

Automated tractor and implement guidance for wine-yards

The awarded automated vehicle developed jointly by Fendt and Braun uses the CAN-based Isobus network to link the tractor and the implement.



On the Agritechnica, Braun presents its awarded automated vehicle (Source: Fendt/Braun)

The automated vehicle for wine-yards by Braun and Fendt has been awarded with the silver-medal of the Agritechnica 2019 innovation award. Operating farm machinery under vines requires a high level of concentration from the tractor driver. The tractor must be steered precisely, while at the same time monitoring and controlling the implements.

The automated vehicle and implement guidance system jointly developed by Fendt and Braun increases output in wine-growing tasks – while simultaneously reducing the strain on the driver. The ground contour, vines, poles, etc. are recorded using laser technology and the information is passed on to the Fendt 200V Vario narrow-track tractor via the CAN-based Isobus interface. The Isobus communication is internationally standard in the ISO 11783 series. Furthermore, the 3D position is determined with a gyroscope and the tractor assumes the track and implement guidance based on this information. The height and width of implements mounted on the left and right between the axles can be controlled independently of each other, however the system can also be used for the lateral guidance of rear mulchers.

The combined tractor/implement control system therefore simplifies the operation of farm machinery under vines. In addition to reducing the strain on the driver and increasing output, more exact guidance of these tools also enables the reduced use of other crop protection measures.

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