



LOW-PRESSURE CLEANING

In July 2012 Alfdex, 50 percent owned by Alfa Laval, produced its one-millionth Alfdex oil mist separator. The separator cleans crankcase gases in heavy vehicles. Swedish truck manufacturer Scania has been using the Alfdex system in its trucks since 2005, when it first came out. TEXT: ÅSA LOVELL PHOTO: SIMON PAULIN

FOUR QUESTIONS FOR HÅKAN PETERSEN, head of Lubrication System, Engine Development, at Scania.

How important is Alfdex to Scania?

“We were very much involved in the development of Alfdex system back in the early 2000s, working in close collaboration with engineers from Alfa Laval and Haldex, which later jointly formed the company Alfdex. Today the Alfdex oil mist separator is the most advanced technology for cleaning crankcase gases that we can offer our customers who want to comply with emission standards. Customer requirements differ depending on regulations and requirements, but on the European market Alfdex has more or less become standard equipment.”

How is Alfdex better than other available solutions?

“Compared with filters, Alfdex is far superior. Filters have to be replaced and disposed of, while Alfdex lasts the lifetime of the engine without service or maintenance. With Alfdex we can also keep the crankcase pressure below the atmospheric pressure to minimize leakage and pressure inside the engine. With filter systems that are available on the market today, you always get high crankcase pressure.”

In 2014 the new and tougher Euro 6 regulations will come into effect. How is Scania dealing with them?

“We have already launched our Scania Euro 6 standard, which is compliant with the new regulations, and Alfdex is part of that offering. Since Euro 6 regulates the total number of emissions from both exhaust gases and crankcase gases, we have not had to change the crankcase solution to comply with the new regulations.”

When looking ahead, is the next-generation Alfdex a part of your agenda?

“Now that Scania Euro 6 is in place, we have to start working toward the next step, offering even cleaner engines and fewer emissions. Naturally, this includes reviewing our crankcase cleaning system. There are several ways to go, but the next-generation Alfdex is certainly one possibility. Even if we succeed in cleaning crankcase gases better, with a lower impact on the environment, we hope to see further improvements concerning simplicity and robustness, as Scania will grow in countries outside Europe where truck operations are tougher.” ■

IMPROVED GENERATION

A new generation of Alfdex oil mist separators meets the increased demands from Euro 6 and extends beyond EPA 10. There are several improvements compared with the first generation of separators from Alfdex:

- It can handle up to three times as much blow-by gas, 50 to 600 litres a minute, depending on the version.
- The cleaned gas under normal driving conditions is close to 100 % oil-free, representing up to four times better cleaning.
- The separator is normally driven hydraulically by the engine lube oil system, but another option is an electric brushless motor with significantly lower energy consumption.