

Less stress but more efficiency in field logistics

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During the harvest, combine harvesters have to keep running – while the weather is good – as downtime costs the farmer money. With Fleet View, a newly developed mobile application from CLAAS, it is now possible to coordinate all of the grain transport tractor-trailer units in a harvesting fleet to allow combine harvesters to keep working without downtime.

The application continuously informs all of the drivers in a logistics chain about the current grain tank fill levels and the positions of the individual combine harvesters in a fleet. This information helps the drivers of the transport vehicles to decide which combine harvester they should drive to next. Until now, the drivers of the tractor-trailer units used for grain transport had to decide which combine harvester to drive to next based on their experience and intuition, or were dependent on a clear view of the machines or radio contact. However, the problem in large fields with difficult visibility and when inexperienced employees are doing the job, is that the tractor-trailer units used to transport the grain are often driven to the wrong combine harvesters, which still have free capacity in their grain tank. As a consequence, other combine harvesters in the fleet whose grain tanks are much closer to full capacity have to slow down or even stop until a transport vehicle reaches them.

CLAAS Fleet View solves this problem with a graphic display on a commercially available tablet PC or smartphone, which every driver in the logistics chain can be equipped with. The display shows the current field positions of all combine harvesters at all times, as well as their respective grain tank fill levels. This information allows the driver to immediately decide which combine harvester they should drive to next and which route they should take to do so.

Fleet View thus reduces the risk of downtime during combine harvester operations and generates efficiency and cost savings in field logistics. It also reduces the stress of harvesting for all of the drivers involved. Another advantage is that Fleet View can be used on all tractors, trucks and other transport vehicles irrespective of the manufacturer.

The technology

The continuous flow of information between the combine harvester and transport vehicle is provided by four sensors in the grain tank, a QUANTIMETER and a transmission module on the combine harvester. The fill level

of the combine harvester is continuously measured using the QUANTIMETER and the values from the grain tank sensors. The current fill level data are continuously transmitted by the transmission module to the tablet PC or smartphone via the mobile telephone network and are updated in real-time. Since the quantity of data transmitted is very small, Fleet View still works perfectly well in regions with a weak mobile telephone network. The geo-positioning data of the combine harvesters, which are also required for the system to work, are obtained through a communications module which is also used by the CLAAS TELEMATICS system. The transmission module required by the system is also part of the basic equipment of TELEMATICS.

The complete CLAAS Fleet View application with hardware and software will enter production in October 2016 and can be used on tablet PCs or smartphones with the iOS or Android operating systems. Downloading the application will be free of charge, while the hardware required by the system is already installed with the TELEMATICS system of the combine harvesters, except for the QUANTIMETER. A Fleet View licence will be required to use the system and can be purchased together with the machine. In future, the entire Fleet View module will be available as an option for all LEXION and TUCANO models as of the 2016 model year.

You will find CLAAS at the Agritechnica 2015 in Hall 13, Stand No. C05.

Source: CLAAS