Horsch Leeb sprayers for agriculture run with MTU engines

Reliable, high-quality harvests are virtually inconceivable without the right crop protection treatments. However, achieving effective and ecologically sound application techniques presents major challenges both for the equipment involved and for those who use it. Sprays have to be applied uniformly across the area to be treated and the machines involved must be economically efficient as well as sustainable. That is why agricultural equipment manufacturer Horsch opted for MTU Series 1000/OM 936, 6-cylinder, in-line engines producing from 210 kW to 260 kW to power its Leeb PT 280 self-propelled crop sprayer. The MTU unit meets EU Stage IV and EPA Tier 4 emissions specifications, delivers high torque at low speeds and features low fuel consumption. MTU’s Series 1000 to 1500 engines are specialized off-highway units based on commercial vehicle engines from Daimler. With a boom width up to 36 metres, this Horsch crop sprayer can treat up to 25,000 ha. year.

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Claas Jaguar Forage Harvester 960, 950, 940 and 930
MTU 6R 1500/OM 473 LA (460 kW) and 6R 1300/OM 471 LA (380 kW) engines

Claas forage harvester runs with MTU engines

The Jaguar forage harvesters from agricultural machinery manufacturer Claas are used for harvesting fodder crops and for gathering, chopping and transferring crops like maize. Harvesters are often only in action for a few weeks a year so completely trouble-free operation is essential during the tight harvesting windows in the agricultural schedule. That is why the Claas Jaguar 950 and 960 are powered by 6-cylinder engines from MTU’s Series 1500 range. Based on the Mercedes-Benz OM 473, these units deliver up to 460 kW and use exhaust gas aftertreatment to achieve compliance with EU Stage V emissions specifications due to come into force in 2019. Located downstream of the engine, the vehicle’s one-box EGA system is particularly low-maintenance. Jaguar 930 and 940 are equipped with MTU Series 1300/OM 471 engines delivering up to 380 kW. MTU’s Series 1000 to 1500 engines are specialized off-highway units based on commercial vehicle engines from Daimler. The units also combine long service lives and compact design with outstanding power-to-weight characteristics that make them particularly reliable and economical to run.

Customer
Claas KGaA mbH

Productions Site
Harsewinkel, Germany

The MTU brand is part of Rolls-Royce Power Systems, providing high-speed engines and propulsion systems for marine, rail, power generation, oil and gas, agriculture, mining, construction and industrial, and defense applications. The portfolio is comprised of diesel engines with up to 10,000 kilowatts and gas engines up to 2,530 kilowatts power output. MTU also offers customized electronic monitoring and control systems for its engines and propulsion systems.
Agriculture

Krone Big X 480 and Big X 580 forage harvesters
MTU 6R 1300/OM 471 LA and 6R 1500/OM 473 LA (380 kW and 460 kW) engines

Krone Big X forage harvester is powered by MTU

Big X forage harvesters from fodder crop harvester specialist Krone are always called for where special levels of efficiency and reliability are involved. Powered by 6-cylinder, in-line MTU Series 1300/OM 471 and Series 1500/OM 473 engines, the Big X 480 and 580 units are among the smaller models in the Krone Big-X series. The transverse-mounted MTU engines meet EU Stage IV and EPA Tier 4 final emissions requirements and deliver 380 kW and 460 kW to power the forage harvesters. MTU’s Series 1000 to 1500 engines are specialized off-highway units based on commercial vehicle engines from Daimler.

Whether operating with grass or maize, these forage harvesters demonstrate that high-quality chopping performance is certainly possible at the lower end of the power range. The Krone Big X 480, for example, can get through up to 171 tonnes (fresh weight) per hour. The forage harvester has a maximum speed of 40 kph and weighs a total of 21 tonnes.

Customer
Maschinenfabrik Bernard Krone GmbH & Co. KG

Productions Site
Spelle, Niedersachsen, Germany

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Sharing a stable with a Superchamp

4,000 hours of operation a year. Distances up to 200 kilometres a day. The Marmix Superchamp SL fodder mixer wagon has to produce top performances and it has to do it reliably and with precision. The demands made of it – and especially of its engine – are high. Not only must it be able to withstand operating stresses over the long term, it must also be impervious to the influence of dust and heat in stabling facilities. These were all factors that Franz Aßfalg, CEO at Marmix GmbH & Co. KG weighed carefully in his initial decision to work with MTU: “In future, our Superchamp SL fodder mixer wagons will be powered by Series 1000/OM 936 6-cylinder, in-line engines. There are only a few vehicles in Germany that have to run non-stop for so many hours and work reliably with such precision. In MTU, we’ve found a partner who meets these high standards.”

MTU’s 6R 1000/OM 936 engine ensures that the fodder mixer wagon reaches its destination fast – at speeds up to 60 kph. In addition, it features a reduced-speed operating mode at 1,450 rpm that keeps wear and noise to a minimum.

The 6-cylinder MTU engine is mounted at the rear of the vehicle and can pivot outwards, providing excellent access for servicing, etc. Developed specifically for off-highway applications on the basis of commercial engines from Daimler, MTU Series 1000 engines for EU Stage IV cover the power range from 100 kW to 260 kW.

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Agriculture

JCB wheel loader 457
MTU 6R 1000/OM 936 engine (193 kW)

JCB’s Type 457 wheel loader is primarily used in the mining sector for removing material from mines and gravel pits. However, weighing up to 20 tonnes, the vehicle is increasingly being used in agricultural applications. The quick-hitch coupler system developed by JCB means a whole series of attachments can be flexibly exchanged to set the vehicle up for a range of applications. The unit was developed for shifting materials and transporting heavy, bulk loads and in the agricultural sector it is most often used in biogas plants and for transporting silage. The series-production model wheel loader from this British manufacturer is powered by a 6-cylinder, in-line MTU Series 1000/OM 936 engine. MTU’s Series 1000 to 1500 engines are specialized off-highway units based on commercial vehicle engines from Daimler. The 6R 1000/OM 936 engine in JCB’s wheel loader delivers up to 193 kW and uses exhaust aftertreatment and SCR technology to achieve compliance with EU Stage IV and EPA Tier 4 final requirements. 1,150 Nm torque at low speed, excellent power-to-weight characteristics, high breakaway force and huge traction power all contribute to the outstanding efficiency of this machine.

Customer

JCB

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Holmer Terra Felis 2 eco beet cleaner-loader
MTU 6R 1000/OM 936 engine (260 kW)

Beet cleaner-loader from Holmer is powered by MTU

Holmer’s Terra Felis 2 eco beet cleaner-loader is powered by an MTU Type 6R 1000/OM 936 engine delivering 260 kW of power. MTU’s Series 1000 to 1500 engines are specialized off-highway units based on commercial vehicle engines from Daimler. The engine meets current EU Stage IV exhaust emissions regulations and can take the Terra Felis 2 eco up to a speed of 40 kph on the road. With its SCR technology for exhaust aftertreatment, the MTU engine not only reduces unwanted exhaust emissions, it also cuts diesel consumption as compared with older vehicles. To complement its powerful, efficient and environmentally friendly drive system, the beet cleaner-loader also boasts a range of other hi-tech features. A laser on the transfer loader arm recognizes the level in the truck being filled and automatically ensures it is evenly loaded. The driver can also select individual cleaning programs depending on how heavily soiled the beets are. To round off, the Terra Felis 2 eco offers one of the fastest folding actions in the marketplace. At the push of a button, the machine can be ready for operation within two minutes.

Customer
Holmer Maschinenbau GmbH

Productions Site
Schierling/Eggmühl, Germany

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Dammann-trac self-propelled crop sprayers
MTU 6R 1000/OM 936 engines (180, 210 and 230 kW)

MTU engines for crop-spraying vehicles from Dammann

For its Dammann-trac self-propelled crop-spraying vehicles, the Dammann company confidently places its faith in MTU engines: all four versions in the product family are powered by MTU Series 1000/OM 936 engines. Delivering drive power of 180 kW (Dammann-trac DT 2000H S4 Highlander and DT 2500H S4), 210 kW (DT 2800 H S4 EcoDrive) and 230 kW (DT 3200H S4), these 6-cylinder in-line engines meet EU Stage IV/EPA Tier 4 emissions standards. MTU’s Series 1000 to 1500 engines are specialized off-highway units based on commercial vehicle engines from Daimler. With an impressive maximum working boom width of 42 metres, Dammann-trac vehicles are also ideal for efficient and fuel-saving large-scale application of crop protection products and fertilizers over large areas.

Customer
Herbert Dammann GmbH

Productions Site
Buxtehude, Germany

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