

# **Enerteck Chemical Corporation Company Presentation**

July 15, 2013







Enerteck Chemical seeks to promote more efficient diesel fuel consumption and control of the associated emissions from that process through the application of their products.

The company has two primary products, *EnerBurn®* Diesel Fuel Catalyst and *PEx* (Particulate Extraction Technology).

EnerBurn® is a proven diesel fuel catalyst whose primary benefits are;

- > Improvement in fuel efficiency
- Reduction in emissions
- Prolonged useful life of equipment

**PEx** is a new product whose primary function is to reduce the particulates from the exhaust cycle of heavy duty diesel engine applications. PEx was designed to bring Tier 1 diesel engines to Tier 2 or higher emissions compliance. Our final testing for CARB approval is slated to be completed by the end of August 2013 and when proven successful, we expect CARB approval for this product shortly thereafter.





## **EnerBurn® Diesel Fuel Catalyst**

**EnerBurn**® has been proven successful in a variety of industrial applications through field testing of equipment under live conditions. Proving a technology while it is in use in the equipment's normal course of use is vital to proving the benefits to the customer.

We currently have customers using *EnerBurn®* to reduce their fuel consumption and control their emission output in the following industries.

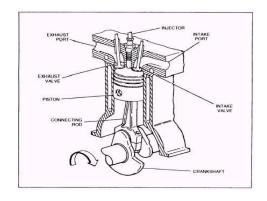
- Inland Marine Towing
- Ocean Marine Towing
- Marine Container Shipping
- Oil Field Services
- Heavy Duty Construction
- > Short Haul Railroad
- Diesel Fueled Electricity Generators

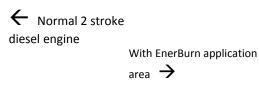


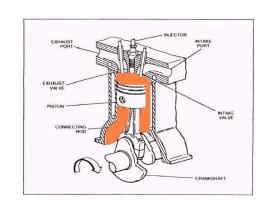




EnerBurn® works by conditioning the combustion chamber surfaces with a nano-scale catalytic coating that doubles the rate of combustion. This causes higher pressure earlier on crank angle which allows the engine to produce more work (HP) with the same amount of fuel. With the work load being the same, this translates into greater fuel efficiency (gph). Because of increased work conversion caused by earlier pressure on crank angle, the exhaust temperature of the engine is reduced by approximately 40-44 degrees F. The emission benefits are achieved due to a More Complete Combustion, Lower Operating Temperature, and Lower Overall Pressure. This accounts for the Reduction of Unburned carbon being released via the exhaust and back into the oil as soot.













# **Product Benefits**

- Improved Fuel Efficiency
- Reduces Equipment Downtime
- Reduces Oxides of Nitrogen (NOx)
- Reduces Stack Emissions
- Reduces Lube Oil Consumption

# **Benefit Range**

- Proven from 7-12%
- Average of 5-7%
- Proven from 8-11%
- Proven from 40-70%
- Proven from 15-22%

Note: Most test results available for viewing at www.enerteck.net





## **EnerBurn® ROI Calculator (Sample Towboat Company)**

First Year Value Analysis Calculator for EnerBurn®							
	Sample Marine Tow		y				
Blue numbers are user	inputs, gray cells are cal	_					
Your fleet uses	1,000,000	gallons of diesel fuel per month					
Assumes efficiency of	7.5%						
Current diesel cost	\$3.10	EnerBurn® Price \$199.00 per gallon					
Lube Oil Use	20,000	gallons per month					
Lube Oil Savings	15%						
Lube Oil Cost	\$6.50	per gallon					
Fleet Injectors	\$29,000	Estimated Sites	6				
Number of Boats	45						
Data gathering cost*	\$290	per month per bo	oat on 25% of flee	et			
		Q1	Q2	Q3	Q4		
BENEFITS							
DEIVERNO	Product cost	\$238,800	\$238,800	\$238,800	\$238,800		
	Reduced fuel costs	\$697,500	\$697,500	\$697,500	\$697,500		
	Lube Oil Cost Reduction	\$58,500	\$58,500	\$58,500	\$58,500		
	Quarterly total	\$517,200	\$517,200	\$517,200	\$517,200		
	Cumulative value	\$517,200	\$1,034,400	\$1,551,600	\$2,068,800		
CAPITAL INVESTMENTS							
	Injector costs*	\$174,000	\$0	\$0	\$0		
	Data gathering**	\$3,263	\$52	\$52	\$52		
	Quarterly total	\$177,263	\$52	\$52	\$52		
	Cumulative investment	\$177,263	\$416,115	\$654,967	\$893,819		
NET VALUE							
	Quarterly total	\$339,938	\$517,148	\$517,148	\$517,148		
Fuel Savings (\$)	Cumulative total	\$339,938	\$857,085	\$1,374,233	\$1,891,381		
	Expected year 2 savings ***				\$2,068,591		
	Expected year 3 savings ***				\$2,068,800		
	1st year net return Breakeven point	<b>\$1,891,381</b> 1st Quarter					
	D. Ca.tovon ponn	Year 1	Year 2	Year 3			
	Fuel Savings (% of total)		5.56%	5.56%			
	ROI (1st year)	267.75%	316.51%	316.58%			

Analysis done by BATL BioFuels LLC® • Value Analysis Calculator • EnerBurn™• Enerteck Chemical Corp.



<sup>\*</sup> Injector costs for fleet fueling, On-Board Injectors requires a larger capital cost

<sup>\*\*</sup> Data gathering is the cost of gathering data for efficiency evaluations and is not required





# Completed EnerBurn Evaluations as of April, 2013

Completed EnerBurn Field Evaluations							
Industry	Equipment	Engine Type	Fuel Consumption Improvement	Reduction In Em	issions Output Nitrous Oxide		
Inland Marine	PushBoat	EMD	8.30%	68.00%	11.70%		
Inland Marine	TowBoat	Blackstone	10.30%	77.00%	8.90%		
Ocean Marine	TowBoat	EMD	7.90%	65.00%	10.10%		
Railroad	Engine	EMD	10.50%	44.00%	9.70%		
Trucking	Semi	Caterpillar	10.30%	N/A	N/A		
Municipal	Garbage Trucl	k Caterpillar	12.60%	N/A	N/A		
Mining	Rock Crusher	Caterpillar	7.60%	N/A	N/A		
Municipal	Generator	Cummins	10.80%	N/A	N/A		
Notes: N/A indicates emission test not performed							





# In Progress Evaluations as of April, 2013

EnerBurn Field Evaluations in Progress						
Industry	Equipment	Engine Type	Expected Completion Date			
Ocean Dredging	<b>Dredging Ship</b>	MAN Diesel	30-Apr-13			
Container Ship	Container Ship	Wartsila	15-Aug-13			
Container Ship	Container Ship	MAN Diesel	1-Aug-13			
Municipal	Trucks	Various	15-Sep-13			
Trucking	Mann Trucks	Various	30-Sep-13			
Municipal	Generators	Caterpillar	30-Aug-13			
Trucking	Volvo Trucks	Volvo	15-Jul-13			
Busing	Diesel Buses	Various	30-Jul-13			
Notes: Completion dates are approximate as conditions warrant						





#### **Particulate Extraction Unit (PEx)**

**PEx**, which is a pseudonym for Particulate Extraction, uses volumetric expansion and contraction to drop the majority of the particulate matter from an exhaust stream.

A plurality of chambers is used to increase and decrease the gas velocity in an undulating manner which encourages the release of the particulate matter.

When used in conjunction with *EnerBurn®*. nearly all particulate matter can be removed from a diesel engines exhaust stream.

The particulate matter that is removed from the exhaust stream is collected at the bottom of the unit and can be disposed of properly each time a vessel docks when the bilge is cleaned.





#### **Particulate Extraction (cont'd)**

We are currently in the latter stages of the approval process for this product. The test unit has thousands of hours on it and will be benchmarked by Emisstar (<a href="www.emisstar.com">www.emisstar.com</a>) for final result verification at the end of August 2013

Upon successful conclusion of this evaluation, Emisstar will submit our application to CARB for approval. This will be a **VERY** significant event for Enerteck as it will allow us to sell an approved product to an end user who is in dire need of that product and where little to no effective competition exists.

Updates on this process will be noted on the home page of our newly improved website, www.enerteck.net.





## **Recent Corporate Events of Importance**

#### New Website Rollout

Our new and improved website went live May 1, 2013. Further improvements will be continually added including full customer area where product order history, new orders, usage data, performance data and a host of other useful data can be viewed and retrieved.

#### **Investor Relations Partner**

We recently announced a partnership with TeQuity Group of Boulder, CO. TeQuity, along with it's Investor Relations partner, John Metzger and Associates, will provide Investor Relations and customer introductions to Enerteck.





## **Recent Corporate Events of Importance (cont'd)**

### <u>Addition of New Distributor</u>

Upon the successful conclusion of an *EnerBurn®* evaluation in Brazil on a Cummins powered Generator, JKG Consulting (Energy Efficient Solutions) was added as a distributor of our products.

Diesel Performance Tech has also agreed to become a distributor of *EnerBurn®*, and has begun the process of securing new evaluation opportunities for the company.

