



Evans Cooling Systems

Another in Our Series of Profiles of EGSA Member Companies

In a side by side comparison done at a video shoot in October, notice that even at 365°, the Evans sample hasn't started to boil yet. Traditional coolant boils over 150° sooner.

EVANS COOLING SYSTEMS IS...

....a privately held company headquartered in Sharon, CT. Evans also operates a fulfillment center in Pottstown, PA and a Sales and Marketing office in Suffield, CT. Evans is supported by dealers in 27 states as well as in China, the UK, Canada, Singapore, Italy, Peru, Belgium the Netherlands and Luxembourg. John W. (Jack) Evans and J. Thomas (Tom) Light have worked continuously on the development of cooling system technology design for over 25 years. They have pioneered innovative aqueous and non-aqueous cooling solutions for gasoline and diesel engines in applications ranging from race cars to trucks to generators. Evans Cooling Systems now have 21 issued U.S. patents, over 40 foreign patents and numerous patents pending.

For more information, visit www.evanscooling.com.

Evans Cooling Systems, Inc. has pioneered innovative aqueous and non-aqueous cooling systems for internal combustion engines for more than twenty five years. The Evans technology, used in both gas and diesel engines, is used in virtually every area of internal combustion engine cooling with systems running in heavy duty diesels, aviation applications, motorcycles, and gasoline engines of essentially every design. This technology is based on a very simple philosophy: To remove the problems associated with water, remove the water.

Water based coolants have been used to cool engines for over 100 years. In fact, all commercially available engine coolants on the market today are water-based except for Evans. Company founders John W. (Jack) Evans and J. Thomas (Tom) Light have worked tirelessly since the early 1970's on the development of cooling system technology design and subsequently have

worked with some of the biggest engine manufacturers in the U.S. Their waterless coolants provide distinct advantages such as a higher boiling point, the elimination of corrosion, and the use of fuel saving strategies that are not available with traditional water based coolants. The end result is greater thermal efficiency, improved fuel economy, and longer engine life. The product line is low in toxicity, non-corrosive, and operates with low pressure.

A common misperception is that Evans formula is a gel, or something other than a liquid. Waterless doesn't mean "liquid-less", but it does mean "corrosion-less". Evans engine coolant is a patented formula consisting of a blend of glycols, with soluble additives and no water. The absence of water in Evans coolants prevents corrosion and avoids electrolysis.

In December 2010, Evans Cooling Systems introduced its waterless coolant for stationary engines at the Power-Gen Show in Orlando. The technology has not only been proven successful in reducing maintenance and operating costs, but also in improving performance and reliability. Evans waterless coolant enables an engine to operate continually in hot weather, under heavy loads, at high altitude, or at high power output without boil over. Evans waterless coolant helps prevent power interruptions and outages by avoiding overheating.

In hot climates, generators experience shut downs when the ambient temperatures don't allow efficient heat rejection. Backup generators are used when the primary generator shuts down and it requires a "cool down" period. The main difference in using the Evans engine coolant is the end to this type of shutdown or blackout period. Evans waterless engine coolant unlocks an extra cooling capacity that your system already has. When the

coolant temperature can be safely raised, the difference between the radiator temperature and the ambient temperature (the delta T) is increased. This more efficient heat transfer from radiator to the ambient air allows the generator to run continuously in hostile environments using less fan power and saving fuel.

"Higher fuel prices, tighter emission regulations, and increasing maintenance costs continually challenge companies to find creative ways to decrease operating costs", says Ed Coyle, Vice President and COO of Evans. "Evans offers an answer to that challenge, with a maintenance-free technology that saves money, helps the environment, and is a safer alternative to water-based coolants."

Any organization relying on generators for primary or stand-by power, can achieve savings and improved reliability. In addition, Evans coolants help the environment by reducing emissions and eliminating the need for disposal. It is no surprise that engine makers as well as after-market manufacturers have been combating heat transfer issues with a multitude of modifications; larger fans, more efficient radiators, additives and applying performance limitations on engine design. By contrast, the Evans Cooling Technology has eliminated the problem!

In the spring of 2011, Evans formed a strategic alliance with Hydratech Technologies Ltd., a UK based company that specializes in heat transfer fluids for the Refrigeration and Air Conditioning, Geothermal and Solar sectors. Hydratech offers unrivalled technical knowledge of fluid thermodynamics and heat-

ing & cooling system design. Evans and Hydratech have formed Evans Cooling Systems UK (Evans UK) to market the waterless engine coolants throughout the UK and Ireland.

The rapid growth of the Asian markets, particularly in China, has opened opportunities for Evans technology in automobiles. Evans is now used in over 70,000 cars in China, providing performance and maintenance benefits and increasing engine life. The company has over 600 locations in China that sell and install the waterless coolant in new vehicles.

Evans continues its development of more efficient engine cooling systems. Research currently underway by Evans includes the production of nano-particles to improve the coolant's heat transfer capabilities. The objective is to produce nano-particles inexpensively and small enough to remain suspended for long periods in coolant liquids. An independent third party laboratory has tested the toxicity of Evans coolants demonstrating that Evans waterless formula sharply reduces the toxicity of the glycols. ECS is currently sponsoring in-vitro research using human tissue to determine the toxicity of its mixtures with regard to humans.

"Evans joined EGSA in 2010 and we look forward to a long and productive membership." Ed Coyle adds. "We're excited to offer a solution to On-Site Power Generating community that can save money, preserve natural resources and reduce hazardous waste." ■