

Contact:

Amy Sills 503.745.8535
amy.sills@daimler.com

Maria McCullough 803-578-3161
maria.mccullough@daimler.com

Detroit Diesel Previews its BlueTec® SCR Technology at TMC

Journalists Get Advanced Look at the Future of Freight Transportation in North America As Detroit Diesel's BlueTec Technology Proves to be as Good for Business as for the Environment

ORLANDO, FL – February 8, 2009 – At the Technology and Maintenance Council (TMC) Conference today, Detroit Diesel gave journalists a preview of its production-intent version of Daimler's widely acclaimed BlueTec® technology.

The fuel-efficient DD13™, DD15™, and soon-to-debut DD16™ family of engines were engineered from the ground up to be integrated with Detroit Diesel's new BlueTec technology which was developed to meet the specific needs and conditions of the trucking industry in North America. The new BlueTec emissions control system requires virtually no changes to Detroit Diesel's base engines – meaning those base engine parts are already available and the service network is already trained to support them.

Like all 2010 selective catalytic reduction (SCR) systems, Detroit Diesel's BlueTec technology will require diesel exhaust fluid (DEF), a solution of two-thirds pure water and one-third automotive-grade urea, to effectively and efficiently treat exhaust gases downstream of the engine. The DEF reacts with smog-forming nitrogen oxide (NOx) in an SCR catalyst, reducing the NOx released into the air into nitrogen and water, safe elements in the air we breathe. In this way, Detroit Diesel's BlueTec technology essentially eliminates all truck engine generated NOx from being released into the air.

Detroit Diesel's BlueTec Technology incorporates emissions technology already present on today's vehicles such as the Exhaust Gas Recirculation, Diesel Oxidation Catalyst, and Diesel Particulate Filter. All SCR systems designed to meet EPA 2010 emissions standards will also require the vehicle's operator to keep the truck filled with DEF and the addition of a few new components. These SCR components include: the DEF tank, DEF doser, SCR catalyst, Aftertreatment Control Module (ACM) and the DEF gauge.

With the massive effort and investment currently being made to establish the DEF production and distribution infrastructure in North America, DEF availability will not be an issue. More than 2,500 dealers, distributors, truckstops and retail outlets are committed to carrying the product. Vehicles equipped with Detroit Diesel BlueTec SCR technology will require DEF refilling about every 5,000 to 7,000 miles per 23-gallon tank under typical highway duty cycles.

Detroit Diesel's BlueTec SCR Technology

Three factors contribute to the optimized fuel efficiency of Detroit Diesel's BlueTec technology. Those factors are: base engine-out NOx levels, DPF regeneration intervals, and exhaust back pressure. Detroit Diesel's BlueTec technology is designed and engineered to offer greater fuel economy. Currently projections show up to 5 percent diesel fuel economy improvement over today's DD15 engines (the industry's current benchmark for fuel economy, thanks in part to turbo compounding) and an up to 3 percent net improvement for the BlueTec emissions technology. When compared to non-SCR technologies planned for use in 2010, the Detroit Diesel BlueTec technology will deliver even greater fuel economy advantage.

BlueTec treats the exhaust gases outside of the engine and allows the in-cylinder combustion process to be fully optimized for peak thermal efficiency via refinement of fuel injection timing and exhaust gas recirculation (EGR) rates. This, in turn, also results in reduced engine heat rejection and reduced stress on the cooling system.

The efficient combustion process of BlueTec equipped engines is also much cleaner and generates extremely low levels of engine-out PM. These low levels of engine-out PM, coupled with favorable NOx/PM ratios and Detroit Diesel's all-new, robust DPF material, significantly prolongs the DPF active regeneration interval in 2010. Moreover, DDC's BlueTec technology predominantly utilizes a low temperature process for DPF regeneration and limits exposure to high temperatures to only once in several thousand miles for typical heavy-duty highway applications.

With these technology enhancements, BlueTec will not only deliver fuel economy improvements but also subject the aftertreatment system to less thermal stress and fatigue compared to other systems. Reduced exposure to high temperatures also minimizes the aging of the catalyst coatings, thus retaining the BlueTec system's high performance and efficiency over its lifetime.

Detroit Diesel's BlueTec technology will be offered in two packaging options - a one-box and a two-box configuration. In addition to providing for space optimization and adaptability to a wide variety of truck applications, the distinctive and proprietary Detroit Diesel BlueTec one-box option uses a unique design that reduces the exhaust gas flow restriction, resulting in less exhaust back pressure and therefore improved fuel economy. At a TMC press conference, Detroit Diesel's one-box configuration was showcased in combination with the DD15 and aerodynamically-designed Cascadia truck.

Detroit Diesel BlueTec Technology - Proven Advantages

As its chosen technology to meet the upcoming stringent EPA 2010 standards for heavy-duty trucks, BlueTec represents the world's latest innovation for clean diesel engine technology. Based on the experience with more than 200,000 trucks in Europe using BlueTec technology and with more than 12 million miles of testing completed on the EPA 2010 BlueTec system, it is clear that this emissions control technology is one of the first and only technologies in decades to improve fuel economy while reducing emissions to near-zero levels and improving air quality and the environment.

"With less than one year to go, I'm excited to introduce the industry to Detroit Diesel's BlueTec SCR technology," said Chris Patterson, president and CEO of Daimler Trucks North America. "SCR technology is clearly the best choice for our customers and we're right on track to be ready with our BlueTec system by January 1, 2010. SCR is the only proven means of meeting the stringent 0.20 g/hp-hr NOx standard as measured at the tailpipe for heavy-duty diesel engines. The great news is that for the first time ever, adoption of the technology offers a competitive business advantage, currently projecting diesel fuel economy gains up to 5 percent, net 3 percent improvement, overall, over today's engines and even more compared to 2010 non-SCR technologies."

BlueTec enables improved performance and fuel consumption, which are essential to today's operators beset by volatile fuel prices.

"Given U.S. driving conditions characterized by steady cruising speeds on the highways and enormous overland distances, the new BlueTec technology will show its advantages early on," said Mark Lampert, senior vice president of sales for Daimler Trucks North America. "Projecting up to 3 percent net improvement, Detroit Diesel's BlueTec technology will offer thousands of dollars in fuel savings annually per truck as well as a simple, reliable and proven emissions control system in 2010. Also, this improvement of fuel consumption is a significant step towards reducing our nation's dependence on foreign oil and towards reducing our industry's environmental signature," he added.

Detroit Diesel's BlueTec - Best Choice for Clean Engine Technology

Detroit Diesel worked with other Daimler companies to develop the North American version of BlueTec technology and the integrated platform of engine and truck design that will place Daimler Trucks North America at the forefront of emissions and performance capability for years to come.

Built upon the experience of its European counterparts, Detroit Diesel's BlueTec technology is modular and may be adapted for use on a variety of vehicles. In 2009, Daimler's U.S. passenger car division, Mercedes Benz USA, introduced three new SUVs as part of Daimler's aggressive expansion in the application of the technology.

BlueTec symbolizes Daimler's commitment to meet today's environmental challenges and those to come. Since early 2005, Daimler alone has delivered more than 200,000 trucks and buses around the world utilizing its proven technology which offers exemplary performance and fuel economy.

Detroit Diesel Corporation is a leading manufacturer of on-highway diesel engines for the commercial truck market. Headquartered in Redford, Mich., Detroit Diesel is engaged in the design, manufacture, sale and service of these products, in addition to supporting alternative and hybrid engine strategies for the commercial truck marketplace. Detroit Diesel is a Daimler AG company.