

FleetOwner

Truck CEOs address SCR

Mar 19, 2009 11:34 AM, By Jim Mele, editor-in-chief

LOUISVILLE. In an effort to dispel what they term “growing misinformation” about the use of [selective catalytic reduction \(SCR\)](#) technology to meet the [2010 emissions](#) standards, the major truck and engine OEMs adopting SCR – backed up by a major producer of [diesel exhaust fluid \(DEF\)](#) and two major truckstop chains – gathered here at the [Mid-America Trucking Show](#) for a special “summit” on the subject.

“This is probably the last time you’ll see heavy-duty engine and truck makers agreeing on anything,” joked Chris Patterson, the retiring president & CEO of [Daimler Trucks North America \(DTNA\)](#).

He went on to say that SCR is – at least from DTNA’s perspective – the “silver bullet” the trucking industry has been waiting for; a technology that will help commercial trucks achieve near-zero emissions of oxides of nitrogen (NOx) while giving customers improved [fuel economy](#).

“With SCR, we’re reversing the negative impact of emissions regulations,” Patterson said. “We’re giving the customer better fuel economy and cleaning the air we all breathe. This is good for everyone.”

“Fuel economy is what the customer demands – and that is what SCR delivers,” added Per Carlsson, president & CEO of [Volvo Trucks North America \(VTNA\)](#). “I wish this meeting had not been necessary, but the misinformation out there about SCR left us no choice.”

The gathered OEMs each noted the fuel economy improvements their SCR packages will provide. For DTNA, fuel economy improves a net 3% when factoring in diesel exhaust fluid (DEF) consumption versus its 2007-model engines; VTNA’s improves 3%; [Mack Trucks](#) – brother company to VTNA – reports 5.1% before DEF is figured in, and [Cummins Inc.](#) said its SCR fuel economy gains range between 3% and 5%.

The gathered OEMs added that they decided not to follow the advanced exhaust gas recirculation (EGR) [path being pursued by Navistar](#) due to their conclusion that EGR had reached its limit in terms of providing emission reduction without severe performance penalties.

“We use EGR today – we all do,” noted Denny Slagle, Mack president & CEO. “But we know the stress it puts on the engine, the heat loads it generates, and the challenge that presents to maintaining engine performance and fuel economy.”

Slagle said Mack “reached the limit of what EGR could do” in terms of reducing emissions. “There’s no way around the fuel economy and performance penalties. This isn’t based on marketing – this is based on science, pure and simple.”

The other big concern is the [safety](#), availability, and potential cost of DEF, a solution comprised of 32.5% urea and water, which is critical to making the SCR process work. DEF is used in conjunction with a catalyst to break NOx down in the exhaust stream into nitrogen and water.

Barry Lonsdale, president of Terra Environmental Technologies – which is a large producer of DEF – said the cost of DEF to the U.S. trucking industry should be “no higher” than what DEF costs in Europe, where SCR is heavily used. Furthermore, the degradation of DEF is minimal if the temperature of the fluid is kept between 15 and 86 degrees Fahrenheit on a relatively consistent basis.

“To make DEF, we steam-reform natural gas to synthesize ammonia, then convert that ammonia into urea by adding ultra pure water,” he explained. “That is what DEF is – and it’s defined as a non-hazardous substance under OSHA [the federal Occupational Safety & Health Agency] rules.”

“Compared to the other substances we handle in this industry, such as diesel fuel and windshield wiper fluid, DEF is really very benign,” added DTNA’s Patterson.

Will there be enough DEF to meet the needs of SCR-equipped trucks in 2010? Truckstop chains Pilot Travel Centers and TravelCenters of America/Petro Stopping Centers believe so.

“We’re initially going to have 100 of our 310 facilities equipped with bulk DEF dispensing tanks right on the fuel island – adding 25 facilities per quarter starting in the third quarter this year,” said Bill Mulligan, vp of development, facilities and environmental at Pilot. “All 310 of our locations will be stocked with 2.5 and one gallon jugs of DEF by December 2009.”

Tom O’Brien, CEO of TravelCenters/Petro, added that his company’s 230 locations will offer gallon jugs of DEF for sale, bulk DEF dispensing tanks in all 1,000 maintenance bays in its service shops, and some bulk dispensing tanks at the fuel island. It’s also stocking the 400 trucks in its “RoadSquad” fleet that provides emergency road service with DEF as well.

“We have no concerns that we won’t have enough DEF supply – we’re getting all we need right now,” he added. “I’d also like to note that for a company like ours that sells diesel fuel to get behind a technology that will result in us selling LESS diesel speaks volumes, I think, for how the industry is approaching this.”

Source: www.FleetOwner.com