Meet the robot tractor at Machinery Days

Visitors to the International Agricultural Machinery Days in Oudenaarde, East Flanders, later this month – among them Flemish minister-president Kris Peeters and environment minister Joke Schauvliege, have a surprise in store: a tractor that drives itself.

The robot tractor (pictured) is the work of the Flanders Mechatronics Technology Centre and the Mechatronics, Biostatistics and Sensors department of the Catholic University of Leuven. Their job was to develop a sensor system that could perform the operations carried out by an experienced tractor driver: constantly evaluating the position of the tractor, the condition of the terrain and the dimensions of the field, and then be able to judge the correct direction and speed needed.

To do that, the tractor, constructed by the Italian machinery manufacturer New Holland, is fitted with sensors that measure the soil conditions, and even keep track of the slippage of the wheels in wet or muddy conditions.

"By allowing agricultural machines to ride around autonomously, the ever-increasing operating costs can be reduced," said Vincent Theunynck of New Holland. "On top of that, there is no longer any need to adjust the driving mechanisms in changing conditions, thanks to the robot's own learning behaviour."

The robot tractor can be seen in action in a video here: www.lecopro.org/tractor.wmv. Agricultural Machinery Days is on 24-25 September.

→ www.werktuigendagen.be