The new generation of the Fendt 700 Vario at Bauma 2022

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At Bauma, the world's leading trade fair for construction machinery and construction vehicles in Munich, Fendt presents the seventh generation of the Fendt 700 Vario series. This completely new ground up design expands the power spectrum to up to 300 hp for versatile applications and also with special equipment. With the new engine, the low unladen weight and the optional speed of up to 60 km/h, this 700 becomes an all-rounder in construction and forestry applications. Technical innovations from the large tractors, such as the VarioDrive transmission or the innovative cooling concept, lead to ground-breaking manoeuvrability in this class.

In its seventh generation, the new range with five models (Fendt 720 Vario, 722 Vario, 724 Vario, 726 Vario and Fendt 728 Vario) occupies the power range from 203 to 283 hp (147 - 206 kW) (ECE R120). The Fendt DynamicPerformance (DP) extra power concept releases up to 20 hp of extra power in the Fendt 728 Vario DP via a demand-dependent control system precisely when it is needed. The top model thus achieves a maximum performance of up to 303 hp. The extra power concept is not tied to driving speed or special tasks. It functions purely dynamically, even when PTO work is carried out at a standstill.

Thomas Steinheber (Business Manager Fendt ISU)

"Tractors can be used flexibly in different areas throughout the year. They have already had a firm place in non-agricultural sectors such as industry, municipalities or even construction for many years," explains Thomas Steinheber, Business Manager Fendt ISU. "The new Fendt VarioDrive drivetrain with the latest generation of our Vario transmission, the low-speed concept Fendt iD and the high degree of flexibility in the equipment form the basis for very high overall machine efficiency and productivity - whether in forestry, various construction sectors or even in different contracting operations."

With speeds of up to 60 km/h, the 700 is perfectly equipped for transport, while the optional front loader enables loading operations. The all-rounder is also at home in winter service or when preparing forest roads.

High tractive power with economical fuel consumption

Designed to meet applications in various areas, the Fendt 700 Vario was developed with a low power-to-weight ratio, with a high performance range, flexibility and the careful use of resources and the environment in mind. The 6-cylinder AGCO Power engine CORE75 with 7.5 litre capacity has been completely redesigned for the power spectrum. Exhaust gas after-treatment takes place via a diesel oxidation catalytic converter (DOC), diesel particulate filter (DPF) and with selective catalytic reduction (SCR) without exhaust gas recirculation. It meets the required exhaust emission standards in all regions worldwide. In Europe, this is the Stage V exhaust emission standard. In addition, maintenance-free hydraulic tappets are used. The single-stage Fendt VarioDrive transmission is made up of the engine and the matching Vario transmission.

PRESS RELEASE AGCO POWER ENGINE CORE75

Intelligently controlled all-wheel drive management is one of the advantages of Fendt VarioDrive. It drives the front and

rear axles as needed and distributes the power dynamically. The so-called pull-in-turn effect pulls the machine into the curve during turns. The result: a particularly small turning circle with full tractive power and less soil compaction. This means that the 700 can also manoeuvre well in narrow construction sites or in the forest.

The innovative low-speed Fendt iD concept is already familiar from the larger tractors. All components, such as the engine, transmission, hydraulics and cooling system, were designed according to the so-called "high torque - low engine speed" principle. In this way, the Fendt 700 Vario achieves high torque even at low engine speeds and saves fuel. The rated engine speed is only 1,700 rpm. The new Fendt 726 and 728 Vario reach a top speed of up to 60 km/h at just 1,450 rpm. The maximum torque of 1,450 Nm on the top model Fendt 728 Vario is achieved at just 1,300 rpm and ensures high tractive power and acceleration strength with minimal specific fuel consumption.

Sets new standards in power-to-weight ratio, manoeuvrability and ground protection

Depending on the work, the series can be flexibly ballasted at the front, on the rear wheels and at the rear. Suitable for use on soil stabilisation or for transport. A gross vehicle weight of up to 15 t allows it to be used as a heavy towing tractor.

The exclusive Concentric Air System (CAS) ventilation and cooling concept is familiar from the Fendt 1000 Vario and has been consistently designed for low engine speeds, compact construction and fuel efficiency. The compact cooling package enables unique manoeuvrability and combines this with particular efficiency. The innovative technology of the pushing high-performance fan presses cooler air into the cooling pack. Therefore, the fan speed can be reduced and up to 40 percent less drive power is needed compared to conventional systems. This power is then available as traction power. The diameter of only 56 cm results in a slim design of the bonnet and enables the large turning angle of the wheels of 52 degrees.

The fully integrated Fendt VarioGrip tyre pressure control system increases the contact area with the ground and boosts tractive power by up to eight percent. When driving on the road, the air pressure is raised and thus the rolling resistance is reduced, thus another two percent fuel* can be saved (*South Westphalia University of Applied Sciences, Agricultural Economics Soest 2014). In the terminal, the driver can conveniently control the tyre pressure via the dual-line tyre pressure control system.

High variance for global requirements

Numerous tyre options are available for the Fendt 700 Vario. The Fendt 726 and 728 Vario models are equipped with large 650/85R38 tyres (2,050 mm diameter) as standard. For special use in construction or forestry, special tyres with an outer width of 2.50 m are possible.

Safety even with heavy transport

The optional top speed of up to 60 km/h at only 1,450 rpm and a comprehensive chassis and safety concept make the Fendt 700 Vario a true transport talent. This includes a dual-circuit brake system, Fendt Reaction Steering, as well as a brake light and deceleration assistant and Fendt Stability Control (FSC). FSC reduces side lean at speeds above 25 km/h and minimises roll. This increases safety in curves as well as driving comfort.

For the first time, a new trailer brake assistant is optionally available for the Fendt 700 Vario. The trailer brake assistant ensures a even tow even in hilly terrain and thus safe driving behaviour. A sensor measures the thrust torque of the trailer via the transmission. When driving downhill, if the tractor detects that the trailer is pushing too hard, the trailer's

pneumatic brakes are activated. Trailer Brake Assist will be available from the end of 2023.

Safety and working comfort thought out down to the last detail

A side window wiper on the right hand side keeps the window clean even in changeable weather. The large panoramic cabin window and the two optional cameras for the front and rear make manoeuvring easier, allowing a direct view of the implement and increase working comfort. Two optional working lights in the bonnet provide the best possible lighting. LED tail lights and a dynamic turn indicator further enhance safety in road traffic.

Long working days in changing weather conditions place high demands on the driver. Even during operations under full load, pleasant temperatures prevail in the cab thanks to the improved performance of the air conditioning system. In addition, drinks and food can now be kept both chilled (0-16°C) and warmed (45-65°C) in a cool and warm box.

A new generation of driver's seat

For the first time, there are six different seat configurations for the Fendt 700 Vario. A new premium seat with intuitive operation via the terminal is available as an option. The driver adjusts the seat height and position as well as the backrest angle electrically via a lever on the side of the seat. When changing out drivers, they can create personalised seat profiles and activate them with one click.

The comfort functions consist of:

- Multi-stage seat climate control
- Multi-stage seat heating
- Four-way lumbar support
- Adjustable side bolsters
- Massage functions
- Memory function for different users

The premium seat will be available from the end of 2023.

Powerful high-performance hydraulics

Up to 220 l/minute and up to five connections at the rear and up to two at the front characterise the high-performance hydraulics of the Fendt 700 Vario.

The new draft control for the rear linkage shifts the weight of the implement proportionally to the rear axle of the tractor, thus increasing traction and improving the work result, e.g., during cultivation.

The Fendt 700 Vario can be ordered now. Delivery of the first machines will begin in the first quarter of 2023.

About Bauma

Bauma is the world's leading trade fair for construction machinery, building materials machinery, mining machinery, construction vehicles and construction equipment. In 2022, it will be held for the 33rd time at the trade fair center in Munich. More than 3,000 exhibitors from 58 countries will present their innovations on 200,000 m2 of covered space as well as an additional 414,000 m2 of outdoor space.

This year's Bauma will be dominated by digitalization and sustainability. Guiding themes at this trade fair are "Construction materials of tomorrow", "Autonomous machines" or also "The way to Zero Emissions".

TO THE BAUMA HOMEPAGE

Impressions from the Bauma 2022

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