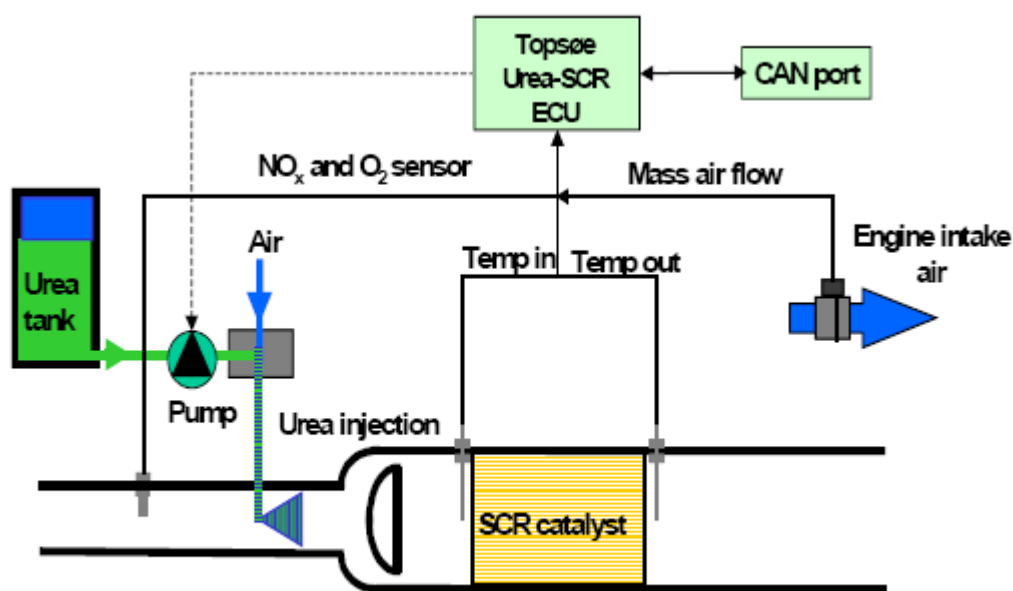


## Pressure sensor in Urea-SCR System

### for Heavy-Duty Diesel Truck Applications

**SensPro Electronics** is pleased to announce the development of their new pressure sensor to measure the output of urea pump for urea SCR (Selective Catalytic Reduction) system.

The Urea-SCR system that was used is schematically shown in Figure 1. It is a sensor based open loop system that uses real-time kinetic calculations for controlling the urea injection. An electronic control unit (ECU) calculates the amount of urea to be injected based on the sensor readings and the actual injection is carried out by means of a digital-dosing pump. SCR with urea or ammonia is one promising method for reduction of NO<sub>x</sub> onboard diesel vehicles. The use of SCR was already investigated during the 1980'ties and in the beginning of the 1990'ties.



**Figure 1.** Urea SCR system

SensPro's urea sensor is proved to be able to work in this application in long term, especially when temperature changes. Urea or ammonia will accelerate those temperature changes. Sensors with other technology cannot withstand rapid temperature changes, either suffering from the freezing effects or crack diaphragm. And thus affect the pressure transducer performance and ultimately the control system. But SensPro's urea sensor will recognize a uniform temperature as to maintain system stability.

Digested from [www.sensorland.com](http://www.sensorland.com)