

Industrial identification with logIdent®

Case Study - Digitalised wine press hall in Kitzingen



Image: GWF / Kitzingen

Project goal

- Automated, digital tracking and processing of around 2000 grape containers
- Complete documentation
- Forklift modernisation

Challenge

- Integration with existing control station and control/software solutions
- Contactless identification of the grape containers when picked up by forklifts

Solution

- Four TSU 200 wide range readers (logIdent®)
- 8000 RFID sticker tags (four for each of the 2000 grape containers)
- Control hardware and software from ENTAC

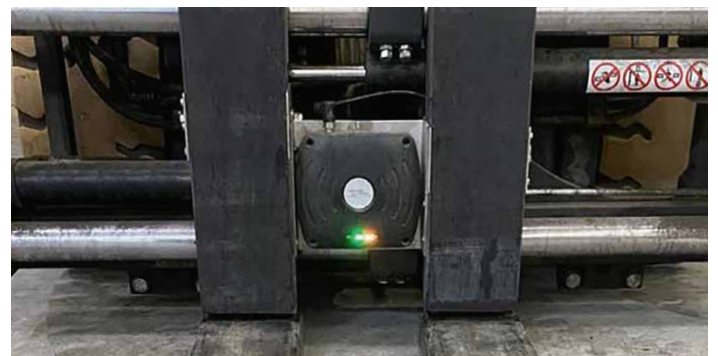
Benefits

- Clear assignment & identification of the containers
- Digital, complete documentation
- Tracking of the grape containers along the entire process

From grape to wine with modern technology - digitalised winepress hall in Kitzingen

One of Europe's most modern wine press halls is located in the Franconian town of Kitzingen. During wine season, several hundred tonnes of grapes are processed there daily. Around 2000 grape containers need to be stored and tracked. For this reason, the Winzergemeinschaft Franken eG (GWF) emphasised digitalisation early during the construction of the hall. The project was entrusted to digitisation specialist ENTAC, who relies on hardware from deister electronic.

The project goal was to ensure efficient and seamless communication between the forklifts in the wine press hall and the control software in the main office. Grape containers were to be directed to the correct storage location or directly to the storage vat or grape press. For this purpose, the forklifts had to be automatically supplied with corresponding driving orders after picking up and sorting out the containers.



Consistent documentation

In wine production, all processes must be fully documented. This becomes a real challenge when around 2,000 containers of 600 kilos of grapes each, coming from hundreds of wineries need to be moved around the 5,000 m² hall area with the help of forklifts. „In order to automate documentation and tracking, each of the four forklifts in the wine press hall was therefore equipped with one of the powerful, reliable wide-range readers from ▶



deister electronic. This communicates with one of our COM boxes, which is also attached to the forklift. Thanks to their robust design, the readers are ideally suited for the adverse conditions in the wine press hall," reports Jörg Dombrowski, responsible project manager at system integrator ENTIAC.

The grape containers are each equipped with four inconspicuously attached RFID sticker tags that are auto-

matically read by the forklift when they are picked up. Information about the contents is stored on the tags - such as the grape quantity and variety and winery of origin. The ENTIAC-COM-Box sends this data via WLAN to the warehouse control software, which in turn automatically displays driving orders and destination storage locations to the driving personnel on a tablet on the forklift.

Fast implementation, fewer errors

The team of four forklift drivers was pleased with the shallow learning curve, the system-related working comfort and the low susceptibility to errors: „Without the system, we would have to get off the forklift for each container and do the documentation by hand scanner and paper list. Now it's all fully automatic.“ The decision-makers of the project - the logistics management, the management of the wine press station, the IT department and the GWF management - were pleased with the short and effective implementation phase: the system was ready to use for the 2021 grape harvest. ■

About the Winzergemeinschaft Franken eG (GWF)

The GWF, founded in 1959, is one of the largest winegrowers' associations in Germany. Between Spessart and Steiger Forest, Saale Valley and Tauberfranken, more than 2,100 wineries grow grapes on more than 1,200 hectares. These are processed into various, sometimes award-winning Franconian wines, in the 5,000 m² Kitzingen wine press hall.



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About the ENTIAC GmbH

ENTIAC has been supporting companies from the automotive and discrete manufacturing industry in their process digitalisation and automation for over 20 years. Digitalisation is in the company's blood, customer satisfaction is a given. From consulting and conception to implementation and customisation, everything comes from a single source.



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About the deister electronic GmbH

For over 40 years, deister electronic has been developing and producing innovative security and automation solutions of the highest quality as an internationally modern and sustainably managed family business. The RFID expert's product portfolio includes intelligent access control systems for doors, gates and other access points as well as smart locker systems for keys, valuables and workwear. The powerful RFID readers and versatile transponders are also used in modern automation processes in Industry 4.0, logistics and waste disposal management.



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