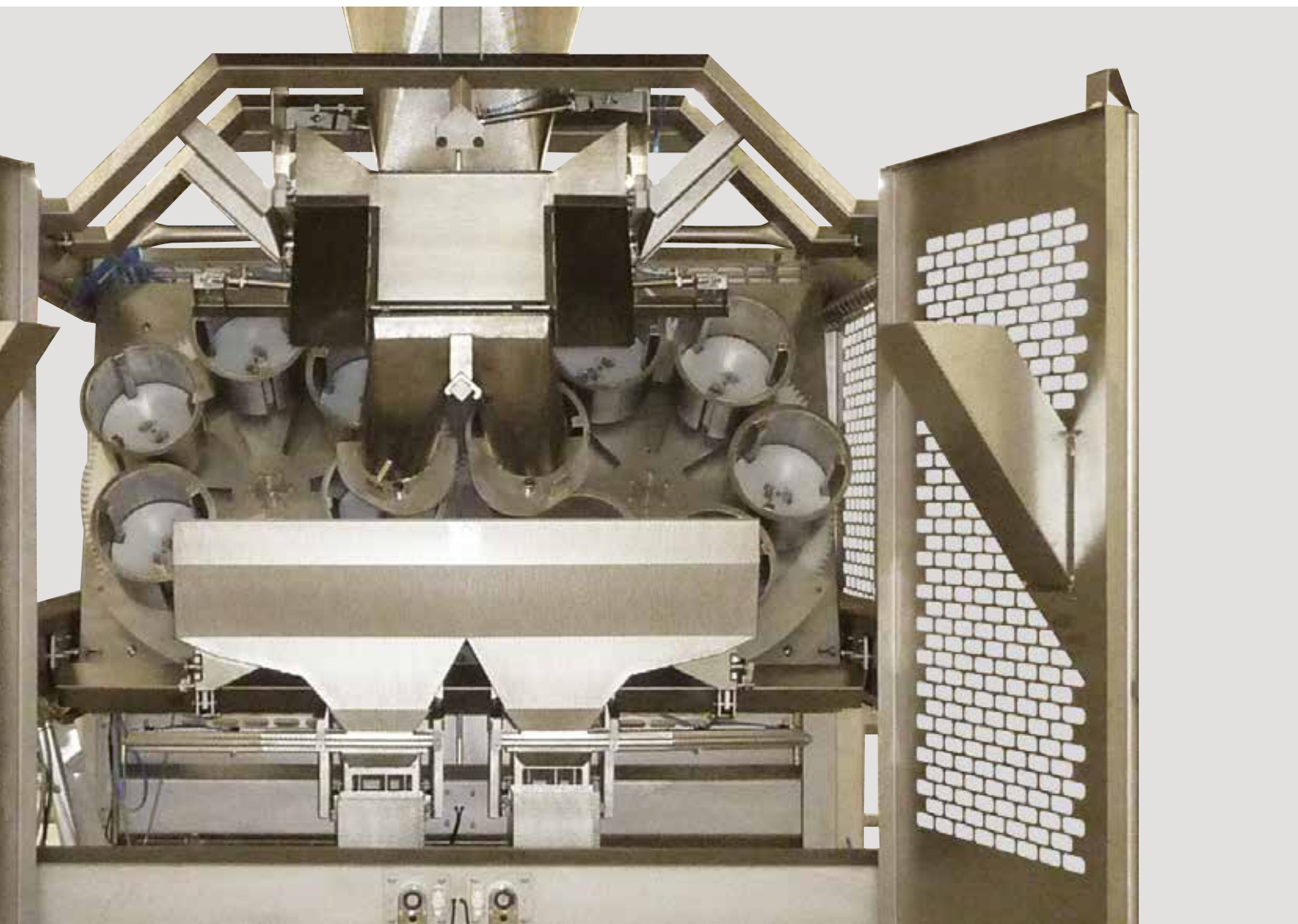


# Orbicote

Automatic continuous  
marination system





Poultry



# Marination: adding diversity and value to your product range

With the trend of convenience foods showing no sign of slowing, marination continues to offer one of the simplest paths to adding value.

Traditional marination-before-portioning has two major problems: it coats portioning equipment, such as weighers, with sticky marinade, and it leaves to chance the amount of marinade that ends up in the pack with each weighed portion. With marinade often costing twice as much as the product pieces it is meant to coat, this is a serious drawback.

Orbicote uses a revolutionary approach to automating the marination process while controlling more carefully than ever before the amounts of product and marinade that go into each pack.



## A marination system for different cuts



Drumsticks



Fillets

### How Orbicote works

With Orbicote, weighing takes place before marination. Each multihead-weighed portion is channelled into a mini-drum where it is tumbled with a set dose of marinade, allowing it to take up a thorough coverage before the entire drum contents are cleanly ejected into the packing system.

### Keeping up with speed

How is it possible to do this at sufficient speed to keep up with the output of a multihead weigher? This is achieved by having up to 12 mini-drums close together in an orbital arrangement, synchronised with the weigher and with, for example, a downstream tray filling system.

### A highly effective approach to marination

Comprehensive testing was carried out to discover the optimum mini-drum configuration, drum rotation speed and number of rotations needed for thorough coating of product pieces with marinade.

As part of this programme, product pieces were examined by food industry marination specialists and assessed for degree of coverage (i.e. marinade adhering to the surface). In each of the 500 tests, the Orbicote mini-drum system met or exceeded their rating of satisfactory coverage.

### Making costly sauces go further

Weighing products before marination avoids the waste associated with marinating bulk amounts in large drums and then weighing them 'wet', where the marinade adheres to the weighing equipment. Losses of marinade, which is usually significantly more expensive than the product being coated, can be as high as 8% using this method.

### Secure loading of product and sauce into mini-drums

The interface between the chutes that carry the product from the weigher and the mouths of the constantly rotating mini-drums is carefully engineered to ensure a clean and secure transfer. The sauce is accurately and decisively dosed into the mini-drums using a volumetric depositing system.

### Gentle handling delivers product to pack in top condition

Short drop distances and a gentle tumbling process in drums of just 30cm diameter help avoid mechanical damage to the product.

### Easy-to-clean, allowing rapid changeovers

With easy access to all parts of the machine and with contact parts (including the mini-drums) readily removable, Orbicote can undergo a changeover, including a change of marinade, in up to 15 minutes.

### Simple and safe to operate

Rapid access is not achieved at the cost of operator safety. Orbicote is comprehensively guarded, the gates being readily openable and removable when the machine is not operating.



# Orbicote: Ishida-engineered for extra efficiency

**Rejected weights cannot hold up the show**

A patented feature of Ishida multihead weighers allows wrong weights to be detected and rejected virtually simultaneously, so that a correct weight can be chosen in place of an incorrect one and discharged into the marinating system without missing a full beat. This adds to the speed and throughput achieved. In addition, any rejection takes place before a 'wrong' weightment reaches the Orbicote system, so no marinade is wasted on rejected portions.

**A system stop won't force a reset**

Orbicote can form a product buffer in the event of a downstream stop. When you turn it on again, the system will continue without resetting or failing.

**No tray no fill**

The Orbicote mini-drum will not expel its contents unless a tray is waiting underneath. And when an unemptied drum makes its way around to the filling point, there will be no further addition of product.

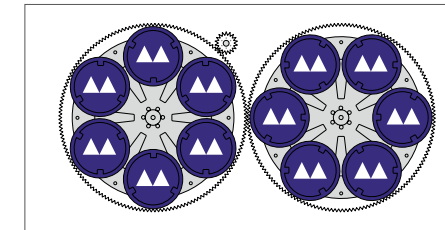
**No empty trays sent for sealing**

If the weigher misses a dump, the unemptied drum carries on around the circuit. Unfilled trays will remain at the line start until filled, so no empty trays will clutter the line or the sealing system.

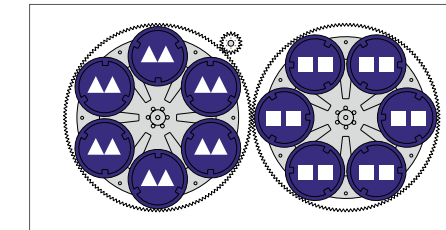
**Rapid marination that immediately transforms your factory's capabilities**

When used with an Ishida 14-head weigher, the Orbicote can fill over 55 trays per minute. A line design for the overall marinating system is shown below, with the unmarinated product arriving from the left, whether in batches or by conveyor directly from a cut-up system.

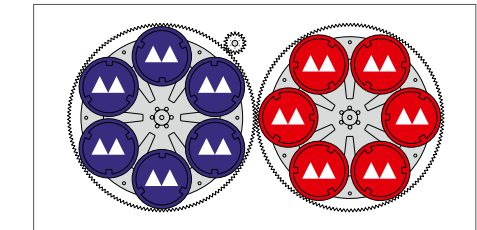
Versatile Orbicote helps you meet varying retail needs and demand levels



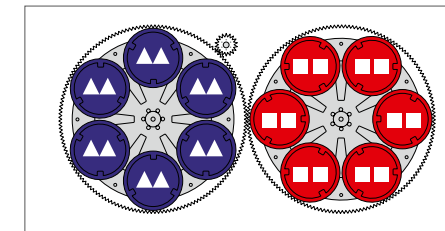
Same cut, same sauce



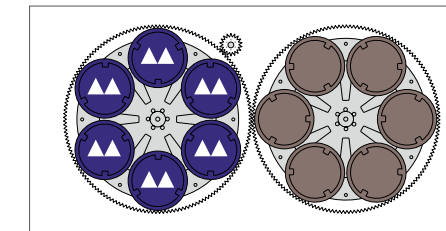
Different cuts, same sauce



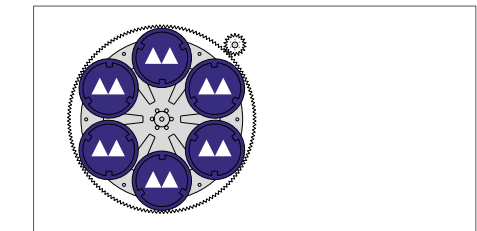
Same cut, different sauces



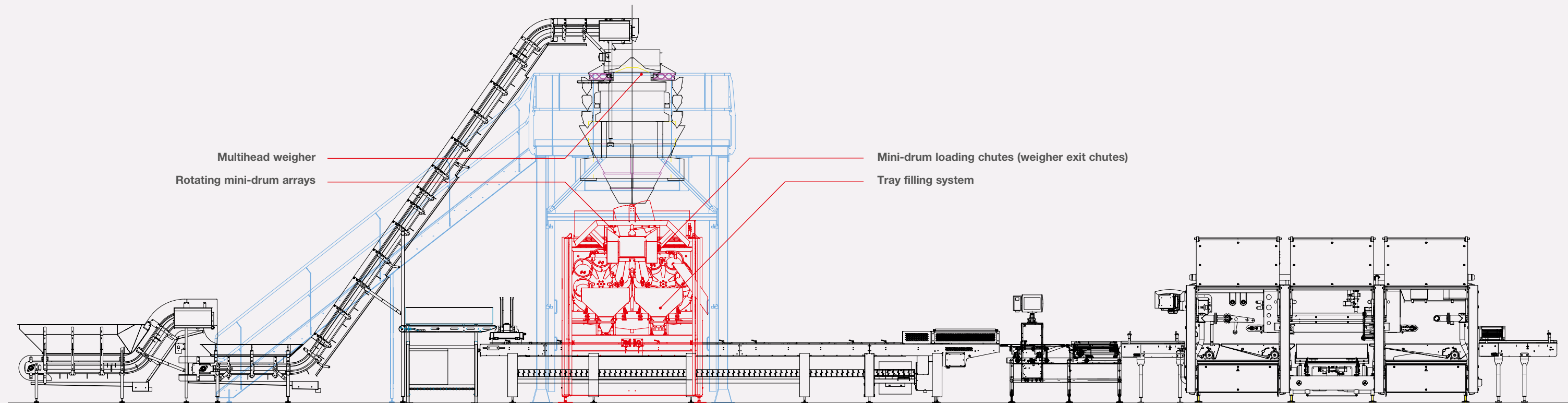
Different cuts, different sauces



Run one side at a time



Single-wheel model



# Working with you every step of the way

Our extensive R&D investment is directed at meeting the challenges of the fast-changing food industry around the globe.

We aim to support our partners fully, from the very start of the buying process, and you will find many equipment brochures, visual animations and case studies available on our website. When you are ready to make contact, a well-resourced network of Ishida companies, distributors and agents, extending across Europe, the Middle East and Africa, can provide advice and organise demonstrations and trials.

Installation is rapid and efficient. For integrated packing lines, we use proven project management techniques and methodologies, tuned to your key objectives and specifications.

A dedicated pan-European service engineering team helps to maximise the performance, functionality and reliability of our installed base. In addition, spares facilities are strategically placed throughout the territory, offering 24-hour delivery in most cases.



Helpline • Spares • Service • Training

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