

SCR: FOR EPA '10

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Q: What is SCR?

A: SCR stands for Selective Catalytic Reduction, an emissions technology designed to help bring diesel truck engines into compliance with new EPA regulations going into effect in 2010. With SCR technology, diesel exhaust fluid (DEF), a water solution of urea, is injected into the exhaust stream to convert nitrogen oxide (NOx) into harmless nitrogen and water vapor.

Q: Why use SCR?

A: SCR is a straightforward NOx aftertreatment system with the following advantages:

- Superior fuel economy compared to other solutions for EPA '10. Total fuel costs will be significantly reduced, even allowing for the DEF.
- Simple solution requiring no changes to today's engines and cooling packages.
 - + In fact, since the amount of exhaust gas recirculated can be reduced, engine performance can be enhanced and cooling requirements reduced.
- Very little maintenance required.
- Reliable, proven approach.
 - + SCR is already proven in high volume production, while massive EGR is not.

Q: What makes up the Volvo SCR system?

A: Volvo's SCR system consists of just a DEF tank, an injector, sensors and wiring harness, and a catalyst.

Q: Does the driver have to do anything to operate SCR?

A: The system operates automatically—all the driver has to do is monitor an indicator on the dash and top off the DEF tank when necessary. Warnings for low DEF levels similar to those for other fluids, like diesel, are included.

Q: What's the range for a tank of DEF?

A: This depends upon the job the truck is doing and tank size. Several DEF tank sizes will be available, and a range of up to 4,000 or more miles will be available for line-haul service. Volvo will work with customers in all applications to optimize operation.

Q: Exactly what is Diesel Exhaust Fluid (DEF)?

A: DEF is a solution of 67.5 percent water and 32.5 percent urea. Urea is a non-hazardous nitrogen-based compound commonly used in fertilizer.

Q: How does the DEF affect truck weight?

A: For every 100 gallons of diesel fuel, two to four gallons of DEF will be required. And a gallon of DEF weighs 9.2 pounds.

Q: Where will DEF be available?

A: Bulk DEF filling stations are being set up at truck stops and diesel service stations across North America. In addition, containers of DEF will be sold at truck stops, dealerships, parts stores and other retail locations.