



SUPERIOR PRODUCTS INTERNATIONAL II, INC.

Update: Super Therm® on Reefer Trucks

July 2008

On July 25th, 2003, Land Line Magazine (The Business Magazine for Professional Truckers) wrote an article that reported the results of a test done by a large grocery company in Arizona. The company compared its Super Therm® coated trucks to 2 "control" trucks. One control truck was un-coated, and the other having the truck manufacturer's "heat resistant" composite top. Their 2003 report on fuel savings states:

"In July, the Super Therm® coated units burned 30 percent less fuel than the "control" units, and 20 percent less than the manufacturer's heat-resistant composite units."

"In October, the Super Therm® units burned 27 percent less fuel than the "control" units and 22 percent less fuel than the manufacturers' heat-resistant composite roofing system units."

Though impressive, these numbers were figured when the national average for Diesel fuel \$1.10 per gallon. As validated on the graph at the end of the update, a review shows that Diesel fuel now has a national average of \$4.72 per gallon. More than 4 times the cost of Diesel fuel 5 years ago.

The percentage of savings has remained the same. Although, the dollars saved has changed greatly.

The July report also states:

"On an annual basis, this resulted in decreased fuel consumption of 1,039 gallons and 463 gallons respectively. At \$1.10 per gallon, the cost savings were \$1,143 and \$509 per unit."

Calculating Diesel fuel at today's price of \$4.70 per gallon, this now calculates to a cost savings of \$4,883 and \$2,176 per unit respectively. This is over 4 times the dollar savings than figured in 2003.

The October report also states:

"On an annualized basis, this resulted in decreased fuel consumption of 599 gallons and 435 gallons respectively. At \$1.10 per gallon, the cost savings were \$659 and \$479 per unit."

This considers the cooler temperatures and shorter days of October. Calculating Diesel fuel at \$4.70 per gallon, this now calculates to a cost savings of \$2,815 and \$2,044 per unit respectively.



**SUPERIOR PRODUCTS
INTERNATIONAL II INC
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Additional Information regarding refrigerated trucks and trailers:

When coating trailers to insulate, there are a couple of points that are of interest to the trailer owners or operators.

- a. Fuel consumption is one point that can be reduced because the trailers do not become hot and absorb as much heat which causes the units to run on high all the time. This is not as important as you would think because of the following points.
- b. A Thermo King Refrigeration unit costs approximately \$20,000-\$25,000. The projected life is approximately 3-6 years with proper maintenance. If a trailer top, sides and bottom (heat from asphalt and concrete) is coated with Super Therm®, the absorption of heat is cut by up to 90%. Since the metal skin cannot absorb heat, then the heat transfer is reduced by the same percentage. At this pace, the Thermo King would be able to cycle and run more on medium speed. This is expected to extend the life of the unit by double or more. \$20,000 X units X trailers X every 3-6 years equates to a tremendous amount of money saved per replacement cycle plus maintenance.
- c. Operation managers are very keen on how much a trailer can haul to expand the business or move additional product on any given day to get more dollar volume using the same trailer. If the trailer is built with 4" of foam in each wall, the wall thickness could be reduced to only 1" of foam with the SUPER THERM on the exterior. Therefore, gaining interior space for additional product. With Super Therm® on the exterior, the metal cannot absorb the solar heat, and the need for foam thickness to slow transference is reduced. This gives the trailer 6" across the floor more capacity to haul product which is increased dollar production from each trailer every day.

Note: The manufacturer of Thermo King is not interested in knowing this nor promoting this since it would cut down on their units sold.



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Super Therm insulates reefers

Industrial Coatings Alliance Group Inc. is an international consultant, distributor, application and maintenance company of roof coatings and roofing systems. Headquartered in Roswell, GA, ICAG is a charter member of the EPA's Energy Star Roof Coatings Program and is a leader in researching and implementing energy conservation roofing programs for various prominent business owners. With more than 5 million square feet of roofing surface coated, as well as more than 30,000 over-the-road trucking trailers, ICAG is recognized as a leader in roofing solutions.

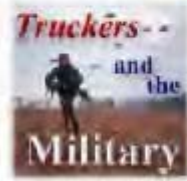
While most roofing systems are merely a means of keeping the weather out, ICAG's coating and roofing systems will provide superior insulating qualities, structural protection and aesthetics that will significantly lower utility cost, provide maintenance savings and enhance the aesthetics of the facilities and/or vehicle. Our research indicates that energy savings alone provide an extremely favorable payback period making the application a viable financial option.

Industrial Coatings Alliance Group has recently tested its proprietary insulation coating with one of the nations largest private refrigerated carriers. ICAG is pleased to announce that Super Therm, its proprietary coating, when applied to the top of a refrigerated trailer, can reduce the units fuel consumption approximately 30 percent versus a multi-temp refrigerated unit with traditional aluminum roofs.

Super Therm is a roof coating that contains four unique ceramics. The ceramic makeup of Super Therm gives it an insulation equivalent to R-19 (6-8 inches of fiberglass batt insulation). Super Therm is a non-conductive ceramic coating that repels 99.5 percent of long-wave energy, 92.5 percent of short-wave energy and 99.9 percent infrared heat energy.

The test began in July 2002. Super Therm roof coating was applied to five multi-temp reefers in Tolleson, AZ. This facility was chosen due to the extreme amount of radiant heat that refrigerated units were exposed to daily, on mostly a year-round basis.

The "Control Group" consisted of five multi-temp trailers with traditional aluminum roofs. A third group of trailers, five multi-temp trailers coated with the trailer manufacturer's proprietary heat-resistant composite roof, was included in the test as well. All 15 units were 2001 model year and manufactured to identical build specifications, with the exception of the addition of the heat-resistant composite roof by the manufacturer.



The primary area of focus for this test was on fuel economy; would the Super Therm coated reefers burn less fuel than the control group and even the group with the heat-resistant composite roofing system. In addition, would the difference in fuel consumed justify the cost of the product?

After gathering and analyzing test results for the months of July and October, ICAG is pleased to announce that Super Therm not only met, but also exceeded the expectations of the private refrigerated carrier.

In July, the Super Therm coated units burned 30 percent less fuel than the "control" units and 20 percent less than the manufacturers heat-resistant composite units. On an annual basis, this

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resulted in decreased fuel consumption of 1,039 gallons and 463 gallons respectively. At \$1.10 per gallon, the cost savings were \$1,143 and \$509 per unit.

In October, the Super Therm units burned 27 percent less fuel than the "control" units and 22 percent less fuel than the manufacturers' heat-resistant composite roofing system units. On an annualized basis, this resulted in decreased fuel consumption of 599 gallons and 435 gallons respectively. At \$1.10 per gallon, the cost savings were \$659 and \$479 per unit. Per our test, we can expect that savings would be highest in the summer months, lowest in the winter months and average in fall and spring months.

With product cost and installation cost considered, a payback could be expected of less than one year. These savings estimates do not include maintenance savings which would likely result from the refrigeration unit running less hours, or running a higher percent of hours in low speed versus high. This would, in theory, also extend the life of the refrigeration unit. In addition, savings associated with a decrease in labor that would result from fueling the reefers less often is not included in the cost savings.

Industrial Coatings Alliance Group Inc. believes that this coating system is consistent with private and for-hire refrigerated unit carriers' goal to provide superior service to their customers and staff while improving the bottom line of that company through significant cost reductions.

For information, contact Industrial Coatings Alliance Group Inc. at (770) 313-3735.

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