



# Best-practice batch line with external cooling for hummus



## Application

The solution is perfected for small-to-medium, industrial scale hummus production. It can also be used for other types of viscous foods, such as dips, caramel preparations, toppings and jam.

## Highlights

- High level of food safety thanks to full pasteurization and rapid cooling
- Enables long product shelf life
- Rapid deep cooling ensuring the right taste and texture of product
- Enables efficient production on a larger scale
- Higher yield, as the boiling water is re-used in the process
- Low investment and operational costs, but high production capacity
- A flexible, patent pending solution that can be used for many types of viscous food
- Can handle particles thanks to dynamic stator in High Shear Mixer device

## Food safety, the cost-efficient way

This patent pending solution combines two proven technologies so you can produce hummus – and other viscous food products – in a cost-efficient and safe way. Full pasteurization and a closed system for rapid, deep cooling ensure the end-result is a high-quality, safe-to-eat product with long shelf life. You can expect low operational costs, even for small-to-medium, industrial scale production. In addition, the efficient cooling system makes higher production volumes possible. Compared to conventional solutions, benefits also include reduced product losses and uncompromised product taste and texture.

Units used are Tetra Pak® High Shear Mixer and Tetra Pak® Continuous Freezer S. The installation of the freezer is straightforward and hassle-free – just connect water and electricity. There is no need for an external ice water or glycol water system.

# Solution overview

Combining two state-of-the-art machines:

## 1 Tetra Pak® High Shear Mixer for emulsified sauces and spreads



## 2 Tetra Pak® Continuous Freezer S



### Process description

#### High shear mixing and pasteurization in Tetra Pak® High Shear Mixer

- Loading of soaked chickpeas
- Cooking of chickpeas
- Grinding in cooking water
- Adding ingredients
- Grinding with high shear
- Pasteurization
- Flash cooling (Optional)

#### Mixer highlights

- Short batch time due to direct steam injection and vacuum system
- Preparation and pasteurization of hummus in ONE unit
- Flexible – ready to handle any type of viscous food
- Fast ingredient intake
- Accurate and repeatable output
- Can handle particles thanks to dynamic stator

#### Rapid deep cooling in Tetra Pak® Continuous Freezer S

- Start cooling when batch is prepared in High Shear Mixer
- Cold product is sent to buffer and filler
- When High Shear Mixer is emptied and all the product is cooled down, freezer stops until next batch is ready to be cooled down

#### Freezer highlights

- Rapid deep cooling
- Plug-and-play installation – just connect electricity and water
- Easy installation and quick start-up
- Accurate and repeatable output