Case story

Background:
Metsä Board Husum, located in Husum, Sweden is an integrated paper and pulp mill producing high-quality uncoated and coated fine paper.
5 and 9 ton forklifts was used to handle the finished paper in the indoor storage areas. In order to maintain the high quality of the paper and to minimize the occupational hazard it was essential that the particulate emissions from the diesel powerd forklifts were kept at a very low level.

The solution:
The solution was to equip the fleet of forklifts with diesel particulate filters. The simplest version of a diesel particulate filter (DPF) is called a passive DPF. The regeneration of a passive DPF demands a certain minimum average exhaust temperature and a favourable balance between particulates and NOx (Nitrogen oxides) emissions. Both of these criteria are often not met during normal forklift operation. For this reason and for the minimum need of driver interaction with the system STT Emtecs CCT® active was selected as the most suitable solution.

The CCT® active is an active particulate filter system based on catalytic combustion and secondary diesel injection. The catalyst together with the wall flow particulate filter collects up to 99% of the harmful particulates (PM) and more than 90 % of the carbon monoxide (CO) and hydrocarbon (HC) emissions. The system is periodically regenerated* automatically by the control system. In total 13 forklifts was equipped with CCT® active

*Regeneration is the process where the collected particulates in the filter are oxidized by heat.