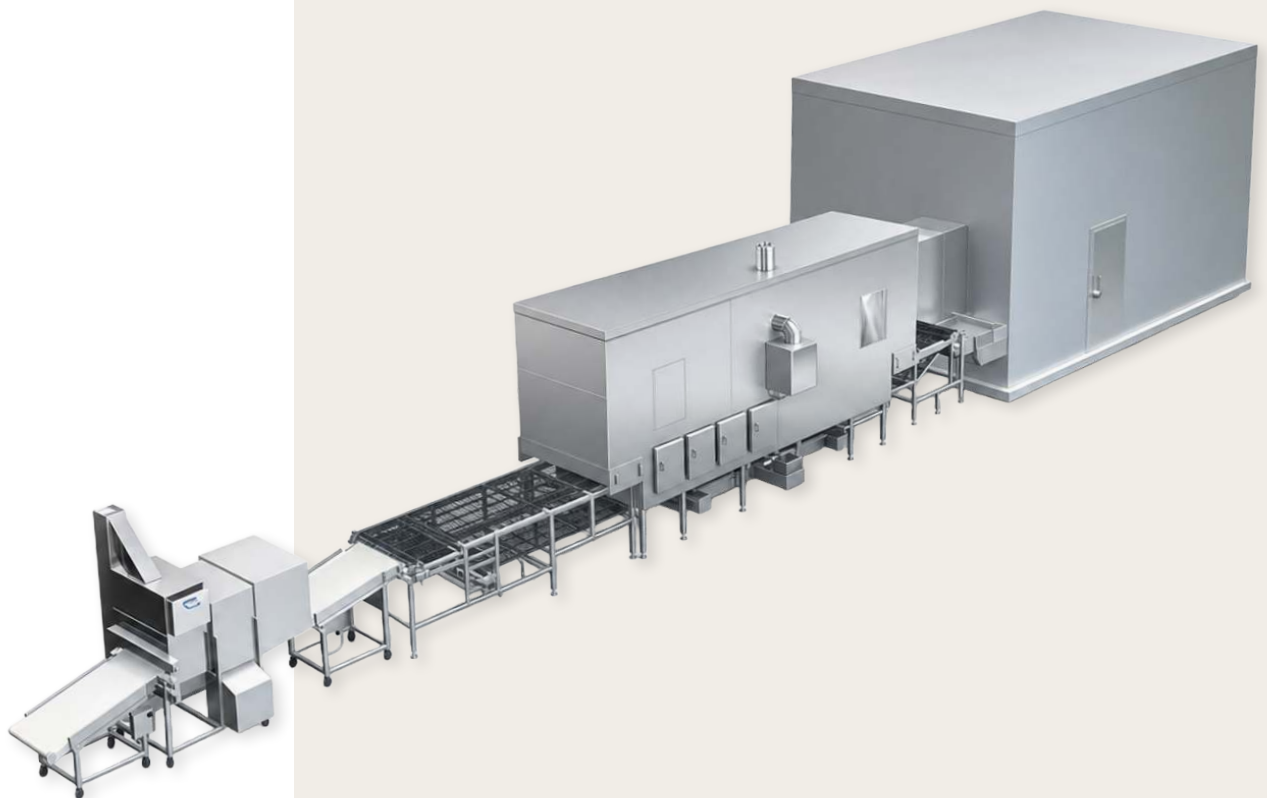




Air Fry Solution

- Elimination of pre-frying stage means cleaner, healthier and better tasting product.
- Controlled oil levels can produce 'lower fat' or 'never been fried' options.
- Up to 50%+ reduction in oil pick-up.
- High impingement airflow system enables excellent setting and coloring of coating.
- High level of control over the end-product.



The future of food is healthier.

As global demand for low-fat products continues to accelerate, food manufacturers are under increasing pressure to innovate and invest in more sustainable, health-focused processing technologies.

JBT Marel's industrial air frying system is designed to meet this challenge. Combining proven processing expertise with advanced air frying technology, it enables manufacturers to reduce fat content, enhance operational flexibility, and capture new opportunities in one of the fastest-growing segments of the food industry.

Simplify your project with a fully integrated air frying solution from JBT Marel, giving you one supplier, one point of contact, and a seamless experience from start to finish.

CHALLENGES	JBT MAREL'S AIR FRYING SOLUTION
Consumers want fried food but then healthier	High impingement airflow system enables excellent setting and coloring of coating
Yield management	Rapid process reduces cook loss
Expensive oil management	Remove oil upkeep with our oil spraying solution
Portfolio diversification difficult with full immersion frying	Broad application range for unfried products
Pre-frying is expensive, has difficult oil management and cleaning	No pre-frying required, CIP in place and reduced HSE requirements



Proven solutions

The industrial air frying solution is suitable for a wide range of coated and breaded products, including:

- Chicken and poultry products
- Fish fingers and fish fillets
- Seafood products
- Breaded vegetables
- Snack foods
- Formed meat and fish products
- Fries and selected bakery applications





- 1** Coating
- 2** Oil Spraying
- 3** Impingement cooking
- 4** Spiral freezing

Healthier products. Exceptional results.

JBT Marel's industrial air frying solution combines advanced coating, precise oil application, controlled cooking, and integrated chilling or freezing into a seamless, in-line process. By eliminating the traditional deep-frying step and optimizing oil usage throughout the process, manufacturers can achieve substantial fat reduction while preserving the golden appearance, crispy texture, and great taste consumers love.

The result is a versatile production solution that helps processors expand their healthier product portfolio and capitalize on the growing demand for reduced-fat foods.

Working principle

Building quality from the first layer

Successful air-fried products begin with a precisely controlled coating process. The consistent application of flour, batter, breading, seasonings, and functional ingredients helps create the desired appearance, texture, and eating experience.

Coating formulations can be tailored to achieve specific product characteristics, including enhanced flavor, color, and crispiness. By combining the right ingredients with controlled application, manufacturers can create air-fried products that deliver the sensory appeal consumers expect while supporting reduced-fat product positioning.



Precise oil application for greater control

Unlike conventional frying, which requires products to be submerged in large volumes of hot oil, air frying uses a carefully measured oil application process.

A controlled oil spray evenly coats the product surface before cooking, typically using only a fraction of the oil required in traditional frying operations. This enables manufacturers to reduce overall oil consumption, minimize waste, and achieve greater control over final fat content while maintaining product quality and appearance.

High-intensity air frying for crisp texture and golden color

Following coating and oil application, products enter the core of the air frying process: high-intensity impingement cooking. High-velocity hot air is directed onto the product surface from above and below, rapidly setting the coating and developing the golden color and crispy texture associated with fried foods. Operating at temperatures of up to 280°C, the process delivers efficient heat transfer while eliminating the need for a traditional pre-frying step.

Precise control of airflow, temperature, humidity, and cooking conditions allows processors to optimize product quality across a wide variety of applications while achieving consistent, repeatable results.



Integrated freezing for maximum product integrity

After cooking, products transition seamlessly into the freezing stage, where rapid freezing helps preserve product quality, appearance, texture, and yield.

By integrating cooking and freezing within a single production flow, manufacturers can maintain product integrity, improve operational efficiency, and support high-throughput production requirements. The result is a streamlined process that delivers consistent quality from raw product to finished pack.



Get in touch with
our specialists

