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PRESS RELEASE

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DEUTZ approves engines for the use of alternative fuels

- DEUTZ on track to become the leading manufacturer of innovative drive systems
- 'E-fuels' paving the way for combustion engines to operate on a carbon-neutral basis
- Alternative fuels reduce overall running costs

DEUTZ has approved the latest generation of its entire TCD engine range for operation with alternative fuels. This will make a further significant reduction to the carbon footprint of combustion engines and even raises the prospect of running such engines on a carbon-neutral basis. For DEUTZ, this represents the next logical step in its efforts to develop sustainable and efficient drive systems. In combination with the electrification of its engine portfolio under the E-DEUTZ strategy, DEUTZ aims for the market leadership in the field of innovative drivetrains.

Sole use of electric motors is already a viable option in the low power output range, but for medium- and heavy-duty applications, for example involving construction equipment or tractors, there is as yet no suitable replacement for the combustion engine as the primary source of power. While electrification can improve efficiency as part of a hybrid system and allows for a downsizing of the combustion engine, there is still considerable potential for improving the eco-friendliness of conventional engines by choosing different fuels.

DEUTZ has now approved the engine series TCD 2.9 / 3.6 / 4.1 / 6.1 / 7.8 / 12.0 / 16.0 under the current EU Stage IV / US Tier 4 standard, as well as all older DEUTZ engines without exhaust aftertreatment, for operation with paraffinic diesel fuels and biodiesel or biodiesel blends. The term paraffinic diesel fuel encompasses a wide range of products.

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HVOs (hydrogenated vegetable oils), in particular, are currently being produced on a commercial scale from sustainable plant oils and waste fats. In the future, 'e-fuels' will also become part of the mix that will enable engines to operate on an eco-friendly, carbonneutral basis using renewable energy. The underlying principle is that in the production process the same amount of CO₂ is taken out as is emitted by the combustion process. Because of its chemical composition, synthetic diesel fuel produced by this method can be mixed and used with fossil-based diesel in any ratio. 'E-fuels' and the E-DEUTZ strategy are a perfect fit. DEUTZ is driving forward both technologies with the aim of minimising its carbon footprint.

The idea behind using biodiesel is also to cut CO₂ emissions. In Europe, biodiesel is primarily based on sustainably and locally produced vegetable oils and waste fats. The approval covers 100 per cent biodiesel for EU Stage IV as well as biodiesel blends, i.e. blended fuels containing biodiesel, for EU Stage IV and US Tier 4 engines.

End customers utilising alternative fuels benefit not only from the knowledge that they are helping the environment but also from tax advantages, which vary from region to region. In Germany and Austria, for example, biodiesel is exempt from tax when it is used for agricultural purposes, which lowers farmers' overall running costs.

"For us as an engine manufacturer, alternative fuels are a key component in our innovative drive system mix," explains Dr Markus Schwaderlapp, Head of Research and Development at DEUTZ AG. "We believe that e-fuels offer a lot of potential for running combustion engines on a carbon-neutral basis. We are therefore looking to combine the benefits of combustion engines – robustness, mobility and flexibility – with those offered by electric drives."

This fuel approval formed part of technical circular 'Fuels 0199-99-01218/4'.

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