

Higher Quality and Throughput with In-Line Checkweighers at Lamb Weston

Lamb Weston®

The Dutch company Lamb Weston/Meijer V.O.F is one of the largest frozen potato product manufacturers in the world. 15 tonnes of potatoes per hour are processed in the Oosterbierum-based company, which supplies its products to the world's biggest quick-service restaurants and food services in 80 countries throughout Europe, the Middle East and Africa. Since discovering the potato's potential in 1920, the company has been producing a wide range of products made from this staple food, the least allergenic in the world. With its 6 locations in Europe and 17 companies in the USA, Lamb Weston places great importance on food safety and quality. The company has been working together with METTLER TOLEDO product inspection for 25 years to fulfil the criteria of globally approved quality and food safety standards and schemes recognised by the Global Food Safety Initiative (GFSI).

Recently, the company has been retrofitting its production lines with five new METTLER TOLEDO checkweighers in order to achieve a higher throughput than ever before. In the future, Lamb Weston even plans to double production by 2020. The conveyor speed of the new checkweighers is therefore perfectly adapted to the higher throughput rates of the company. And, if necessary, the checkweighers can be adapted further still to accommodate the speed that the production line is likely to achieve in years to come.



Versatile in-line checkweighers, perfectly adapted to the production line's requirements

Lamb Weston

Checkweigher and Connectivity Solution
Regulatory Compliance and Savings

METTLER TOLEDO



10 million portions of fries per day are produced in Europe alone

A huge amount of products need to be reliably checked in order to meet the requirements of net content laws for packaged products and to ensure customer satisfaction – as well as eliminate expensive product giveaway. The automatic checkweighers are installed downstream of a multi-head weigher where Lamb Weston's French fries are portioned before ultimately being packed in 1 kg (=2.2 lbs) bags. The bags are then weighed, with "bad" products being rejected by a pusher. This enables off-weight products to be sorted out reliably. To help this process, a light barrier monitors whether the rejection of underweight or overweight products was successful. If this is not the case, a message is displayed in the info section of the user friendly 15" touchscreen terminal. An immediate conveyor shutdown and the activation of a potential-free contact warning the production personnel allows them to easily remove "bad products"

from the "good products" path and feed them back into the production process in the end.

State-of-the-art technology guarantees high-quality French fries

More than one hundred employees in Oosterbierum ensure that potatoes are processed into high-quality prefried frozen French fries and other potato specialties. French fries have their very own quality specifications, which relate to not only their taste but also their physical appearance. Complex camera technology inspects every single French fry for natural defects, while their color is continuously checked by eye in a laboratory. At the same time, all by-products such as potato skins and bits of potato find a new useful destination – as animal feed, for example.

The high-tech nature of the manufacturing process makes the company's production environment very complex. The design of the five checkweighing solutions has been perfectly adapted to this environment. Due to the small amount of space available, Lamb Weston needed a checkweighing solution that was space-saving and, at the same time, adapted to the height dimensions of upstream and downstream machines. The entire checkweighing system has been designed with a special height to match the line height of the customer's production system. In another effort to accommodate space requirements, the conveyor control system has been positioned externally with a separate control

cabinet including the weighing terminal.

The METTLER TOLEDO FreeWeigh. Net® software package also allows the checkweighers to be used in the integrated production network for recording statistical quality data. The company's entire production process can thus be traced and recorded on item level as well as on batch level, and the system facilitates an accurate overview of current production data. In this way, Lamb Weston covers the entire scope of finished packaging and filling process checking and can react faster to changes in the production process.

Sjerk Zoodtsma, technical director in the field of final packaging, explains that the current production line's upgrade was successfully realised by METTLER TOLEDO: "We are very satisfied with the retrofitting of our production lines. The new checkweighers are perfectly aligned with our production speed and ensure a much higher throughput. And what is more, we now have maximum uptime."

More information:

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METTLER-TOLEDO Group
Product Inspection Division

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Website: www.mt.com/pi

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