

## **Group-wide contract with Continental**

### **Mobile data acquisition for Continental AG – the corporation signs a group-wide contract with Membrain**

Continental AG has already been working together successfully with Membrain GmbH in the field of mobile data acquisition since 2006. Now, Continental AG is putting the seal on this partnership with an official group-wide contract. This is intended to further strengthen the many years of collaboration and teamwork between the two companies that originally began with the “batch tracing in tyre production” project. Continental AG then also introduced the Membrain standard inventory management solution into its plants at Korbach in Germany and in the USA.

At the beginning of this year, Continental once again also decided to introduce the Membrain standard for mobile data acquisition for maintenance with SAP PM. The tangible asset inventory was successfully implemented in spring 2012 and subsequently also released for the initial stock-takes on an international level. The existing maintenance application is currently being extended to include kanban.

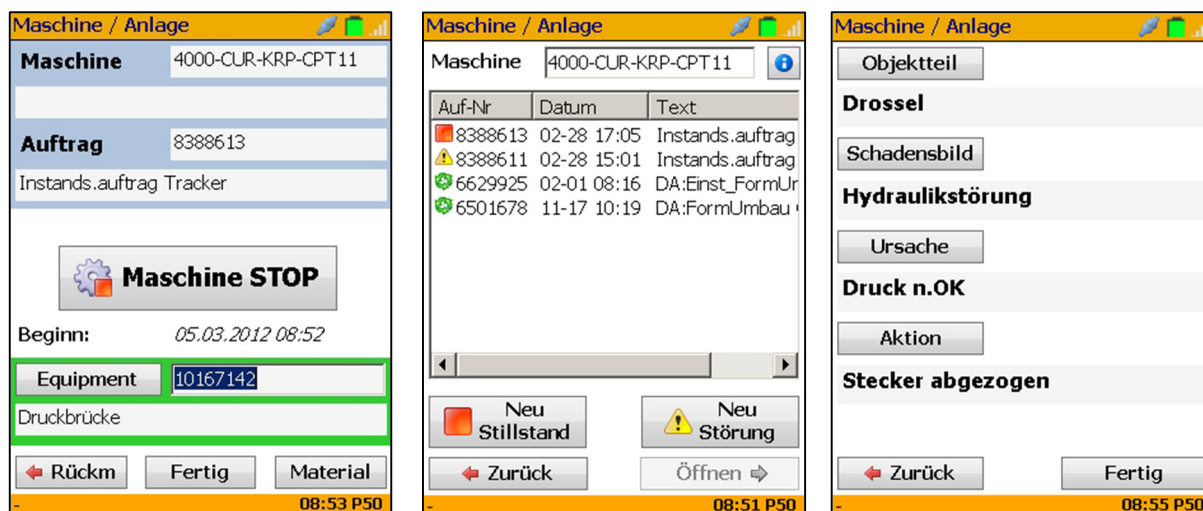
Membrain GmbH is a leading software provider for production and logistics solutions. The product portfolio ranges from mobile data acquisition and production and machine data acquisition to data integration, even in complex manufacturing execution systems (MES). In 2012, the Membrain software was awarded the Innovationspreis Mittelstand for innovative SMEs and the Industriepreis for outstanding industrial solutions.

Today, Hanover-based Continental AG is one of the largest automotive suppliers worldwide. The listed company currently employs around 169,000 people at over 200 locations in 46 countries.

At the time, the initial “batch tracing in tyre production“ project was one of a kind, and the requirements were as complex as the high-tech tyres themselves with their limited life cycle. Rubber ages, and so the selection of raw materials plays a key role in the production of the end product. It is essential that the material is processed before its expiration date. Following the FIFO principle (First In - First Out), material produced first must also be processed first. Workers are now able to immediately identify the condition of the material (still within its expiration date, locked, reserved). The mobile application makes it possible to make stock transfers from one bin location to the next, and to the machines. A FIFO check is performed prior to a machine put-away - it is now also possible to carry out a stock-take or identify a booking process at any time. The application is intuitive to use, and the user interface clear and easy for the worker to understand. Nearly all of the actions can be performed with scanners and only a few keyboard inputs are required. The data is recorded using mobile data acquisition and transferred online direct to the Oracle database. The data acquired in this way can be used for traceability purposes and analyses.

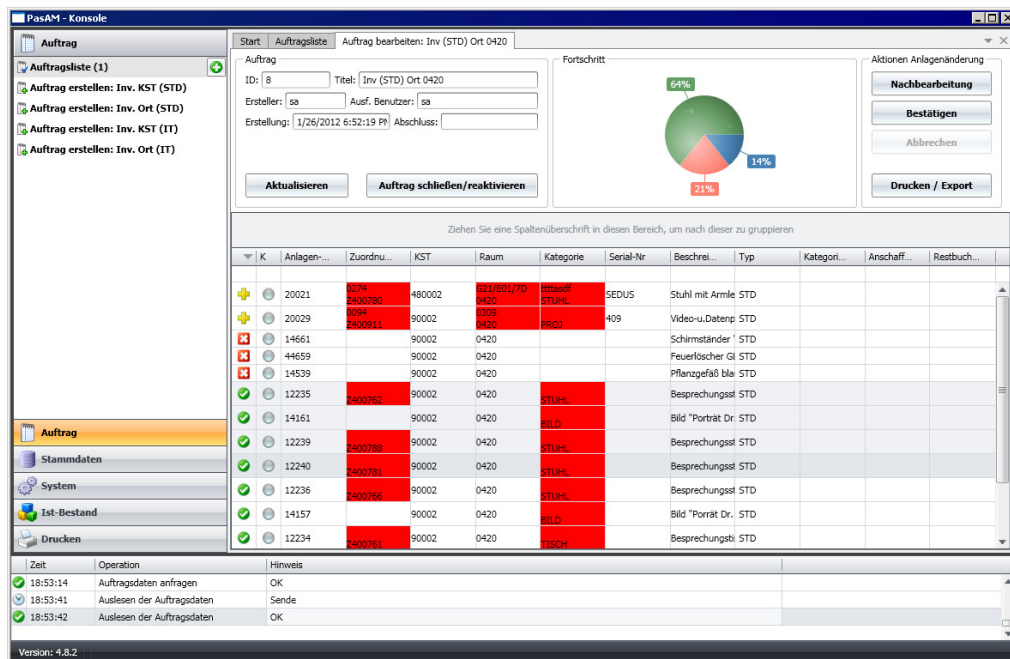
The introduction of the MembrainPAS mobile inventory management solution marked an end to the laborious, time-consuming and error-prone workflow previously in operation in Korbach and locations in the USA. The online/offline mode allows the much tried-and-tested standard application to operate quickly without interruptions, even under diverse environmental conditions (e.g. in a warehouse without wireless coverage). The temporary storage of the data prevents connection breakdowns, data losses and double entries. The inventory is recorded by scanning with mobile devices. The data are then transferred to the SAP system where they are compared. A stock-take can now be performed by anyone quickly and error-free at any time without high administrative costs.

Continental AG uses the **MembrainPAS PM product** - mobile data acquisition for planning, managing, documenting, analysing and organising maintenance. Using the mobile application, scanning, recording and creating the maintenance orders is quick and easy, and service repairs and any malfunctions/downtime can be selected and subsequently processed. The software also has a spare parts management function. This makes it easy to request any required articles, record requisition notes and manage spare parts. The worker reports a start and end time for each order and when the work is complete, selects the cause, activity, damage type and object type from a list. This makes it possible to create analyses and statistics, e.g. weak points, material and error analyses, downtime/fault notifications, cause identification, maintenance cost reports, etc. The MembrainRTC server (Real Time Connector) manages the processes in the background and creates an interface between the mobile devices and the SAP backend system. In order to process small parts orders more quickly and direct, Continental decided to extend the existing mobile MembrainPAS PM solution to incorporate a **kanban solution**. The mobile solution has been extended to include a dialog box that is used with kanban cards to trigger a purchase requisition (PurReq) in the SAP system. All entries can be time-delayed on the mobile devices, as well as on the MembrainRTC server. Kanban orders can therefore be created regardless of the WLAN and SAP connection.



Screenshots MembrainPAS PM Client

Continental also decided in favour of Membrain when implementing the **“SAP AA-based creation of inventory labels and automated stock-takes” project**. The aim of the project was to introduce an asset inventory system with integrated interface to the existing SAP system. The asset numbers managed on the SAP side were refined as part of the project. The **MembrainPAS AM automated asset inventory** is now performed using mobile devices and a Windows application (console). Continental uses two mobile devices and two consoles per plant. Approximately 140,000 tangible assets are recorded in total. A data interface ensures automatic reconciliation with the SAP system. The introduction of MembrainPAS AM has optimised the asset inventory itself and created greater transparency overall. Once the solution had been put into operation, initial stock-takes were performed in the plants in Slovenia and China.



Screenshot MembrainPAS AM Console