



Asphalt Dry-Out Process

Introduction:

Re-Synth International's (RSI) patented and proprietary technologies place your business ahead of the rest. Our implemented technology provides cost benefits derived from fuel efficiency while also decreasing your environmental footprint.

Fuels we work with:

RSI works with various oil-based fuels, biofuels and blends. We improve the efficiency of ULSD (Ultra Low Sulphur Diesel), LFO (Light Fuel Oil), HFO (Heavy Fuel Oil), Crude Oil, Biodiesel blends, Used Motor Oil (UMO) blends, Pyrolytic Oils, to name a few. If a fuel or fuel blend is not included in this list, we work with our customers to satisfy their needs.

Process Optimization Methodology

Our proposed skid is optimized for space management. We require a foot print of less than 36 sq.ft. Our enhanced fuel is injected into the oven burner in the form of emulsified fuel. Our experience with these units proves there is an increase in Brake Thermal Efficiency due to the micro atomization and sudden expansion of aqueous micro bubbles during the combustion.

Process Emissions

RSI Emulsified fuels provide a more efficient combustion with added benefits in terms of overall produced emissions. Emission reductions are observed in NOx production, CO, CO2. Results have shown that soot and PM are reduced. We achieve reductions in soot emission as high as 81% with emulsified fuel.

Maintenance Reduction

RSI fuels improve the combustion process while reducing emission generation. Particulate matter and soot from the combustion are reduced to such extent that the combustion chamber cleaning frequency can be reduced.

In terms of corrosion probabilities, RSI emulsified fuels are not corrosive. Our proprietary technology encapsulates and binds small droplets of water into the fuel. Such is the effect that the water that enters the combustion chamber is used as part of the combustion and exits the unit as exhaust water vapor. RSI emulsions trap any "free water" or moisture content from the incoming fuel also preventing unit misfires or injection problems.

Why choose ReSynth?

We offer quantifiable cost saving benefits in fuel consumption. Savings are calculated per month based on your fuel type. Using the following example based on \$2.00 per gallon for a client that has a daily fuel consumption of 1,000 gallons.

ULSD/Biodiesel Blends:	Average of \$6,000/month*
LFO/UMO/Pyrol Oil:	Average of \$7,500/month*
HFO/Crude Oil/Bunker:	Average of \$9,000/month*

*** Savings range depends on the fuel, the equipment and the final business agreement.**

ReSynth network can manage needs for any liquid fuel fed asphalt dry-out unit.

www.resynthinternational.com