

# ISHIDA WEIGHER GENTLY SUPPORTS CONFISERIE BOSCH'S GROWTH

## Case Study **Confiserie Bosch**

### Facts and figures

- » The Ishida multihead weigher is delivering a 30-fold increase in speed.
- » Wibeles are small biscuits which Confiserie Bosch produces as a premium product each biscuit needs to look perfect in its packaging, and so breakages must be minimised.
- » The weigher is running at speeds of 60 packs per minute and an impressive accuracy of only 0.1g per pack.
- » The web-based Sentinel software allows the weigher to be connected to the Ishida service team's system, where production data can be monitored and evaluated in real time.

An Ishida multihead weigher, specifically designed to gently weigh delicate and fragile products, has helped to significantly boost efficiency and growth – delivering a 30-fold increase in speed - at leading German biscuit and confectionery manufacturer Confiserie Bosch. The company is Germany's largest manufacturer of the Wibele, a traditional sweet biscuit from the region of Swabia.

### Challenge

Since it changed hands in 2010, Confiserie Bosch has experienced rapid growth which led to its move in 2018 to a new headquarters on the outskirts of the town of Uhingen. "Sales have doubled in recent years, and our production lines could no longer keep up," explains Managing Director and owner Wolfgang Hellstern.

Wibeles are small biscuits which Confiserie Bosch produces as a premium product to meet the highest standards of quality. This means that each biscuit needs to look perfect in its packaging, and so breakages must be minimised. The Wibeles used to be packed by hand, which was very labour-intensive and offered little flexibility. "We would encounter bottlenecks especially during peak times, and employee absences had disastrous consequences," recalls Wolfgang Hellstern. He then conducted an unusual experiment, spending one night filling bags himself. "When I saw the rather sobering results the next morning, it became clear to me that although we do a lot of production by hand at Confiserie Bosch, we needed machines to help us out," he explains.

### Solution

Just like the other products that Confiserie Bosch makes, including chocolates, sweets, praline eggs and chocolate-coated fruit, Wibeles are extremely fragile and so present a real challenge for a fully automated weighing and packing process. The solution not only needed to be fast and operate with close to zero product giveaway, but also handle the fragile product with extreme







“ This enormous improvement in performance cuts costs considerably and means that our investment is paying for itself very quickly. the factor that has really made the difference is the “incredibly gentle” handling of the Ishida multihead weigher. ”

care. According to Wolfgang Hellstern, “Before we made our investment decision, we watched Ishida weighers in action during visits to other production facilities, which gave us some idea of the technology involved.”

The 14-head CCW-RV-GS multihead weigher for fragile products selected by Confiserie Bosch features gently sloping hoppers with minimum transfer distances and shallow angle discharge chutes with minimal drop heights, to ensure that the products are handled with the utmost care. Both the hoppers and the discharge chutes are also fitted with removable synthetic liners for extra cushioning and a ring shutter underneath the discharge chute further reduces drop distances, minimises product collisions and optimises the product transfer to the packaging machine.

The weigher is fed via a belt elevator and conveyor. A belt elevator and feeder then transfer the biscuits via the weigher's dispersion feeder table and the 14 radial feeder troughs to a set of special curved pool and weigh hoppers with double opening doors. The system's software takes just a fraction of a second to calculate the three best combinations, checks them again and selects the combination of weigh hoppers that come closest to the target weight. The unique anti-floor-vibration system protects the load cell of the weigh hoppers from external vibrations emanating from the production environment. The precisely weighed portions are then released directly from the timing hopper into a bagmaker underneath.

Confiserie Bosch is now using its Ishida weighing and filling system to pack half of its range, amounting to around 80 products. The system

switches between products several times a day which can be done seamlessly using different pre-sets that can be called up on the multihead weigher's touch screen display.

The bags have fill weights of between 40g and 200g with the weigher running at speeds of 60 packs per minute and an impressive accuracy variance of only 0.1g per pack. In comparison, an employee could just about manage 2 packs per minute with the old manual packing process, and with a much lower accuracy and consistency.

As Wolfgang Hellstern points out: “This enormous improvement in performance cuts costs considerably and means that our investment is paying for itself very quickly.” Nevertheless, the factor that has really made the difference is the “incredibly gentle handling of the Ishida multihead weigher”, without which automation would not have been possible. Wolfgang Hellstern states that Confiserie Bosch can now manufacture its products with much more flexibility and is able to accept orders that previously had to be turned down.

Because the CCW-RV-GS model supports Industry 4.0 technology, the Ishida multihead weigher has also given Confiserie Bosch further potential for optimising its processes. For performance monitoring purposes, the web-based Sentinel software allows the weigher to be connected to the Ishida service team's system, where production data can be monitored and evaluated in real time. Daily reports can then be generated showing trends, batch sizes and other statistics. Any machine faults or drops in performance can be identified early and often fixed remotely.

## Contact

### Ishida Europe Limited

Tel: +44 121 607 7700  
info@ishidaeurope.com

Kettles Wood Drive  
Woodgate Business Park  
Birmingham B32 3DB  
United Kingdom



[www.ishidaeurope.com](http://www.ishidaeurope.com)