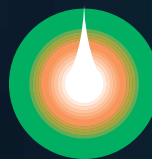


**RESIDUAL FUEL ADDITIVE**

## Naturally Intelligent.

A simple solution is always smart. Operators of boilers and process heaters are continually challenged to improve their efficiency while reducing harmful emissions. ORYXE Energy's breakthrough residual fuel additive, ORYXE™ RFT, does both. Derived from naturally occurring materials, ORYXE RFT is scientifically proven to reduce particulate matter. Plus, ORYXE RFT enhances fuel efficiency. Creating cleaner air, improving fuel performance and thoughtfully reducing your operating costs. Very intelligent, indeed.



**ORYXE  
ENERGY**  
The New Nature of Fuel.®

[www.oryxe.com](http://www.oryxe.com)

# Solving the Emissions Problem.

Operators of residual oil-fired plants will experience reduced black smoke emissions from their exhaust stack and improved overall efficiency with the use of ORYXE Energy's residual fuel additive technology, ORYXE™ RFT. The efficiency improvement, ranging from 2 to 6%, often offsets the cost of the additive, thus providing users with an emission reduction program that requires no large capital expense and little to no operational expense.

Unlike most conventional combustion additives, ORYXE RFT significantly reduces PM (Figure A), while simultaneously reducing NOx, CO and CO<sub>2</sub>. NOx is typically reduced by 34%, CO by 50% and CO<sub>2</sub> by 23%.

## Particulate Matter (PM) Reduction

Figure A

% O <sub>2</sub> Present	% PM Reduction
4.5	63.0
7.0	50.0

Results from IPT Test Report, São Paulo, Brazil

## Total Heat Output Per Barrel of Crude Oil

Figure B



Results from Major Refiner Field Test

ORYXE Energy's proprietary technology also creates a shorter, more intense flame close to the burner. The flame provides a greater heat release earlier in the combustion zone, allowing more time for heat transfer to take place and thus increasing heat transfer efficiency. This process is evidenced by an increase in the total heat output and an increase in the total heat absorbed (Figure B). The visible change in flame intensity (Figure C) also provides evidence of the efficiency improvement.

## Visual Flame Change

Figure C

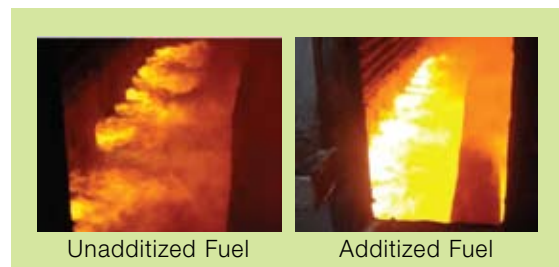


Image from Major Refiner Field Test

## A Natural Solution.

ORYXE RFT is based on naturally occurring chemical processes, and contains a proprietary, renewable ingredient that is biodegradable and non-toxic.

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