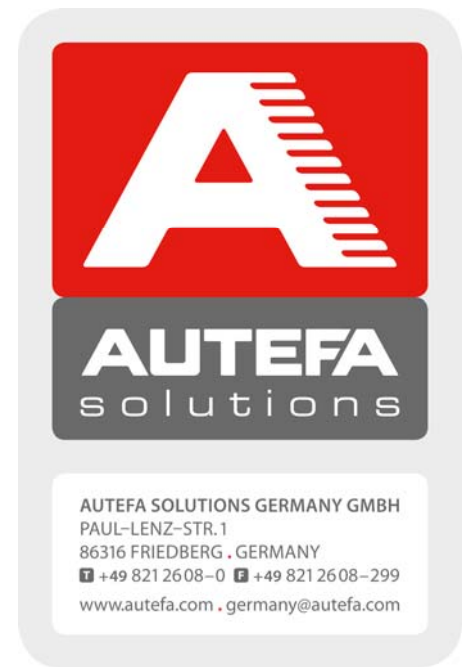


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**Winery Toifl: With a 100% bottle fixation,
the state-of-the-art wine bottling line in Austria**



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Winery A&M Toifl is a renowned family business in the heart of Lower Austria.

As a strong partner for the food industry and as international wine merchant, the family business is very well established. The range of wines impresses with a wide selection of high quality wines at reasonable prices. Reliability in all respects, flexibility, and progressiveness as well as innovative strength are the essential values of the Toifl family to further expand their market position in future.

Using state-of-the art technology, Winery Toifl is able to adapt to the continually growing market requirements and to react promptly and flexibly to individual customer needs. A growing demand in the year 2013 led to the decision to invest in a new bottling line.

After discussions with several suppliers, Michael and Christoph Toifl decided in favour of the AUTEFA Solutions line concept. For more than 60 years AUTEFA has developed and supplied turnkey installations and special machinery. Under the brand name "Certus", AUTEFA is focused on fully automated systems which cover the entire material flow, starting from production machines up to the storage of goods in intermediate storage systems or high bay storage systems, including commissioning and dispatch. In the priority area of beverage industry, the Friedberg company has installed numerous systems around the globe. Among the customers are besides numerous companies in Europe also large bottling companies in Africa, USA, Australia and Asia. AUTEFA belongs to the companies which are able to plan, install, realize and commission complete complex installations worldwide.

Reliable performances, high flexibility in combination with state-of-the-art technology are the criteria that convinced Winery A&M Toifl to invest in the dry area of AUTEFA Solutions. The latest generation of the sweep-off depalletizer, type CERTANT R, based on proven Certus Technology, ensures a reliable material supply from the beginning of the line to the subsequent machines with the relevant number of bottles. The products are slid on a discharge table and then directly lead into the filling process.

100% fixing of bottles reduces operating costs

Due to problems of the existing line caused by glass breakage during the sweep-off process, Michael and Christoph Toifl decided on AUTEFA's "No-Broken Glass Device". This module was explicitly designed for customers of the beverage industry. The trend towards ever thinner and lighter glass often results in troubles caused by glass breakage throughout the production process. With the help of the "No-Broken Glass Device" the bottles are fixed and secured during all lifting- and pushing movements. In the sweep-off process each layer of bottles remains fixed until the sweep-off cycle is completed. Breakage of the bottles before and during the sweep-off cycle will be prevented. The sweep-off depalletizer CERTANT avoids broken glass in the dry area. Employees can concentrate on basic tasks and are not busy with removing broken glass. The "No-Broken Glass Device" eliminates contaminations and disturbances due to glass breakage on the subsequent units as well as the risk of injury for the employees. The Sweep-off depalletizer CERTANT processes bottles, placed on flat plastic trays as well as in cardboard trays or -lids.



Sweep-off Depalletizer CERTANT R/"No-Broken Glass Device"

Flexible bottle transport

At Winery Toifl all sorts of wines are bottled. The range varies from 0.25-l to 1-litre bottles. The bottle transport system following the sweep-off depalletizer was designed in accordance with the required flexibility. Short set-up times are a crucial factor for the competitiveness of a family business. To avoid time- and cost intensive set-ups, state-of-the-art technology was the basis for the bottle transport system. The accumulation conveyors and buffering systems are designed according to the latest technology. Non-pressure bottle separation ensures an optimal production flow. Accumulation- and buffer sections are arranged correspondingly. Micro stops of individual machines have no influence on the efficiency of the entire production line.



Bottle transport

Energy-efficient blower technology replaces expensive compressed air applications

For reliable bottle labelling, an efficient drying system is essential. This is guaranteed by a completely closed drying system. A high performance centrifugal blower ensures effective drying by means of a continuous airstream. The enclosure of the working area with integrated fixtures and setting devices guarantees fast and accurate reproducible settings of the air knives. The stainless steel soundproof blower enclosure with lateral air intake channels offers optimal sound insulation, ease of use and excellent hygiene properties at maximum performance level.

Case erection without problems

„Case erection without problems“, was the requirement for the choice of the case erector type. A&M Toifl uses corrugated fiberboard boxes acc. FEFCO 0200/0201 with hot glue bottom sealing. A wrap resistant, stable machine frame is the basis for repeatedly precise sealing of the bottom flaps. In order to keep the personnel requirement on a low level, an elongated carton blank hopper was established.

Packing with minimum set-up time

Central part of the new Toifl line is a fully-automated AUTEFA packer. Equipped with a 4-lane feeding line, the bottles are packed in cartons of 6 and 24. The four axes multi-gripper head offers the advantage of automatic distance compensation for the incoming bottles and also for possible differences in the material thickness of the cardboards. By using the multi-gripper head, different bottle sizes can be processed with only one packer head. The changeover work for the different bottle types is limited to the selection of the relevant programs which are provided in the software. Long transport distances may bear the risk of damages to the bottle labels. To eliminate this risk, the usage of cardboard boxes with separators was constructively considered right from the beginning.

The carton transport is performed with the help of a plastic chain. This ensures a careful and low noise transport of the cartons. Due to the selected type of chain, narrow radii could be realized and the complete installation could be built extremely space-saving. Thus, the carton sealer could be placed close to the packer.



Packer CERTANT PP

Palletizing System with integrated empty pallet handling

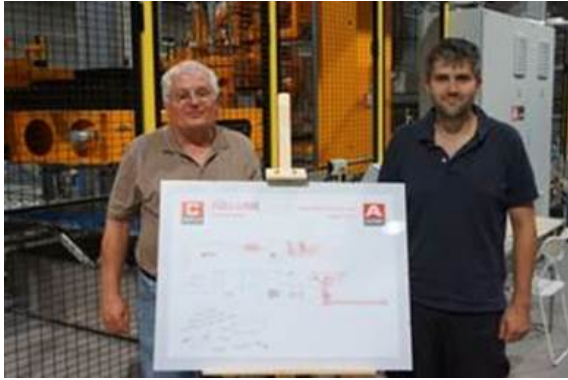
At the end of the line there is a palletizer CERTANT P arranged. The palletizer is equipped with state-of-the-art control software which allows product changes without set-up times. The visualization concept enables the operator to monitor all relevant machine data at a glance. A product change on the line can be done by selecting the corresponding program. At the inlet of the two axes machine, the pneumatic turning station, proven in the wine sector, was integrated. The transport of the cartons to the drive turning station is performed contact-free. The transition from the drive turning station to the layering station is carried out by means of an integrated sliding unit. The formed layer is taken over by the forked gripper head and placed on a deposited pallet. The forked gripper head with integrated centering guarantees layer palletizing without excess ends. The empty pallet supply is carried out without pallet magazine. The empty euro-pallets and Duesseldorf pallets are prepositioned at the palletizing position by means of a pallet gripper which is integrated in the forked gripper head.

Subsequent to the palletizer, the pallets are transported to a stretch winder. Corresponding winding programs guarantee an excellent pallet securing at long transport distances.



Palletizer CERTANT P

The production of the new line was launched in August 2015. Senior partner, Michael Toifl laid the foundation for a transition of the company to the next generation. Christoph Toifl, responsible for production and technology, was instrumental in choosing the types of machines for the new bottling line.



Christoph and Michael Toifl are happy about the successful start of the production line

In close cooperation with AUTEFA Solutions, those machines were selected which stand for successful and efficient production. Since August, Winery Toifl has therefore established the most modern wine bottling line in Austria.