HY-PER LUBE DIESEL SUPER COOLANT

PRODUCT PERFORMANCE AND TESTING RESULTS

We selected two engines for our temperature reduction and performance tests:

6.6L Duramax LMM with intercooler, variable geometry turbocharger, and EGR cooler which is capable of reducing exhaust gas temps by an average of 650 degrees. This engine is found in the Chevy truck models Silverado, Kodiak, and Express, and GMC truck models Sierra, TopKick, and Savana.

6.4L Powerstroke with dual, sequential non waste-gated turbochargers and dual EGR coolers which are capable of reducing exhaust gas temps by up to 1000 degrees before they reach the EGR valve and mix with the intake charge. This engine is found in various Ford Super Duty and Excursion truck models.

Because of the extra heat developed by the turbocharger, EGR cooler(s), and in some cases oil coolers on these engines, they place an extremely heavy demand on the engine coolant. So any additional heat transfer provided by the coolant translates into pretty meaningful improvements.

With the Duramax, the addition of the H/D Super Coolant to a 50/50 mix resulted in a 4 degree drop in stabilized coolant temp -- from 210 to 206. This drop enhanced the volumetric efficiency of the turbo charger enough to generate a 0.9% increase in fuel economy, and 2.0% increase in torque.

With the Powerstroke, the addition of the H/D Super Coolant to a 50/50 mix resulted in a 5 degree drop in stabilized coolant temp -- from 208 to 203. This drop enhanced the volumetric efficiency of the turbo charger enough to generate a 1.3% increase in fuel economy, and 2.9% increase in torque.

With the Duramax, the addition of the H/D Super Coolant to straight water coolant resulted in a 8 degree drop in stabilized coolant temp -- from 210 to 202. This drop enhanced the volumetric efficiency of the turbo charger enough to generate a 1.7% increase in fuel economy, and 2.7% increase in torque.

With the Powerstroke, the addition of the H/D Super Coolant to straight water coolant resulted in an 10 degree drop in stabilized coolant temp -- from 208 to 198. This drop enhanced the volumetric efficiency of the turbo charger enough to generate a 1.9% increase in fuel economy, and 3.2% increase in torque.

Even though these fuel economy increases are not huge, for those trucks that do see higher mileage, this can add up over the course of thousands of miles. At today's fuel prices, the savings would be more than enough to pay for the cost of the product many times over!

In terms of warm-up times, we noted the following average improvements for both engines (tested ONLY with 50/50 mix):

30 deg to 120 deg occurred 1.9 minutes quicker.

30 deg to 180 deg occurred 2.7 minutes quicker.