodes and cathodes, that will remove undesirable contaminants either by chemical reaction and precipitation or by causing colloidal materials to coalesce and then be removed by electrolytic flotation. The most common plate materials are iron and aluminum. These metal ions tend to form metal oxides that electro-chemically attract to the contaminants that have been destabilized, producing insoluble oxides and hydroxides - floc - that are easily separated from the clear water.

TARGET AREAS

The electrochemical system has proven to be able to deal with a variety of wastewaters. Several wastewaters that cannot be treated with standard coagulation/flocculation processes, or turn to be very expensive to be treated by that technology, have successfully been treated with the electro-coagulation process. It has been used to remove complex organics, fats, oil and grease, break oil emulsions and processes multiple contaminants. Waters coming from detergent production industries, chemical or pharmaceutical industries, oily waters, textile and dye industry, metal plating, and many others, have been treated with electro-coagulation technology with consistent and reliable results, with significantly less operation costs than alternative technologies, with low power consumption, generally with no chemical additions and with a capital cost much less than other alternative technologies.



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Innovating
Technology
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FEATURES

Compact and pre-assembled electro-coagulation unit, composed by oxidation cell, entirely constructed in PP (polypropylene), equipped with electric current rectifier for current supply.
 VABEC® cells are simple units, easy to install, light and small, with no significant running costs, equipped with electrodes easy to find in the market and easy to replace at any time.
 VABEC® cells special configuration allows the adjustment of the number of plates and distance between plates, allowing a fine tuning on power and current relation. It can run either on iron, aluminum and stainless steel electrodes, with 4 mm thickness, with independent coupling to the electrical current rectifier. The cell is a compact, closed structure, made in PP and PVC, equipped with a removable cover, a foam prevention, discharge system, and a draining valve. It features all CE safety requirements.

Technical Data

Model: VABEC 250E60	N° electrodes: 60 (allow up to 80)	Current Density: 150-250 to 20-100 A/m ²
General Dimensions: 980 x 810 x 950 mm	Electrodes thickness: 4mm	Electrode type: Fe, SS, Al
Volume: 250L	Flow rate: from 1 m ³ /h/module	Manufacturing: Body – PP Cover – PP / PE, ventilated
Connections: Inlet/outlet - PVC/PP DN40	Effluent volume ration (S/V): up to 20 m ² /m ³	

This data is only for reference, dimensions and technical specifications might change without notice, in order to improve equipments and equipment efficiencies.