



SPEED INCREASE AND QUALITY UPGRADE with Ubimax Vision Picking Solution xPick



JOHN DEERE



Mannheim, Germany



Agricultural Machinery
Manufacturer



Roll-out to full
production



2016

INITIAL SITUATION

At the John Deere works in Mannheim, different tractor models are built at one assembly line. With coordinated logistic procedures, the assembly line is fed with the right material, at the right place, at the right time, for the right tractor model.

For the kitting process, 5 part families with different versions are kitted in 3 different kitting wagons. The confirmation of the kitting steps takes place by manually double checking all process steps.

Keen to use the latest technology innovations, John Deere decided to step up their game...

BUSINESS CHALLENGE

The demand for lean and efficient processes with high quality as well as high productivity levels asks for mistake proof operations to avoid problems at the assembly line. The speed and the error rate of the current picking process needed to be enhanced as well as the flexibility of workers.



„We chose Ubimax because of their high number of references. Ubimax could show us that their technology delivers a value in real-life production environments!“

-Martin Drüke, Head of Factory Logistics

Workers need both of their hands, in order to handle the often heavy vehicle components. An enhancement, therefore, should also consider the ergonomic factor next to the productivity and quality level of the picking application.



210.000
picks a year



<10
PPM



100%
satisfied workers



It took Ubimax only three months to develop and implement a solution based on the John Deere requirements. The Vision Picking Solution xPick was introduced, optimizing the kitting process. After a short ramp up time, the full production targets were met with the Ubimax Solution.

Vuzix M300 Smart Glasses (with intuitive graphical User Interface) are used, offering a highly adjustable smart glass for different preferred mounting options. Touch or voice control allows extremely easy operation. As a general principle, users have both hands free while they are working. The camera in the glasses is also used as a barcode reader for the confirmation process.



CONVINCING BENEFITS

The benefits of the hands-free Vision Picking Solution were measurable after only two weeks in use, supporting the kitting and increasing the process quality. Through the implementation of xPick, a reduction of the error rate close to zero was achieved and the intertwined operations were unraveled.

Next to error rate improvement, the ergonomics were significantly enhanced by introducing hands-free working where it is really needed. The implementation of the Ubimax solution also favors a shorter training time for new employees as well as a more flexible employee deployment.

