

# **RGF**<sup>®</sup> **ESP**

ENVIRONMENTAL GROUP

*RGF's Advanced Emulsion Splitting and Encapsulation Treatment System*

**ESP 250**



**ESP 100**



**ESP 400**  
**ESP 600**



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## ADVANTAGES

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- RGF** is the Recognized Leader with thousands of systems installed world wide since 1985.
- RGF's** system integrators will provide application engineering and regulatory expertise.
- Multiple safety system controls.
- Handles a wide range of waste
- Waste Stream Specific Chemical encapsulation agents.
- Free Water and Operating Cost Analysis
- State-of-the-art controls
- Auto self-cleaning Process Tank
- RGF** is a Total Service Company from planning to operation. Environmental systems are our only business.
- Best warranty in the industry
- Low operating cost
- Free pilot studies & testing
- Fully automatic, easy-to-use, versatile
- Meets National Electric Code for indoor maintenance facilities.
- Typical filter cake meets T.C.L.P. standards
- Computerized process and safety system

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## APPLICATIONS

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**The ESP Systems are designed to treat or recycle waste streams from industries such as:**

Latex manufacturing plants	Parts washing waste	Grinding fluids
Paint and die manufacturers	Oil water emulsions	Detergent emulsions
Carpet manufacturing plants	Silk screen painting	Paint spray booths
Glue manufacturing plants	Creosote plants	Floor scrubber waste
Texture coatings manufacturers	Dioxin	Carpet cleaning waste
Metal working coolants		

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## OPERATION

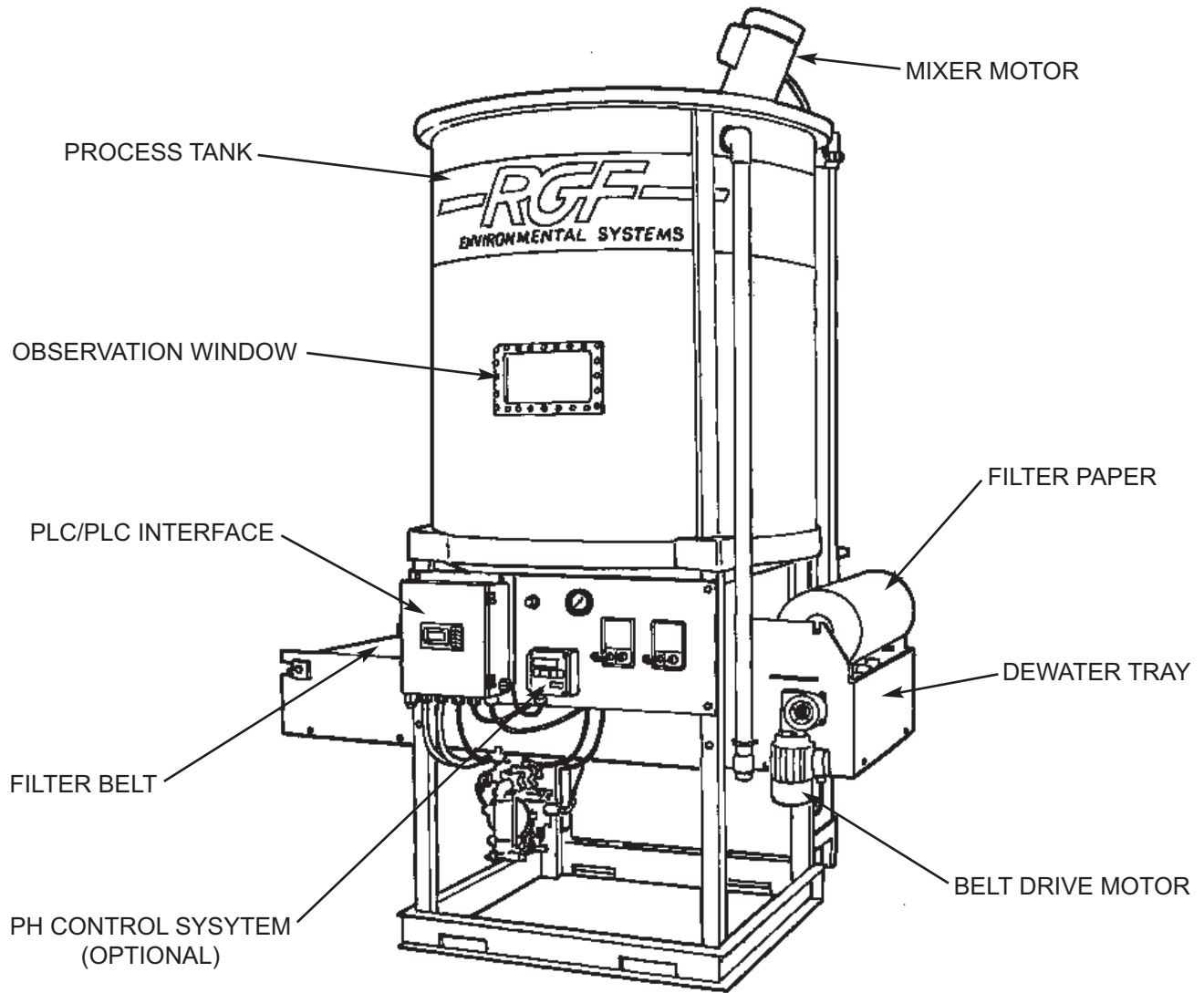
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The collected wastewater is stored in a holding tank (optional) after free oils and heavy solids have been removed. The water is then automatically transferred to the ESP System processing tank. The Water is pre-mixed with the QF Series Floc which is added automatically. The programmed mixing cycle creates a rapid floc which separates and then encapsulates the contaminants removing them from the water. The encapsulated material is then allowed to settle, separating the solids from the water. The now filterable sludge is dispensed to a filter belt for dewatering. The filter belt is automatically advanced when the filter becomes clogged. The filtered water is collected in a tray and directed to discharge or collection. The collected and dried sludge in many cases meets disposal standards for non-hazardous landfills and T.C.L.P. tests. It is recommended that EPA toxicity tests be conducted to determine the leachability of individual filter cakes.

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# ESP

ESP 250 SHOWN



## SPECIFICATIONS

MODEL	ESP-100	ESP-250	ESP-400	ESP-600
TREATMENT CAPACITY	100	250	400	600
TREATMENT TYPE	BATCH	BATCH	BATCH	BATCH
AIR SUPPLY	100 psi @ 20 SCFM	100 psi @ 20 SCFM	100 psi @ 35 SCFM	100 psi @ 35 SCFM
PROCESS CONTROL	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC
FLOCCULANT	QF SERIES	QF SERIES	QF SERIES	QF SERIES
ELECTRICAL	220 VOLT 1 PHASE 20 A	220 VOLT 1 PHASE 20 A	220 VOLT 1 PHASE 25 A	220 VOLT 1 PHASE 30 A
SUMP PUMP	1/2 HP 115 V 7.2 A	1/2 HP 115 V 7.2 A	1/2 HP 115 V 7.2 A	1/2 HP 115 V 7.2 A
DIMENSIONS	6'H X 7'W X 6'D	8'H X 7'W X 5'D	12'H X 8'W X 7'D	12'H X 8'W X 7'D
FILTER PAPER		50 MICRON	50 MICRON	50 MICRON

MANUFACTURER RESERVES THE RIGHT TO MAKE CHANGES WITHOUT NOTICE.

## The Process

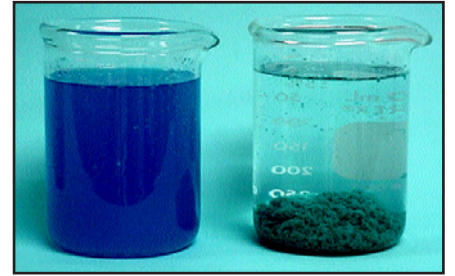
**QF Series Encapsulate** removes contaminants from the wastewater by adsorption. Shown below are three typical waste streams that have been treated with the QF Encapsulate. The resulting sludge is removed and the treated, clear water is either sent to discharge or can be reused. The QF Series Encapsulate is designed to adsorb the constituents into a non-leachable material that can be disposed of to a non-hazardous landfill. Results are a clear product, no hazardous sludge disposal costs and assurance of proper treatment. With the ESP Systems automation, hands on operation is virtually eliminated.



Metals



Emulsified oils



Ink & paint waste

## The Company



### Innovation

Since 1985 RGF has maintained a steady flow of award winning innovative pollution solutions. RGF has been awarded national recognition as a recipient of the Inc./MCI Customer Service Award.



### Design

Our technical staff consists of the following specialists: biological, mechanical, chemical, waste treatment, construction engineering, nuclear, fabrication, design, and environmental law. Our AutoCAD service provides fast, accurate designs.

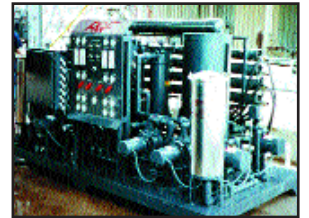


### Ozone Technology

RGF has been a leader in ozone technology since 1985. We developed an advanced catalytic oxidation system that combines UV light with ozone to create a hydroxyl radical for total organic oxidation. Our Photoionization process has been approved by the USDA / FDA / FSIS for food processing.

### R & D

RGF maintains a Research and Development staff that is involved in EPA / USDA / FDA / EPRI and University Environmental Studies. Our staff continuously develops system improvements and new products. RGF personnel have been published in over 60 national journals and textbooks.



### Custom Applications

RGF's award winning engineering team custom designs systems for wastewater recycling, ozone, pesticides, marine, and laundry treatment.



### Lab

RGF maintains a state-of-the-art analytical lab, which will provide free water testing for as long as you own your RGF system. This assures our customers that, should your waste stream change, you will be able to make the appropriate modifications to meet your needs.



### Patented Technology

RGF has been a leader in patented Environmental Technology.



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3875 Fiscal Court West Palm Beach, Florida 33404 USA  
800 842-7771 Fax 561 848-9454 www.rgf.com

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