

RGF's Advanced System for **Dry Chamber Flash Evaporation by Thermo-Oxidation** for Complete (100%) Elimination of Wastewater and Waste Oil...



TO-30



TO-60



TO-150

ADVANTAGES

- **RGF** is the Recognized Leader with over 20,000 systems installed world wide since 1985.
- Less than 1 year return on investment.
- **RGF** Customer Service is second to none which was proven by winning the INC. Magazine Positive Performer Award for Outstanding Customer Service.
- Wetted surfaces are Non-Ferrous - eliminating rust and corrosion problems.
- Pre-wired, fully automatic, versatile, and easy to use.
- Meets National Electric Code for indoor maintenance facilities.
- Operates on natural gas and liquid propane gas. The system can be configured to use no. 2 fuel oil or waste oil with optional waste oil burner.
- Easiest system on the market to clean, waste is dry ash.
- **RGF's** system integrators will provide application engineering and regulatory expertise.
- Meets stringent NFPA86 Fire Safety Code requirements.
- No sewer connection required. No NPDES permits needed.
- Evaporation rate is not dependent on air humidity or temperature of liquid.
- Written cost per gallon guarantee.
- Multiple safety system controls.
- Will reduce water-based contaminant's by 100%.
- Cost as low as \$0.03 per gallon for fuel (can actually save money when waste oil is used).
- Will eliminate disposal cost and/or sewer discharge.
- Handles a wide range of waste
- Total waste stream analysis performed during evaluation.
- **RGF** is a Total Service Company from planning to operation. Environmental Systems are our only business.

APPLICATIONS

The **RGF ENVIRONMENTAL Systems Thermo-Oxidizer** is designed for **Waste Disposal Applications** such as ...

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|-------------------------------|-------------------------------|---------------------------|
| ▪ Petroleum Hydrocarbon Waste | ▪ RO, NF, UF Concentrators | ▪ Floor Scrubber Water |
| ▪ Die Casting | ▪ Tumbling Solutions | ▪ Plating Solutions |
| ▪ Alkaline Cleaners | ▪ Waste Haulers | ▪ Textiles |
| ▪ Machinery Coolants | ▪ Process Wastewater | ▪ Heavy Equipment |
| ▪ Compressor Wastes | ▪ Printed Circuit Board Waste | ▪ Food Processing |
| ▪ Ink and Paint Waste | ▪ Tanker Cleaning | ▪ Manufacturing Processes |
| | ▪ Snow Plow Salt Waste | |

CONCEPT

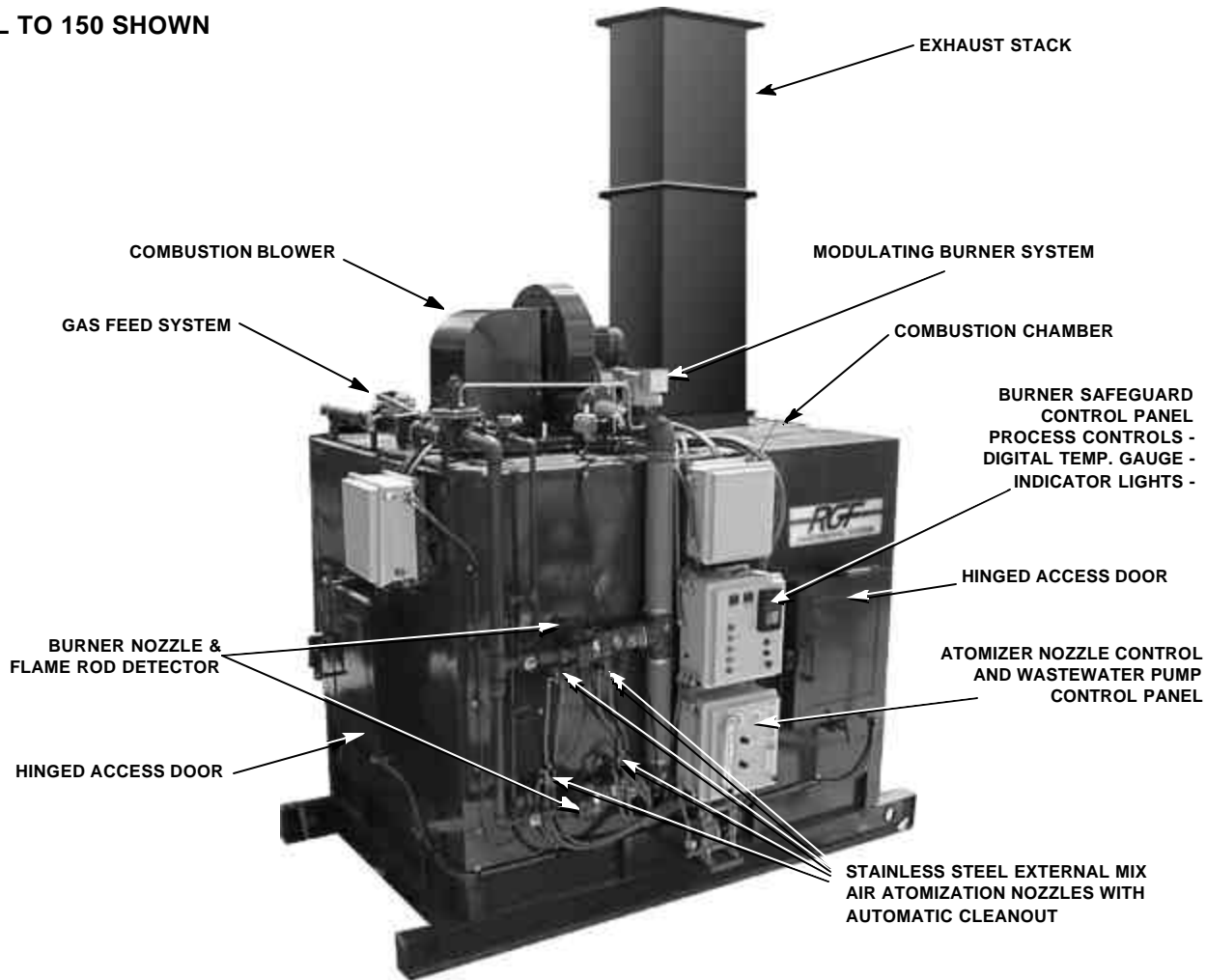
The **RGF Thermo-Oxidizer** is designed to completely evaporate liquid waste, leaving only a dry ash residue. By automatically controlling the combustion temperature, maximum efficiency is achieved. This results in fuel costs as low as \$0.03 per gallon. **RGF** utilizes a cast ceramic refractory for all combustion chamber surfaces to eliminate corrosion and metal failure. By utilizing the optional waste oil burner, the system can eliminate both waste oil and wastewater.

PROCESS

The **RGF Thermo-Oxidizer** is controlled by a combination PLC and UL approved microprocessor based Flame Safeguard Controller. Visual confirmation of the Thermo-Oxidizer status is provided by LCD displays, indicator lights, and digital temperature displays. The stainless steel burner nozzle provides the energy necessary for the waste water evaporation. A pump pressurizes the wastewater for injection into the air atomization nozzles. The waste water stream is thereby atomized directly into the combustion chamber where it is completely evaporated.

THERMO-OXIDIZER

*MODEL TO 150 SHOWN



SPECIFICATIONS

TO-150

DIMENSIONS - excluding stack	6"Wx 10'-6"L x 8'-10"H	COMBUSTION BLOWER MOTOR	5 hp
CHAMBER VOLUME	118 Cubic Ft.	AIR SUPPLY REQUIREMENTS	46 SCFM @ 120 psi
DISPOSAL RATE	0 to 150 GPH	OPERATING RANGE	800° - 1,400° F
ELECTRICAL REQUIREMENTS	480 VAC 3 phase 15 amp, 110 volt, 15 amp	BURNER SAFEGUARD CONTROL	UL, CSA Listed, FM and IRI Approved NFPA 86 Rated
WEIGHT (APPROX.)	23,000 lbs.	GAS PRESSURE	2.0 psi
CONSTRUCTION	3/16" Steel Plate	EXTERIOR FINISH	High Temp. Two Part Polyurethane paint
PROCESS FEED PUMP	0 - 2.5 GPM		

TO-60

DIMENSIONS - excluding stack	6'-6"W X 6'-0"D X 8'-10" H	COMBUSTION BLOWER MOTOR	2 h.p.
CHAMBER VOLUME	80 Cubic Ft.	AIR SUPPLY REQUIREMENTS	26 SCFM @ 120 PSI
DISPOSAL RATE	60 gph	OPERATING RANGE	800° - 1,400° F
ELECTRICAL REQUIREMENTS	220 VAC, 20 Amps, 1 or 3 phase	BURNER SAFEGUARD CONTROL	UL, CSA Listed, FM and IRI Approved NFPA 86 Rated
WEIGHT (APPROX.)	11,000 LBS.	GAS PRESSURE	1.5 psi
CONSTRUCTION	3/16" Steel Plate	EXTERIOR FINISH	High Temp. Two Part Polyurethane paint
PROCESS FEED PUMP	0 - 1 GPM		

TO-30

DIMENSIONS - excluding stack	5'-2"W X 7'-2"D X 7'-10" H	COMBUSTION BLOWER MOTOR	1/ 2 h.p.
CHAMBER VOLUME	58 Cubic Ft.	AIR SUPPLY REQUIREMENTS	16 SCFM @ 120 PSI
DISPOSAL RATE	30 gph	OPERATING RANGE	800° - 1,400° F
ELECTRICAL REQUIREMENTS	110 VAC, 20 Amps, 1 phase	BURNER SAFEGUARD CONTROL	UL, CSA Listed, FM and IRI Approved NFPA 86 Rated
WEIGHT (APPROX.)	9,000 LBS.	GAS PRESSURE	1.5 psi
CONSTRUCTION	3/16" Steel Plate	EXTERIOR FINISH	High Temp. Two Part Polyurethane paint
PROCESS FEED PUMP	0 - .5 GPM		

