



Modern tea bag production with the flexible conveyor system VarioFlow *plus* from Rexroth

Precise, safe, space-saving: Rexroth sets tea in motion

Thanks to the low-wear and compact chain conveyor system VarioFlow *plus*, the tea manufacturer Yamamotoyama can produce tea bags in many flavors simultaneously and within short periods of time in a limited space – with particular attention being paid to not damaging the high-quality product packaging.

In order to gradually expand production, the tea manufacturer Yamamotoyama needed a conveyor system that offers the possibility of grouping varieties and transports batches of flavors to the cartoning machine. During implementation, the company opted for the modular chain conveyor system VarioFlow *plus* from Bosch Rexroth. This system groups twelve cartons of one variety together and leads them to the cartoning machine. Thanks to the smooth surface of the chain, the gloss-laminated final packaging of the tea is not damaged or scratched in the process.

Production speed increased – despite a small footprint

Since the available production space and the lateral distance between the production machines were very small, the conveyor system needed to be implemented in restricted space conditions. The VarioFlow *plus* accomplished this through the variable use of ascending and descending surfaces as well as lateral offsets, which effectively minimized the footprint of the system. The project was supported on-site by TransAutomation Technologies Inc., a member of the Bosch Rexroth ProBuilder Network. They expanded the mechanical design of VarioFlow *plus* with customer-specific, mechanical devices for controlling carton grouping and equipped the system with an electronic control. This enabled the conveyor system to be adjusted to the high output of tea cartons – every machine produces 18 cartons per minute. As a result, the production speed was significantly increased and all procedures were optimized for the long term.

Challenge

Transporting groups of twelve cartons precisely and faultlessly to the cartoning machine within a limited space while protecting the carton surface

Solution

VarioFlow *plus* chain conveyor system with a smooth chain surface

Result

“The project went very well from start to finish.”

Daniel Goldstein, COO of Yamamotoyama of America



Solved with

- ▶ Chain conveyor system VarioFlow *plus*
- ▶ Customer-specific adjustments to the mechanical equipment
- ▶ Addition of an electronic control
- ▶ Consulting, delivery and service