

Project example Beverage packaging



The Packaging Centre South Service Centre, which is located in the Unterschleißheim district of Munich has successfully packaged beverages since the middle of 2009. It currently produces multipacks and export packs for beer and soft drinks for around a dozen customers from the regional and national brewing industry.

This plant allows bottles to be packed in a wide-range of different forms of container including their labelling, printing with best-before-date and bar codes, as well as final packaging onto pallets (Euro, Duesseldorf, Chep pallets etc. including transit support). To meet the ever changing requirements of the various Packaging Centre South customers, flexibility was one of the essential criteria addressed by IPS developing the packaging concept. The wide-range of product packaging variants already in use there today illustrates the success of the scheme.

Possible product formats include, for instance, various cluster forms/packs, arranged in threes, fours, sixes, and twelves on trays (corrugated card or plastic), in flexible divider plastic crates

or shipping cartons. The plant can also produce mixed packs or special formats such as promotion packs containing, for example, 5 bottles and a beer glass or some other inserts.

As always, IPS ensured the optimum plant arrangement by selecting the most suitable specialist equipment suppliers: Robots for: depalletisation of the crates, removal of the bottles and placement on the product infeed conveyor, for palletising the empty crates and packaged export cartons, and the stretch film winder, were all sourced from the company PCA Roboter- und Verpackungstechnik. At any time, this equipment can also be used to insert new bottles into the emptied crates.

Six TLM F4 robots from Gerhard Schubert GmbH group the randomly fed bottles. Another ten TLM F2 robots and a new-generation TLM robot, the TLM F3, also from Schubert, together take care of erecting the blanks for all varieties of the primary and secondary packaging (sleeves, carriers, trays, shipping cartons), inserting dividers to separate the bottles, loading the bottles into the cartons as well as finally closing the packs.

1.



The service centre now produces multipacks and export packs for beer and soft drinks for a range of customers across the beverage industry.

2.

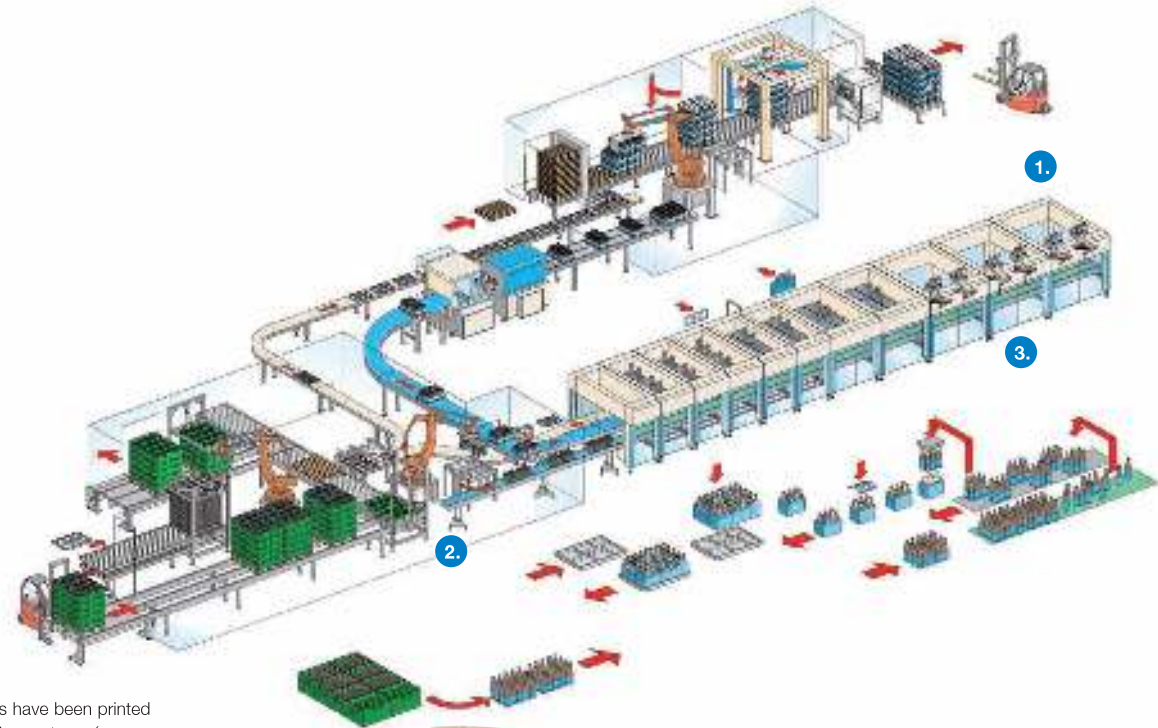


Crates are depalletized, the bottles removed and placed on the product infeed conveyor by a palletizing robot by the company PCA Roboter- und Verpackungstechnik.

3.



Three TLM F44 robots from Gerhard Schubert GmbH group the randomly fed bottles, onto a continuous running product infeed belt.



Once the cartons have been printed in according to the customer's specification, a labeller guarantees that the cartons (and also later on also the shipping pallets) are correctly marked. Secure and reliable, stretch wrapping and welding of the tray containers is ensured by a shrink tunnel supplied by Hugo Beck GmbH + Co. KG.

The design and implementation of this extremely flexible and totally integrated system was achieved by IPS in a period of less than 9 months.



4 x 6-bottle basket in a 24-bottle sales carton (0,33l or 12oz)



4 x 6-bottle clusters in a divider plastic crate (0,33l)



6 x 4-bottle clusters film wrapped in trays (0,33l)