

Pollution file

Reeco

REGENERATIVE ENVIRONMENTAL EQUIPMENT CO., INC.

YOUNG INDUSTRIAL PARK • MUNCY, PENNSYLVANIA 17756

SUBJECT: FUME & ODOR CONTROL

Did you see our insert in POLLUTION
ENGINEERING?

For complete information use the reply
card.

May we help you?

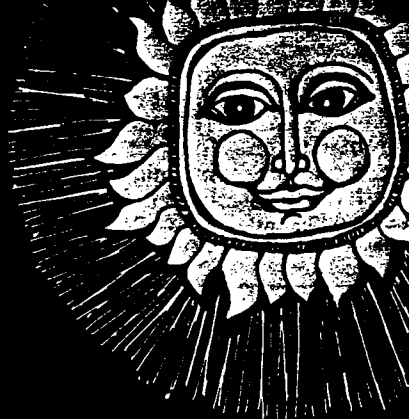
Cordially,
REECO

James H. Mueller

James H. Mueller
President

DSW 588193

STLCOPCB4093529



Let's clear the air.

- 1 Fuel Cost is Normally the Greatest Cost.
- 2 RE-THERM is Low Total Cost Pollution Control.

REECO RE-THERM Fume and Odor Control

REECO RE-THERM PROVIDES LOW TOTAL COST FUME AND OXIDATION OF CONTAMINANTS

REECO RE-THERM is a top that reflects the heat within, providing a reliable thermal oxidation system for efficient removal of fumes and odors. Overall design features allow for maximum use of low-cost standard and proven industrial components for total system reliability.

REECO RE-THERM's modular design provides flexibility in size of installation and for system expansion as required. The system features a forced

common afterburner, afterburner with energy recovery, and the REECO RE-THERM System. The cost saving of the RE-THERM System, within the first year, is significant.

REECO RE-THERM SYSTEM	
Model 1	\$17,253
Model 2	11,846
Model 3	11,357
Model 4	12,500
Model 5	232,550
Model 6	255%

Initial equipment costs can be misleading.

Table One compares total cost for owning and operating types of equipment available:

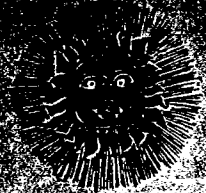
BUSINESS REPLY MAIL

NO POSTAGE
NECESSARY
IF MAILED
IN THE UNITED STATES

REECO
CORPORATION, INDUSTRIAL EQUIPMENT CO., INC.
P.O. BOX 1000, PITTSBURGH, PA. 15201

FIRST CLASS
Permit No. 10
Pittsburgh, Pa.

DSW 588194



low fuel costs... low total cost.

FUEL COSTS... MAKE THE BIG DIFFERENCE

Fuel usage is the greatest single factor of operating cost for thermal oxidation equipment. The RE-THERM System offers extremely high thermal recovery efficiency and, therefore, low fuel consumption — low total operating cost.

Table Two shows fuel cost comparisons for: the RE-THERM Thermal Regenerative System, common afterburner, and afterburner with a tube-type metal heat exchanger.

Available Energy

Energy normally quoted for natural gas or oil is based on that which is theoretically available. This theoretical value, known as the higher heating value (HHV) of the fuel,

is normally in the range of 1,000 BTU/FP for natural gas, and 140,000 BTU/Gal. for No. 2 fuel oil. The HHV is NOT the energy available to do work!

Two losses occur in the combustion and utilization of fuel. (1) the latent heat loss which is that energy used in the chemical combustion of the fuel, and (2) the sensible heat loss which is that energy lost due to the temperature of the exhaust gases. These two losses (latent and sensible heat) represent 42% of the natural gas gross energy for a common afterburner exhausting at 1500°F. The comparable RE-THERM losses are less than one-half of the afterburner.

	RE-THERM SYSTEM
10,000 SCFM	
80%	
200°F	
1500°F	
400°F	
260°F	
2,808,000	
4036	
\$0.88	
18%	
82%	
\$3.305	
	\$2.91
	\$11,640
	86%
	\$70,600

☐ I have an application for the **Reeco**
RE-THERM FUME & ODOR CONTROL SYSTEM

This is a ☐ NEW ☐ EXISTING installation

Application: _____

Contaminates: _____

System Volume: _____ SCFM

Water in Process Gases: _____ LB/HR

No application, but please send literature.

Name _____ Title _____ Company _____

Address _____ City _____ State _____ Zip _____

Energy Crisis & NOx

The increased demands on our natural resources are raising fuel costs and limiting availability — thus having an ever greater effect on equip-

ment operating costs. RE-THERM offers typical fuel savings of 86%. Another anti-pollution factor of the system's lower fuel consumption is lower oxides of nitrogen emissions to the atmosphere.

RE-THERM — HIGH-EFFICIENCY OPERATION

The basic operation of the RE-THERM System is shown starting with Diagram A. Purification is accomplished by having the process fumes ① enter through an inlet damper ② and flow through a pre-heat chamber ③ which had recovered thermal energy during a previous cycle. The pre-heat chamber raises the temperature of the gases prior to their entering the purification chamber ④ where fumes and odors are destroyed. After purification, clean gases pass through the energy recovery chambers ⑤, where eighty percent of the thermal energy is recovered. The purified gases ⑥ then exit through the outlet dampers ⑦.

This procedure is then repeated, with the damper sequence rotating to the next energy recovery chamber to be used as the pre-heat chamber.

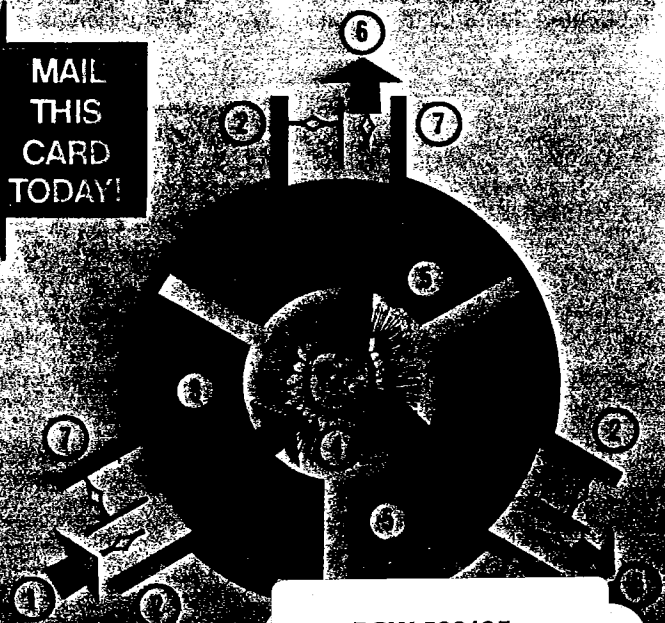
In actual operation the flow through the pre-heat/energy recovery chambers is dependent on the size of the equipment and the number of chambers incorporated.

1.8 Seconds at 1600°F

The average time gases are in the purification chamber, at rated conditions, is approximately 1.8 seconds. This extended period of time provides higher purification levels by the classic Time - Temperature - Turbulance concept.

- ① PROCESS FUMES
- ② INLET DAMPER
- ③ PRE-HEAT CHAMBER (Energy Recovery Chamber)
- ④ PURIFICATION CHAMBER
- ⑤ ENERGY RECOVERY CHAMBER
- ⑥ PURIFIED GASES
- ⑦ OUTLET DAMPER

MAIL
THIS
CARD
TODAY!



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