Inspiring technology!

ROTZINGER

PFR (Productflow Regulation) and Buffer

BELT BUFFER **MLB**

Multilevel buffering & cooling of sensitive products




1 Batch formation: inline inspection and grouping of products ***2. Product lift:*** feeding the different buffer levels
3. Product cooling: cooling and buffer section (left), discharge section (rear) ***4. Line design:*** optional wash-down construction

Application Area

The multi-level belt buffer (MLB) is primarily used for unwrapped products. In addition to marshmallows, biscuits, or sticky bars, it can convey a wide range of items. The unit can be built in an optional wash-down design, making it suitable for products that generate significant contamination during conveying and where minimizing cleaning time is a priority. The MLB not only regulates product flow, but can also be used for cooling products after baking or for unloading the oven.

Functionality

Incoming products are inspected, and poorly aligned rows can be diverted. The products are grouped without contact and without accumulation pressure, and then positioned on a lift belt for timing-in. The system control sequentially feeds the different buffer levels with the product groups. Once downstream conveying allows further transport, and once the required dwell time has been reached, the product groups are transferred to the discharge belt and, if needed, merged back into a continuous product flow. Loading and unloading can take place at different speeds. Since the products are neither pushed nor accumulated under pressure, this concept is particularly suitable for delicate and sticky products.

MLB for baked goods: 1,800 mm belt width and 100 m of cooling and buffering length.

Customer benefits

The MLB enables the handling of delicate or sticky products. It can be used for product flow regulation and/or for cooling. Implementing product flow regulation can significantly increase productivity. Small pulley diameters allow the handling of very small products as well. The MLB is modular in design and can be adapted to the available space. This makes it possible to avoid long cooling tunnels or costly structural modifications. The system is easily accessible for maintenance and cleaning. The technical simplicity of the unit allows straightforward operation. With intelligent control, optimal buffer utilization is achieved. This not only maximizes throughput but also improves the overall line effectiveness (OEE).

Performance data

Performance data are product- and process-specific and depend on the available space.

Product dimensions	Length: 30–500 mm Height: 4–300 mm
Row throughput	High speeds, depending on the product
Buffer capacity	Depending on row throughput & product size
Installation height	6,000 mm and higher; can also span multiple floors
Belt width	Up to 1,800 mm

Product Focus

- Easy to operate
- High-performance solutions
- Hight availability
- Low Total Cost of Ownership

ROTZINGER AG | Rinaustrasse 30 | CH-4303 Kaiseraugst | SWITZERLAND | Tel +41 61 815 11 11 | www.rotzinger.ch | info@rotzinger.ch