



STALAM
Radio Frequency Equipment

**EGG PRODUCTS
PROCESSING**



EGGPURE+

Tube-type rapid heater



Longer Shelf-Life

Integrating the RF equipment into your existing pasteurization system will significantly improve bacteria inactivation, leading to extended shelf-life and safer products. In fact our RF technology will allow you to:

- **Cut Logistics Costs**, by reducing the frequency of deliveries.
- **Expand Your Market**, enabling you to reach more distant customers thanks to longer-lasting products.
- **Offer healthier products**, by eliminating preservatives and chemical additives.



Enhanced Productivity at a Lower Cost

You will enjoy a substantial increase in productivity and lower operational costs with RF pasteurization, thanks to:

- **Minimum Fouling**, extending the working cycle between cleaning steps by up to 100%.
- **Less use of water and cleaning products**, reducing related costs for wastewater treatment and environmental impact.
- **Increased Efficiency**, improving your processing line productivity by up to 30% and enabling you to postpone the need for current equipment upgrade.



Superior Quality

RF pasteurization ensures fast and uniform heating throughout the product, providing a more efficient and gentle process. Benefits include:

- **No Overheating**, achieving consistent heating, thus eliminating micro-cooking.
- **Faster Processing**, reducing thermal stress and enhancing product quality.



EGGFOAM+

Ultrasonic Treatment



Restores the original egg Functionality

The ultrasound (US) treatment restores the original microstructure of egg proteins by inducing rapid compression and decompression waves, which help to reinstate the intramolecular bonds in protein molecules that may have been broken due to thermal stress during pasteurization.



Improved Yield and Performances

Enhanced Whipping: the US treatment improves the whipping and consistency of egg white foam, making it more effective in recipes.
Softer Bakery Products: Sponge cakes and other baked goods benefit from a more consistent and homogeneous dough porosity, resulting in a softer texture.

Better Emulsification: Egg yolks treated with ultrasound show superior emulsification properties, leading to creamier and more pleasant mayonnaise and other emulsified products.



Easy and Quick Retrofit

The US treatment can be seamlessly integrated into any existing pasteurization line before the product is cooled to storage temperatures, making it a practical and convenient enhancement for current production processes



COLDWAVE+ 2.0

Tempering and Defrosting



Fast And Uniform Process

Volumetric heating, generated by the vibration of water molecules, produces a uniform temperature increase throughout the entire product in a short time, ensuring fast and consistent processing while preserving quality and structure.



Defrosting In The Storage Packaging

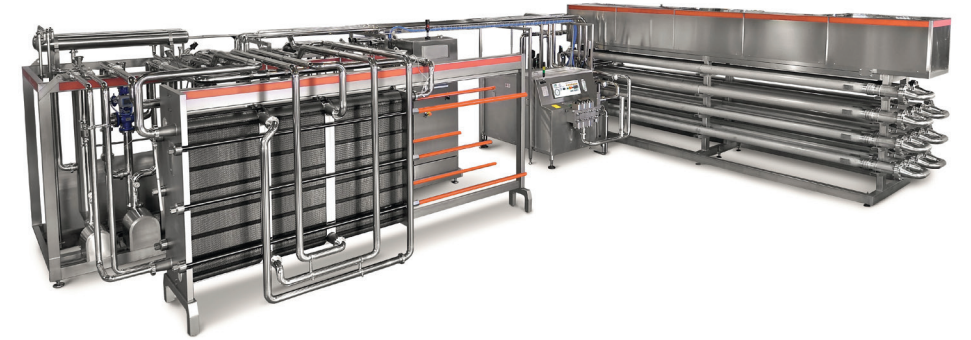
Defrosting in storage packaging can be performed in a non-sterile environment while maintaining the original sales packaging. this approach ensures product hygiene, reduces handling, and streamlines operations without compromising packaging integrity. it's an efficient solution for frozen food processing.

No Bacteria Proliferation

Defrosting in storage packaging prevents bacteria proliferation because the package remains sealed, maintaining a hygienic environment. moreover, thanks to the short defrosting duration and refrigerated temperature, product degradation is avoided, ensuring quality and safety.

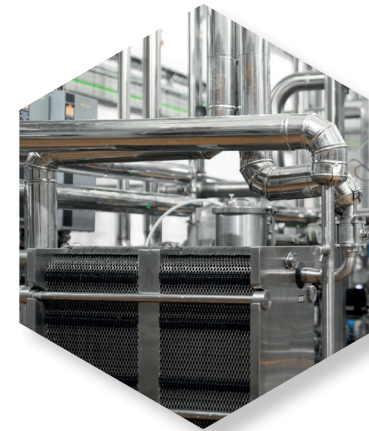


INTEGRATED PASTEURIZATION SOLUTIONS



Heat Exchanger

Preheating carried out by a heat exchanger enables thermal energy recovery during the cooling phase, improving overall system efficiency while minimizing fouling, caused by higher temperature gradients and extending continuous operation time between cleaning cycles.



Homogenization

Homogenization in liquid egg pasteurization improves heat transfer efficiency, ensures uniform consistency, and enhances microbiological safety by reducing particle size, resulting in a smoother product with better functional properties for downstream applications.



Holding

The holding phase in liquid egg pasteurization ensures that the product remains at the target temperature for a precise time, enabling effective microbial inactivation while preserving functional properties such as foaming, emulsification, and nutritional quality.



Established in 1978, STALAM is the world leader in the development, design and manufacture of Radio Frequency (RF) equipment for thermal processing of raw materials, intermediates and finished industrial products. Its range of equipment includes pasteurizers for liquid food products. Exporting more than 95% of its products to the five continents, STALAM provides professional and prompt commercial, technical assistance and retrofit support in all relevant industrial areas throughout the world, thanks to its well-structured sale and servicing organization.



stalam.com

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