GEA MultiJector 2mm

Perfect brine distribution and retention every time





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Focusing on your product

The new GEA MultiJector with 2mm injector needles helps you to bring the highest quality and accuracy to the art of bacon and poultry making. Consistent color and taste, long shelf life, high yield and low cost from complete GEA manufacturing lines that give the ultimate control from meat and poultry reception to consumer packages.



The secret is inspired engineering from GEA with unique features that provide tangible benefits to all bacon and poultry manufacturers: injection accuracy for a low standard deviation and maximum profitability; flexible needles that will not break or distort; and the injection Time-in-Meat technique for better brine uptake and more even brine distribution.

But to make perfect bacon and poultry, everything has to be in balance; that's where the legendary GEA technology know-how comes in. It's not what you do, it's how you do it that matters. And GEA does it right.

Focusing on accuracy, consistency and higher profits

Accurate brine injection needs a little finesse. The GEA MultiJector's adjustable injection head sets the needles close to the product for the maximum 'Time-in-Meat'.

Machine settings can adjust the cycle time for each product to ensure even brine injection. This avoids over or under-cured areas for a more consistent taste and color, and contributes to a longer, more predictable shelf life. Low standard deviation maximizes yield and profits.

Process parameters stored in recipe

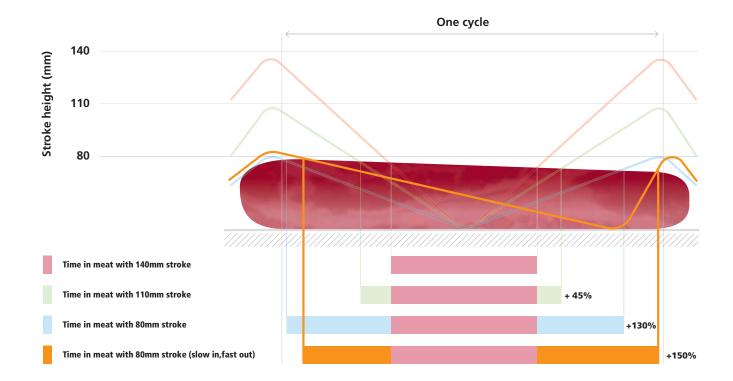
Accurate, controllable injection achieves a more consistent product and higher yields with all parameters stored in the recipe.

Adjustable pressure

The stripper plate on the GEA MultiJector is adjustable to vary the pressure on the meat from a light touch to more robust pressure to assist brine distribution in some products.







Controllable Time-in-Meat

Time-in-Meat is a GEA injection precision technique based on the specific combination of stroke height and injection cycle time, both optimized for each product type. Thanks to the Time-in-Meat technique, the needles stay in the product longer during injection, which leads to better brine uptake and more even brine distribution. As a result, product quality and consistency are significantly increased, and higher efficiency and yields can be achieved.



OptiFlex needles: flexibility meets strength

At the heart of the GEA MultiJector are the unique 2mm OptiFlex needles that combine flexibility with strength as never before.

They are 68% stronger than traditional stainless steel and will flex and recover their shape helping to prevent bent or broken needles ensuring quality consistency and maximum productivity. If extraordinary circumstances cause needles to break, they can be easily located with standard metal detectors.



Flexible and strong

2mm OptiFlex needles flex in the meat to resist bending and breaking while delivering superior brine distribution throughout the bacon and poultry.



No needle marks

The unique needle design stays sharp for up to 60% longer. This extends their operational life and leaves no marks in the meat and poultry after injecting.



Cassette design

A new cassette design provides a consistent needle pattern. The cassettes can be exchanged completely in 7-9 minutes for cleaning or replacement, keeping downtime to a minimum.

Focusing on consistent yield

Tumbler defrosting

Valuable proteins can be lost during the defrosting of meat prior to curing. However, defrosting under vacuum conditions in the GEA ColdSteam tumbler is a safe, flexible, controllable way to keep the protein-rich meat drip within the product for maximum water holding capacity and color.



Homogenous brine mixing

Accurate, homogenous brine mixing is a key element of the process allowing manufacturers to select the right brine recipe for each product, including the necessary additives, to achieve the quality, color and consistency required.



Getting the brine temperature right

The optional GEA SuperChill is a stand-alone brine chiller that maintains the brine between 2°C to 4°C (35,6°F and 39,2°F) for the optimum temperature during production. Accurate brine temperature control reduces injection pick-up variation and reduces post-injection purge enabling manufacturers to stay closer to the allowed maximum. GEA SuperChill potentially increases yield providing a better quality, more consistent product and a fast pay back.



Brine filtration

GEA's dual suction brine filters are integral with the injectors. They purify brine from injectors, removing any meat particles or fibers present, and return it to the process in a continuous operation, without the need to dump the brine. This helps prevents blocked needles, reduces wastage and ensures that brine remains in excellent condition. And all vital filter parts stay on the filter tank during sanitation.





Shakers and flip-over, drip-off conveyors

Shaking the product after injection removes excess brine and closes needle marks. The massaging action actives proteins to improve the water holding capacity of the final product.

Ultra-hygienic frame design

The MultiJector is designed without hollow areas or hidden or inaccessible cavities that are difficult to clean or inspect. All surfaces are easily reached, and horizontal faces are inclined to prevent fluid build-up. All hoses, cylinders and pneumatic systems are routed away from the food zone. The bottom of the drive zone is completely free of components for effective inspection.





Inline tumbling

The GEA RotoDrum removes excess brine from the different layers in bacon and from the cavity in whole birds by moving the product through the drum in a spiraling motion as it turns. It also gives a massaging effect to close remaining needle marks.

Easy cleaning for minimum downtime

The MultiJector also features a unique conveyor belt cleaning system that includes a hoisting device mounted on a trolley. This allows the belt to be removed, cleaned and returned by one person without having to remove up and downstream equipment. Simple removal of the belt gives easy access to the machine for fast, thorough cleaning and minimum downtime.

Focusing downstream



GEA technology and expertise for making perfect bacon and poultry does not stop with brine injection. Upstream operations such as chilling and downstream smoking, cooking, freezing, slicing and packing all form part of the process. All are matched and seamlessly integrated to create the ultimate complete bacon and poultry production line.



Cooking with GEA Cookstar

For 25 years the GEA Cookstar has been the leading cooker for the food industry. Today it has evolved to provide three-phase cooking that can cook and roast any product in virtually any style, including the smoking of bacon and poultry products.

Spiral Freezing with CALLIFREEZE™

GEA has recently introduced CALLIFREEZE[™] to its S-Tec range of spiral freezers for the food industry. The new system calibrates the freezer parameters by continuously measuring the level of frozenness of the product at the freezer exit. This ensures that products are frozen precisely to the manufacturer's requirements, preparing them ideally for slicing and providing the best possible quality with the minimum of power.



Perfect slicing and packing

Absolute hygiene, consistent product quality and perfect presentation are essential for sliced products that will stand out on a supermarket shelf. GEA slicers and packers create products that are as attractive as they are appealing: stacked, shingled, interleaved or in chunks all with GEA precision and product weight control for maximum yield and minimum wastage.



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA is listed in the STOXX[®] Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.

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