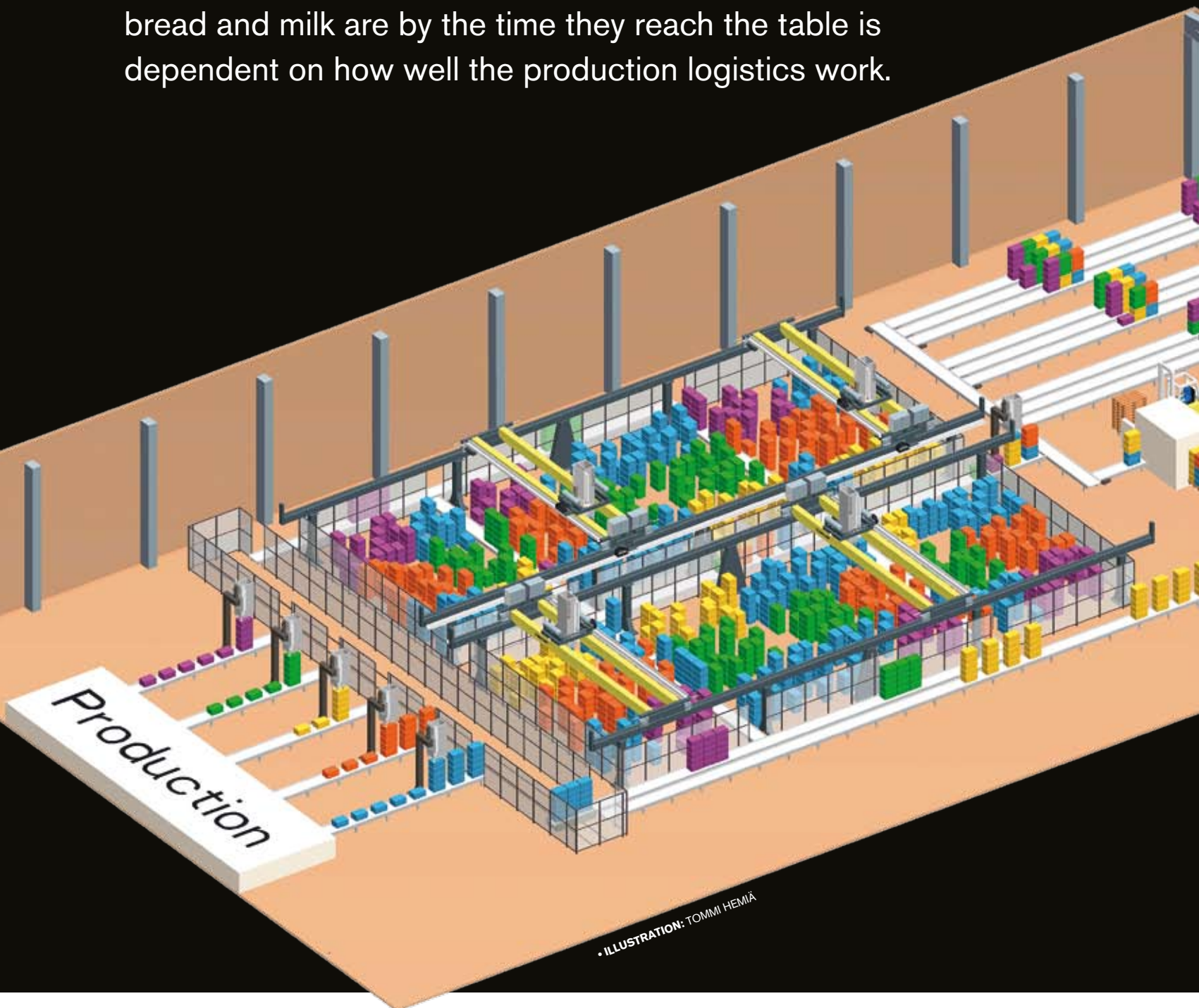


When quality is a race against time

# MultiPick keeps fresh products on the move

Speed and cost-efficiency will determine the future prospects of the food industry. How fresh the consumer's bread and milk are by the time they reach the table is dependent on how well the production logistics work.



• ILLUSTRATION: TOMMI HEMÄ

The food industry is constantly facing new challenges. The retail business is consolidating, competition is getting tougher, and product delivery times are getting shorter. In addition, demands on the accuracy and traceability of deliveries are increasing.

In the future, the producers that will succeed in this business sector are those who can optimize production, react the fastest to challenges, and adapt their wholesale prices while maintaining quality. Even though the delivery cycle is getting faster, there is no room for mistakes. Every single additional hour when the product is on its way from production to the store shelf is an hour off the selling time and may ultimately affect the bottom line.

“The traditional distribution center methods may form a bottleneck to increased

production,” states Timo Rajakangas of Cimcorp.

The more products manufactured, the bigger the need for manpower. Besides being a question of cost, the availability of a suitable workforce may be a problem. Especially in bakeries, the majority of the work is done during the unsocial early morning hours. In dairies, in addition, the work is done in low temperatures.

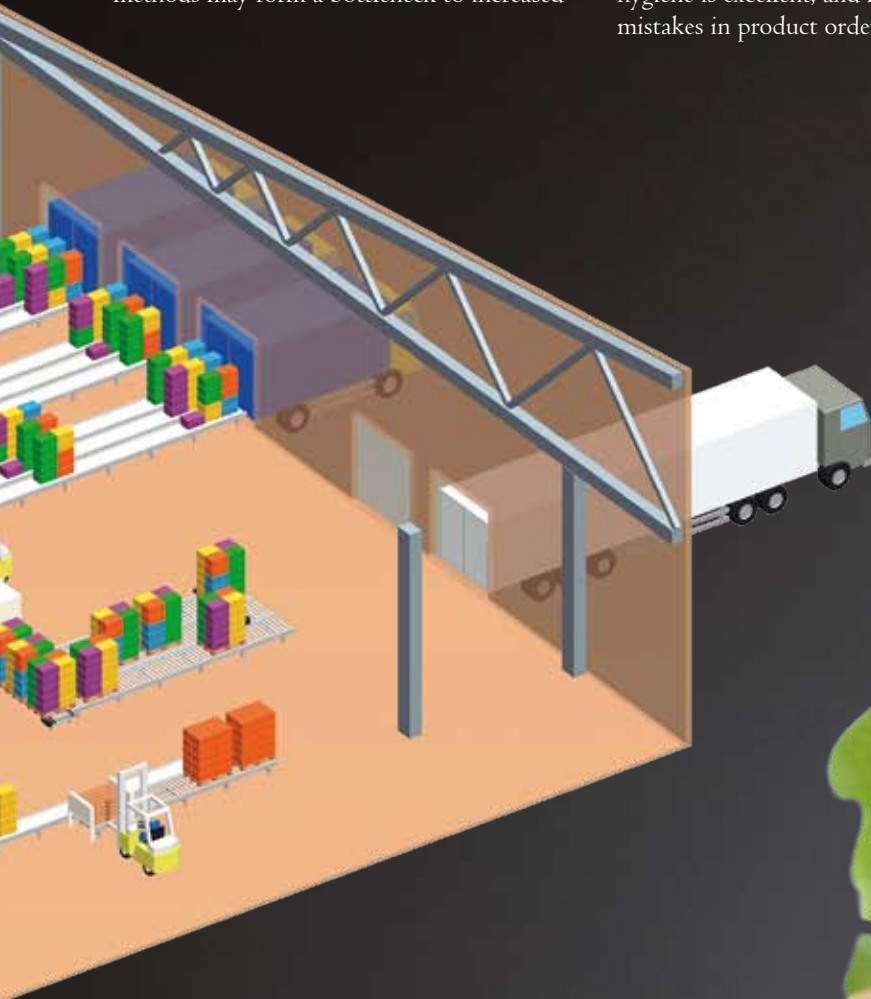
“The solution consists of either total or partial automation of the dispatch function. In the MultiPick system, the goods move automatically from the production line to the loading docks and the material flow is controlled by computers. The product is always in the right place at the right time, hygiene is excellent, and robots never make mistakes in product order picking.”

## Benefits of automation

In dairies and bakeries, the fast cycle of the dispatch function is also a guarantee of high quality. For example, the handling of easily perishable dairy products requires not only hygienic conditions but also an unbroken refrigerated chain. This can be realized easily using robot technology, because robots work faultlessly in the lowest temperatures.

In many countries, legislation limits the amount of heavy product crates that a worker is allowed to lift during each day. For seasonal peaks, more workers are required, who are not always so motivated to carry out their work.

“Of course, the impact of a fully automatic MultiPick system on the working conditions and ergonomics of the distribution center is considerable,” says Rajakangas. ▶



### The MultiPick system speeds up and improves logistics at bakeries and dairies.

1. Product crates are stacked on the conveyor that transfers them to dispatch.
2. The MultiPick robot stores the product stacks as they are on the floor for order picking.
3. MultiPick collects customer orders from the floor storage.
4. Customer stacks are transferred along the outbound conveyor for delivery.



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“But the thing that makes the system flexible is the fact that product stacks are collected on the empty floor below the robot. It is hard to imagine a more flexible warehousing method than a plain floor. It is easy to clean when for instance leaking packages need cleaning up. No product shelves, pallets, or roll containers are necessary in a Multi-Pick warehouse.”

With MultiPick, products can be picked automatically immediately after production in customer-specific product stacks to await distribution. In this way they proceed as a continuous flow in precisely the direction they should, from production to the customer without unnecessary intermediate steps.

After order picking, the system transfers the finished customer-specific product batches automatically to the delivery trucks. Orders are picked and the truck is loaded normally in reverse drop-off order, so that unloading proceeds quickly and flawlessly along the delivery route.

Even though the system deals with large freight masses and order quantities, the automatic handling of material flow always ensures that the certain knowledge of where the products are and where they are going. The sorting errors typical of manual order picking cannot occur.

“It is essential for product safety that the warehouse control system (WCS) that controls a MultiPick distribution center is linked up to the customer’s sales system. In this way, traceability of the products may be useful in the event of a manufacturing error or product recall,” says Rajakangas.

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