



PRESS RELEASE

DEUTZ AG

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Bauma 2016: DEUTZ showcases extended product portfolio

- DEUTZ at the world's biggest trade fair for construction equipment
- The new TCD 2.2 three-cylinder engine extends the lower power output range
- For the first time, DEUTZ will be exhibiting two new gas engines
- TCD 5.0 four-cylinder engine with 100 to 150kW

DEUTZ will be exhibiting its extended product portfolio at Bauma in Munich between 11 and 17 April 2016. On display will be the independent engine manufacturer's new three-cylinder diesel engine for the lower power output range, two new gas engines, a new four-cylinder five litre development and its well-proven 'Stage V ready' engine range.

Bauma, the world's foremost trade fair covering everything related to construction equipment, material handling equipment and construction site vehicles and machinery, is the most important industry event for DEUTZ, the Cologne-based specialist engine company and, consequently, the ideal platform for showcasing its latest innovative developments.

New diesel and gas engines for the lower power output range

DEUTZ is expanding its portfolio in the lower power output range with a new three-cylinder variant of the successful TCD 2.9 four-cylinder engine. Generating 22 to 56kW, this TCD 2.2 will represent a further option, in particular for low-load applications in the material handling and compact construction equipment field. DEUTZ will also be showing two liquefied



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petroleum gas versions (also known as LPG or fuel gas) of the TCD 2.2 and the TCD 2.9 at Bauma. These engines, designated as G 2.2 and G 2.9, are particularly suitable for forklift trucks employed inside buildings because, when used as a fuel, liquefied petroleum gas produces considerably fewer emissions. The gas variants will generate 26 to 54kW and represent a genuine first in the DEUTZ product range, which otherwise includes only diesel-powered engines. With the aid of a three-way catalytic converter and without the need for a sophisticated exhaust aftertreatment system, these engines will also meet EU Stage V, thus providing a convenient alternative.

All the TCD/G 2.2 and 2.9 variants make use of the same engine platform, allowing customers to exploit extensive synergy effects when installing them, including those related to the connectors or to spare parts provision. These new engines will be introduced to the market from 2019 in time for EU Stage V.

DEUTZ TCD 5.0 engine project

TCD 5.0 is the name of DEUTZ's new water-cooled five litre cubic capacity four-cylinder inline engine project, which is scheduled to go into full production in 2019 in time for EU Stage V. This particularly compact diesel, including turbocharger and charge air cooling, generates 100 to 150kW, offering customers an additional powerful alternative within the DEUTZ product landscape. The engine conforms to the downsizing principle, i.e. it produces more power from a smaller cubic capacity. It allows larger engines to be replaced or offers an increase in output from an engine of the same original size. In addition, the engine runs more efficiently and, in conjunction with its lower weight, has more economical fuel consumption.

The installed dimensions and customer interfaces are virtually identical to those of the TCD 4.1, whose compact design sets a benchmark. The design of the TCD 5.0's underlying technology features minimum pipework, fewer components, strict separation between the hot and cold sides to avoid the need for heat shielding measures and a reduction in perfor-

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mance losses from the oil and water circuits. It also has an overhead camshaft, a crossflow cylinder head including a high degree of component and functional interlinkage, maintenance-free hydraulic valve play compensation and a robust dust and impact-resistant cylinder head cover.

"With the TCD 5.0 engine, we want to fill the gap in the 100 to 150kW power output range. At the same time, we are developing a new technological platform with outstanding product features," explains Michael Wellenzohn, member of the Board of Management of DEUTZ AG with responsibility for sales, service and marketing.

The TCD 5.0 will be equipped with the well-proven DEUTZ exhaust aftertreatment system, consisting of the diesel particulate filter (DPF), selective catalytic reduction (SCR) and the diesel oxidising catalytic converter (DOC). This provides customers with the assurance of a future-proof technology.

'Stage V ready' from 2.2 to 16.0 litre cubic capacity

At Bauma 2016, in addition to the new models, DEUTZ will also be exhibiting its well-known 'Stage V ready' TCD product range, consisting of the four-cylinder TCD 2.9, 3.6 and 4.1 engines and the six-cylinder TCD 6.1 and 7.8 models. These engines are available with diesel particulate filters (DPF) and already satisfy EU Stage V, which will apply from 2019 (based on the European Commission's proposal dated 25 September 2014). The six-cylinder TCD 12.0 V-engine and the TCD 16.0 eight-cylinder variant will also be given the 'Stage V ready' label right on time for Bauma. DEUTZ has decided to equip these engines too with a DPF ready for EU Stage V. The size and configuration of the 'Stage V ready' engines with DPF will remain virtually identical as the industry transitions from the current EU Stage IV to EU Stage V, meaning no expensive changes will have to be made to customers' equipment.

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Powerful compact engines

Bauma will also highlight the high-torque variants, a special feature of the compact engines

of less than four litres cubic capacity. The TCD 2.9 High Torque generates a maximum

torque of 375Nm and the TCD 3.6 High Torque generates a maximum torque of 390Nm yet

still remain below the relevant power threshold of 56kW for the coming Stage V exhaust

emissions standard, meaning that they do not require an SCR system. The two engines

meet the current EU Stage IV standard only using an open diesel oxidising catalytic con-

verter (DOC) for exhaust aftertreatment. These engines are very popular with customers as

DOC-only solutions. The extremely successful TCD 3.6 can also be seen at Bauma as a

powerpack which includes the engine, the cooling system and exhaust aftertreatment.

The TCD 2.9 will be shown for the first time as a 75kW high-power version for mobile ma-

chinery. For customers looking to downsize their equipment, the engine can replace larger

equivalents, thereby saving on weight, installation space and costs.

"For us, Bauma is the perfect stage on which to present our developments to a wide audi-

ence of trade visitors. Whether new engines or innovative variants of our existing products

- we always offer our customers the solutions for tomorrow, today," says Michael Wellen-

zohn, member of the Board of Management of DEUTZ AG.

DEUTZ at Bauma 2016: hall A4, stand 337

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