

Pilot particulate filtration system at MTU Plant 2

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- Exhaust aftertreatment for large engine test stands
- New territory in exhaust aftertreatment technology

MTU is introducing new technology for scrubbing exhaust emissions from its engine test stands at Plant 2 in Manzell. Working with external specialists, company experts have developed a concept designed to significantly reduce soot emissions from the test stands. The initial phase is scheduled to enter pilot operation at the start of 2017.

"We are confident that the filtration plant will deliver the results we want. But this is as yet untried technology for us," said Dr Ulrich Dohle, Chairman of the Board at Rolls-Royce Power Systems and CEO at MTU Friedrichshafen. This is the very first plant of its kind to be installed anywhere for the aftertreatment of exhaust from test stands for large engines.

No exhaust limits have yet been set for large engine test stands of this magnitude but an obvious obligation exists to equip them with state-of-the-art technology. A study commissioned by MTU and conducted by TÜV Südwest concluded that exhaust aftertreatment plants for test stands of this type do not reflect the latest technological developments. A feasibility study carried out by MTU in conjunction with specialist manufacturers and engine experts from the University of Rostock subsequently developed a technical concept that is now to undergo trials with a pilot plant. The trials will involve equipping the four test stands for engines producing higher levels of particulate, with dedusting systems and then routing the scrubbed exhaust gas to a new stack that will also be used for exhaust from the other series-production test stands. An application for approval is currently being processed by the relevant authorities for the Lake Constance Region for two test benches to be modernized.

"Our plans go a lot further than current legal requirements demand," said Dohle. "We are pleased that we have now found a technical solution which seems to be feasible. We cannot be 100% certain of the actual results but we are ready to take a chance and invest the millions of euros needed for the project," he added. The initial phase of construction is due to start in spring 2016 with test operation scheduled for spring 2017. If the new exhaust aftertreatment technology proves successful, the two other test stands for the engines in

question will also be fitted with similar equipment from 2018.

Source: Rolls-Royce Holdings plc