

Transparent production Say goodbye to mountains of paper

Compact industrial printers have evolved to be an essential tool in the field of automotive manufacturing, mainly for the identification of large components. What makes this so special is that the printers get the relevant order data directly from the central data base.

“Using the industrial printers made our production a lot more transparent”, explains Nicole-Patrizia Pelka, working in the BDE management at Faun Umwelttechnik GmbH, in Osterholz-Scharmbeck.

18 thermal direct printers from the cab Mach4 series have been operating for almost a year now, partly in three-shift operation. 17 printers prove their efficiency in the production, one printer is used in the incoming goods department. The RFID capable printer is part of a project that is currently in planning.

In 2008, Faun Umwelttechnik produced at its Osterholz-Scharmbeck location over 1200 tailor-made waste collection vehicles. Every day, two or three vehicles of a particular type leave the manufacturing process. Each line always handles several types of vehicles. “ Usually, standard models need a production time of about 5-6 weeks, special orders require another 8 weeks and more”, continues the BDE manager. “That’s why we have such a variety of parts that need to be precisely identified.”

Production starts with the own laser system where the parts are cut. Second step is the steel construction department where large components, i.e. the tanks are produced. Then, these parts pass in pairs and together with the rear part of the vehicle the priming and varnishing department and then move just-in-time to the pre-assembly and assembly of the complete vehicle. “We are using the printers for the identification of the parts, especially the big component parts,” so Nicole-Patrizia Pelka.” Thus, we are able to exactly verify the status of order processing and know which step does follow.”

The printers are connected to the BDE terminal via Ethernet Interface. All printers come with an USB barcode scanner. The accompanying order documents have a barcode containing payslip ident number and working step. These data are scanned and used appropriately for the parts identification. Having direct access, the printers take these information online from the server - no further interfaces and manual inputs necessary. The whole process is running via the scanners. We are, at any time, able to check the status of every single part,” Pelka continues. If he does not get any information at the scanning process, the employee knows that the order is already booked. He can start a new one. “ So, we have the possibility to verify, regardless of the operating data collection, whether an order is completed or not.”

The waste collection vehicles are built according to a program specified by the production management. This weekly updated program has to be identical to the order processing documents. These documents need to have the same time schedule. It is not possible that single parts leave a processing step for the next one without the assignment and without the parts identification.

After having been identified the ident paper is cut with the help of the cutter which is integrated in the printer and clearly visible fixed to be picked-up by the logistics for being moved to the next processing place.

Each of the printers takes the relevant data from the internal data base. This is made possible by the database connector, the cab software that is running on a server. Additionally, in the stand-alone mode with network connection, the database connector enables to directly query data from a central SQL capable database and to print on the label. At the same time data can be written back and changed during the printing process.

“If necessary, we can change the file at any time”, Pelka explains the advantage. The cab language is not difficult and can be varied easily and rapidly. All printers are controlled via FTP access from the PC without affecting production. And in case the network connection is interrupted a restart makes all systems working again perfectly. The investment for the robust printers was worth it.” We are getting more and more flexible in production and are well prepared for new tasks”, finalizes Nicole-Patrizia Pelka.