

Project example Pet food



The Herbert Ospelt company wanted to pack its wide range of pet foods in a diverse range of sizes to match the shelf space of international retailers. The variety of sizes, according to brand, mixture and carton format makes the cartoning process a particularly sophisticated task.

The new packing line from IPS overcomes this challenge. It offers high performance and efficient processes from the configuration used for selecting the correct mix of product through to assembling and filling the shelf and transport cartons.

The user requirements profile:

- Supply of several hundred upright bags per minute (100g content)
- Manufacture of shelf-ready packaging and multi-pack packaging (ten carton sizes)
- Two double-row shelf-ready versions (two cartons glued together)
- Assortments: Up to four varieties in a single pack
- Mixtures: Between 25% to 75% of the carton content per variety, depending on the assortment in the package

- Mixed packages with different assortment configurations and/or single variety packaging
- Packaging in shelf-trays (six different formats)

With conveyor speeds of up to 25m/min, a lot of computing power is required. This "juggling" act is mastered by the extensively tried and tested VMS control system from Schubert: the system runs reliably regardless of which format is being processed.

Robots sort the pet food lying in the dividers of a four-track clefted chain. If the control system detects that not enough pouches of a particular variety are being produced, it temporarily slows down the chain.

A stepping chain sets the pouches upright. As soon as a formation is complete, a TLM-F2 robot transfers the packs onto a grouping table. Two paddles then push them together by

1.



TLM-F44 robotic arms position several hundred bags per minute in the packaging line infeed chain.

2.

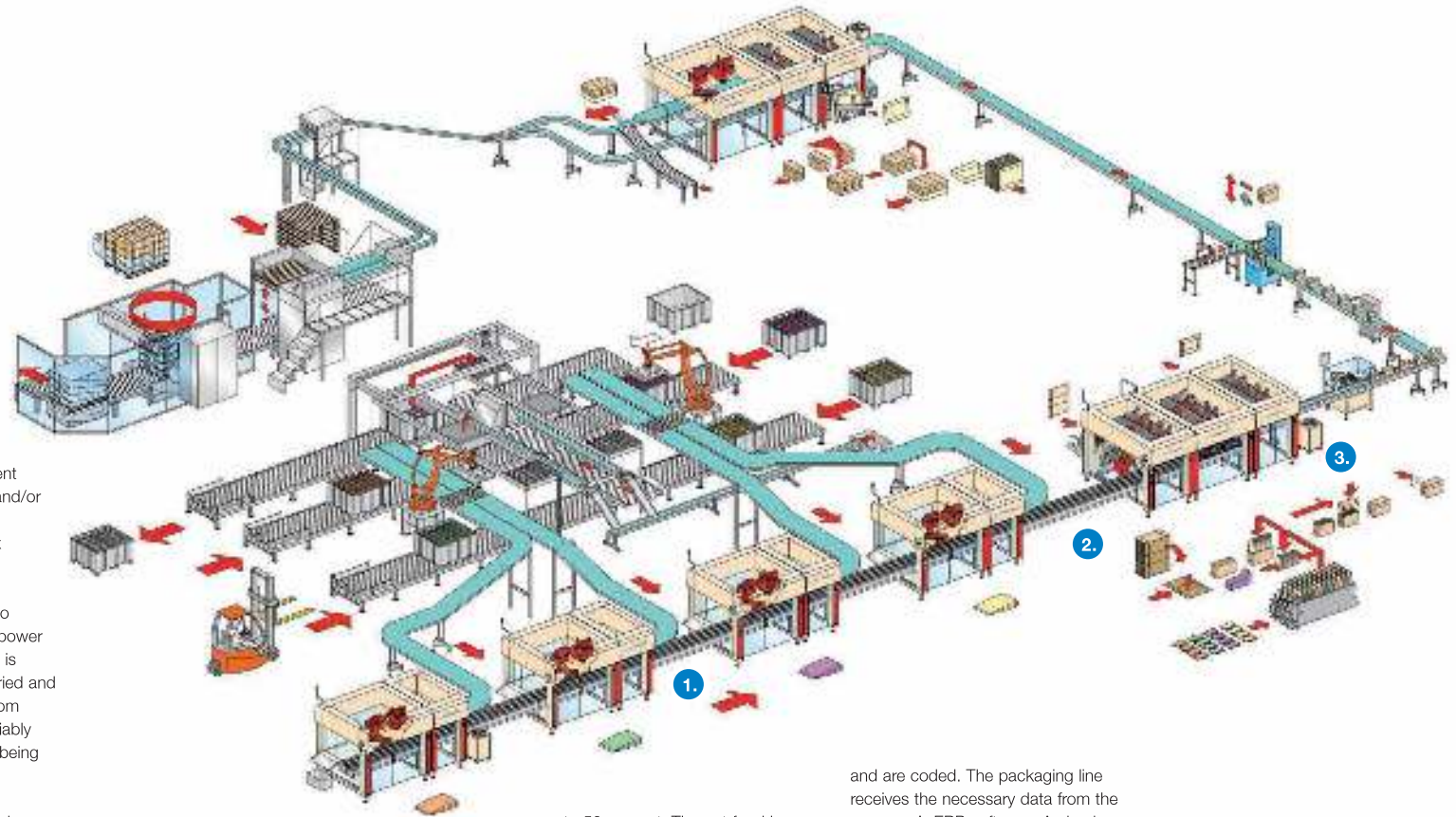


The pre-grouped pouches are set upright and placed in the grouping table using TLM-F2 robots, in order to adapt to the respective carton dimensions.

3.



The filled cartons are closed with a separate lid and placed onto the outfeed conveyor.



and are coded. The packaging line receives the necessary data from the company's ERP software. A check weigher verifies each carton to ensure it is completely filled. The attractively packaged pet food, in the correct mix, is finally transferred to the next section of the plant for palletising.

up to 50 percent. The pet food is levelled off in the pouches. The row will now fit into the packaging.

The finished packs are labelled on their long side or on adjacent corners