



# GEA A-SERIES IQF TUNNEL FREEZER

High product quality and sustainable  
solution for potato applications





# Unmatched experience in the potato freezing process

With increasing freezing capacity and extension of production time for french fries, sliced or diced potato to address market demands, continuous development is required to maximize food safety, product yield and this with minimum of energy consumption.

GEA IQF tunnel freezers for potato applications are specifically designed for pre-cooling and freezing process steps with multizone temperature freezer embedding unique features for hygiene, efficiency, high uptime, and reliability.

Our technology is proven over 40 years of experience in the potato industry with a large freezer installed base.

GEA experts in frozen food applications ensure that the best solution is identified for your product and select a tunnel configuration to guarantee quality and safe products throughout your entire freezing process.

Our IQF tunnel range design includes energy savings and energy recovery systems with minimum of 22% reduction of CO<sup>2</sup> emissions certified by EU-Taxonomy classification.

## **Innovative, optimized, scientifically proven**

Our engineering department uses the latest airflow and heat transfer technologies. With the ability to conduct simulations and confirm the results in our test freezers, we can quickly generate new and industry-leading solutions that energy efficiently maximize product quality and yield.





# GEA IQF tunnel features and benefits

## Customized solution:

- Modular configuration.
- Belt width and mesh options for optimum product handling.
- Precool / Freezing/ Stabilization multiple combinations.
- External/Internal fan motors option.
- Sequential defrost option for long continuous operating time, up to 21 days.
- Cleaning system options from manual to full recirculating CIP sequence.

## Safe product handling:

- Open profiles and fully welded structure matching 3A and EHEDG design guidelines.
- Design answers the most stringent hygiene requirements with fully welded floor and fully welded enclosure option.
- Full recirculating cleaning system that acts like a giant dishwasher.
- Optimum bacteria log reduction with precise control of water temperature and detergent concentration.

## Reduced cleaning time:

- Automated Cleaning system for reduction of water usage, labor hours and cleaning time.
- Exhaust fan option reducing warm-up time before cleaning and start in cold time after cleaning.

## Energy savings:

- Free cooling with Thermosyphon Pre-cool.
- Free plant water heating from +15 to +30°C with water precool section.
- Optimum evaporating temperature design setting for freezing section.
- Callifreeze system to control freezer parameters according to product frozen condition target and this with minimum of energy consumption.

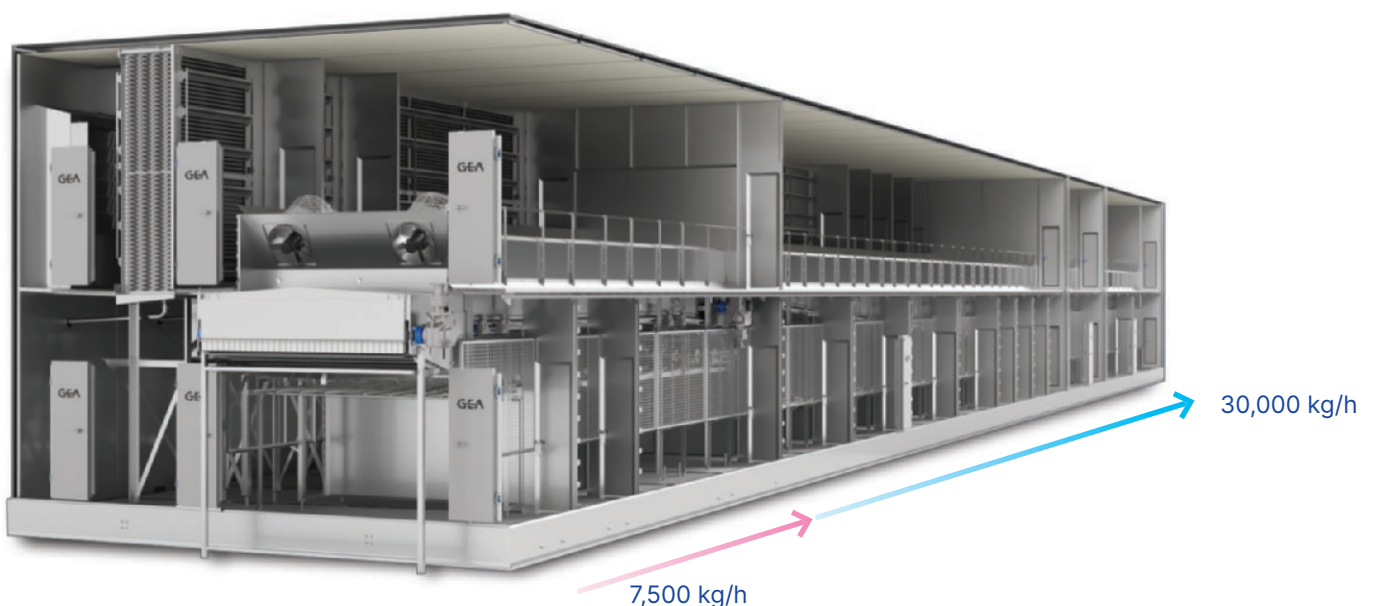
## Long operating time

- Sequential defrost option combined with GEA SPCS air balance system for comfortable 21 days operating time.
- Special louver design for fan section isolation providing faster sequential defrosting. No partitions between fan sections for better access for cleaning.

## Low total cost of ownership:

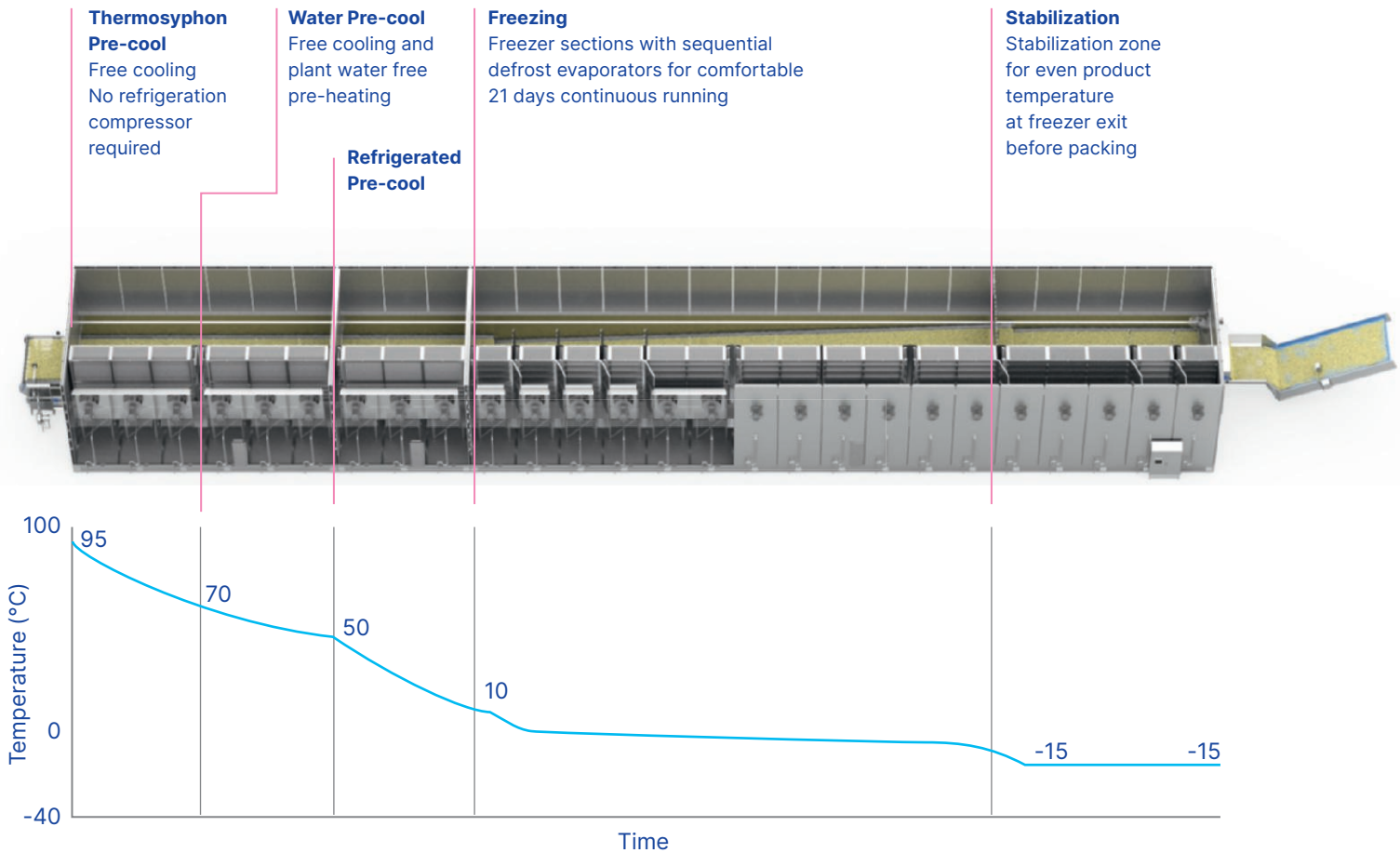
- Energy recovery option and energy optimization system.
- External drive motors and external fan motors option for ease of maintenance.
- Robust and reliable design.
- Non proprietary parts.

## IQF tunnel freezers capacity range



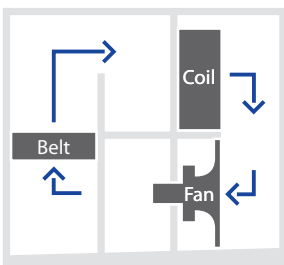
With Sequential Defrost option: up to 21 days continuous running

# GEA IQF Tunnel Configurations

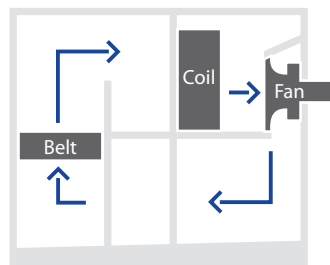


**GEA A-series IQF tunnel freezer for french fries: Multiple temperature zones**

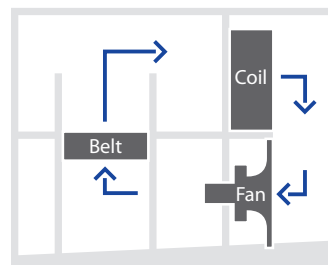
**AA-series**  
With internal fan motors



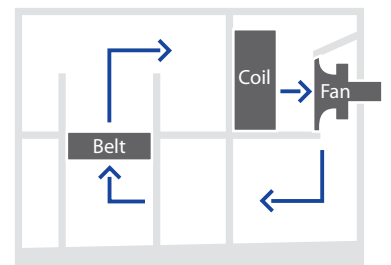
**AD-series**  
With external fan motors



**AAW option**  
Additional catwalk on wall side



**ADW option**  
Additional catwalk on wall side



**Tunnel section options**

# Proven Energy savings



Designed for energy recovery and minimum energy consumption with Thermosyphon Pre-cool sections and Water pre-cool sections.

Minimum of 22% reduction of CO<sup>2</sup> emissions certified by EU taxonomy certification body.



## GEA Callifreeze® system

GEA unique sensor and control system

- Continuous product level of frozenness monitoring and recording.
- **Full traceability** to support HACCP program.
- Adjustment of freezer parameters to maintain product frozen quality with **minimum of energy consumption**. 10% to 15+% energy savings with Callifreeze control system.

# GEA IQF Hygienic design

Design matching 3A / EHEDG guidelines to **reduce the number of critical control points**.

- Fully welded structure, floor and enclosure to **eliminate dirt traps**.
- Open profiles, sloped surfaces for **perfect drainability**.
- **Ample access** to all internal components.





# Customer satisfaction is our main objective

Working with GEA Service means partnering with a dedicated team of service experts. Our focus is to build, maintain, and improve customer performance throughout the entire life cycle of the plant and its equipment.

## **Beginning of Life Services**

Getting you started with seamless support for instant productivity and performance.

## **Lifetime Services**

Keeping it running with the cost-efficient way of ensuring safety and reliability.

## **Extended Life Services**

Constantly improving by sharing our knowledge to safeguard your investment .

## **Consulting & Enhanced Operations**

Together with you by enduring commitment to you and your business.



## Technology Center

### **Experienced product application team at your service**

Our application experts can test your products using our in-house freezing test facility before you invest. Our Technology Centers located in Richmond, BC, Canada and Bakel, The Netherlands, offer a wide range of freezer and chiller equipment, and configurable air temperature and airflow conditions to match your processing needs.

We offer comprehensive hands on training and product test programs to support your operational requirements. Data collected during testing can be analyzed by our technology experts to help you to select the right process conditions for your product. We can even ship testing units to your site for product trials under the correct production conditions.

