

Newtec Adapt Weighing Principles According to Customer Needs

Newtec supplies technology that guarantees weighing accuracy, trust in the best weighing results for packing units and cost-effective, customised solutions.

The Newtec multi-head weighers offer various advantages for the packaging industry that revolve around three weighing principles:

- Combinatorial weighing
- Counting by weight
- Mix weighing

Addressing the needs of both small and large packing houses, Newtec supplies technology that guarantees weighing accuracy, trust in the best weighing results for packing units and cost-effective, customised solutions.

More specifically, Newtec's multi-head weighers are purposed for weighing and packing fresh food, washed and unwashed crops, fragile and less fragile produce, as well as multiple product sizes and portion sizes ranging from 50g to 25kg. Newtec serves customers that respond to the ever-growing need for ready-to-eat food in different shapes and sizes and well-packed, convenient portions, and contributes to changing the way consumers access healthy, fresh food. In addition, Newtec provides sustainable solutions with less giveaway and optimal running.

"Sustainability, cost-effectiveness, speed and efficiency in production are at the heart of Newtec's three weighing principles and the machines we supply to our customers," says Marketing and Communications Lead, Maria Birch Sterregård.

Multihead weighing solutions with a focus on the product

Newtec's weighing principles of combination, mix and counting-by-weight services aim to maximise accuracy of performance and handle produce in a sensitive way by reducing giveaway considerably.

The level of automation Newtec provides holds a variety of benefits for both small and large packhouses. Newtec supplies weighing machines with four to sixteen weigh heads running up to 120 portions per minute, depending on the client's needs. According to Newtec's technical head of sales Christian Max Villadsen, Newtec offers 'machines for all products and all portion sizes. We can match whatever request we are getting'.

Christian Max Villadsen goes on to explain: "The starting point is always the product so that we can make sure we handle the product the right way to make it high end." This is also what Newtec's head of sales and market development Thomas Heinicke points out when he says that: "On every single delivery, we pay the utmost respect to the product which we need to handle, doing it as gently as possible, delivering the required speed to the customer and of course also having an extremely high accuracy in the weigh mass."

Newtec's combination weighing machines

Combination weighing effectively weighs the partial portions of the products in the weigh heads. The partial portions are then selected in combination to create the optimum target weight. By approximating the target weight set by the customer, Newtec's weighing machines discharge the selected combination into the containers for the packing of the products in a neat, clean, and fast way.

An example of high-speed production can be seen with Newtec's model 4015B2, which can handle up to 110 portions per minute while being flexible for both medium and small produce.

To meet the customers' exact needs, the machine model and thereby the number and size of the weigh heads are determined according to customer needs. The higher the number of weigh heads, the higher capacity you can achieve. The number of available combinations also increases with the number of weigh heads. With an increased number of available combinations, you will achieve higher accuracy in your target weight.

Newtec weighing machines are easy to maintain and operate. The stainless-steel construction and excellent mechanical design make them extremely durable. The weighing machines are either connected to a packing line or used as standalone.

Counting by weight or by photocells

Count by weight can be done in two ways:

Counting by weight

All Newtec's weighing machines can count by weight and their traits can help customers meet their specific product, size and portion requirements. Counting by weight is indicative for homogeneous products – products with uniform size, shape and weight – and for customers wishing a certain amount packed in a container. Based on the average product weight, the machine counts the number of products in each weigh head and empties a combination with the right amount in various packaging options.

Counting by weight guarantees an efficient way to handle products of the same size, shape and weight, reduce giveaway and avoid repackaging.

Counting by photocells

If the product weight is very dissimilar, Newtec offers a sensor bar on several machines. At the sensor, the products are being counted before they fall into the weigh heads. Often this bar is offered with a rotation brush mounted additionally on the weigher as part of Newtec's 'count-to-target kit'. The function of the rotation brush is to keep the products down and distribute them in one layer in the chutes to make them visible for the photocells for counting.

Both principles can be used to count from two to 20 products in each portion.

Newtec's Mix Weighers

Newtec manufactures many mix weighing machines. To deliver a customised solution according to their customers' needs, Newtec just needs information about the number of products to be mixed and the required accuracy of each product group.

Sensitivity and flexibility to the product are also reflected in Newtec's mix solution when distributing the products into the weigh heads and final packaging. According to the product specifications and requirements, the products are packed in a variety of containers. The filling of the product is based on its kind and cost to avoid the overfill of the most expensive product.

According to Villadsen: "I think that we will see a growing demand for special solutions where we mix different products. We've seen that it's a growing trend, especially in Europe and I'm sure it will come in other markets as well. It requires a special solution where we combine different weighing machines to one solution, which can mix the different products into the same pack." With Newtec, the packing process is elevated through an automated operation ensuring convenience, easy use and high-quality results.

An example would be the root vegetable mix solution offered by Newtec for a client whose aim was a switch from manual to automated for the mixing of four vegetables

packed in a punnet. Two Newtec weighing machines were chosen – one handling three products because of its ability to separate the products to be weighed one at a time and the other handling carrots. Newtec's weighing machine especially for carrots tops up to the correct target weight with carrots. Although the carrots are the last product to be weighed, they are placed at the bottom of the punnet according to customer request. With the combination of the two weighing machines, the client achieved accuracy in portions, less giveaway and reliance on staff while also following the contemporary trend of creating different mixes.