## **Additiveline**

Additive mixing and dosing



add it mix it dose it

# taste it!





## **Additiveline**

## Mixing and dosing of additives for potato flakes

- The perfect solution for dosing additives to potato flakes
- Mixing and dosing of emulsifier, SAPP, dextrose, phophate, colorants and more
- ✓ Single or multi tank systems
- Optional fully automated for consistent results



### Additives mixing and dosing

The Additiveline is a system used in the potato industry for mixing and dosing additives in the potato flakes production line.

As potato flake production lines get bigger and bigger, the demand of automated systems increases.

Potatoes are cooked and mashed. The desired additives are added to the mashed potatoes. The puree is then pressed through large rollers into a thin layer, also called film. This layer undergoes a rapid drying procedure until the desired humidity level is reached, after which this pressed layer is scraped off the drum. The layer is then broken up by a crusher into potato flakes of the desired size, which are then packed.

To give the flakes the desired characteristics in terms of flavour, color and other specifications, additives are dosed in the mashed potatoes. This includes product characteristics such as taste, a crispy 'bite' or a longer shelf life.



### **Options and additives**

An additive mixing and dosing system can have various setups and be provided with various options. Contact us to hear all possibilities.

#### Options

- CIP cleaning system
- Cold and/or warm water unit
- Screw powder transport system
- Vacuum transport system
- Big Bag unloading
- Manual bag unloading
- Various mixing principles

#### **Additives**

- Dextrose
- Pyrophosphate
- Phosphate
- GMS
- Emulsifier
- SAPP

Starch

- Sulfite
- Citric acid

### Additiveline

# add it. mix it. dose it!



### How an **Additiveline** works:

### **Powder handling**

The first part of the Additiveline is the powder handling part.

The dry additives can be brought to the line in Big Bags by a

Big Bag unloading station or in smaller bags through a powder
filling cabinet. Of course, a combination of both is also possible.

From that point, the powder can be transported to the tanks by vacuum, screw conveyor or directly dosed in the tanks. Working with vacuum transport allows you to keep the dry part of the line separated from the wet part.



### **Mixing**

In the second part of the Additiveline, the additives are mixed with water. A volumetric feeder doses the correct amount of additives to the water.

The solids percentage of additives and the characteristics of it, determine the agitator needed. This can be a simple propeller agitator, a disperser, a high speed mixer or even an inline mixer.

Several setups can be used. A single tank setup where all additives are dosed into the same tank or a multiple tank setup where certain additives have a dedicated mixing tank. The big advantage of the second option is that the additives can be dosed separately into the potato mash, which increases the flexibility of the system and the quality of the end product.





### **Dosing**

Once the additives are mixed with water, they can be dosed in a ricer or cooker. In a ricer only liquid additives can be dosed, where in a cooker it's also possible to add dry additives.

Throughout the year, the potatoes used for making flakes will vary in quality and characteristics. By having the ability to change the dosing percentages, a nice and even quality can be produced whole year round.



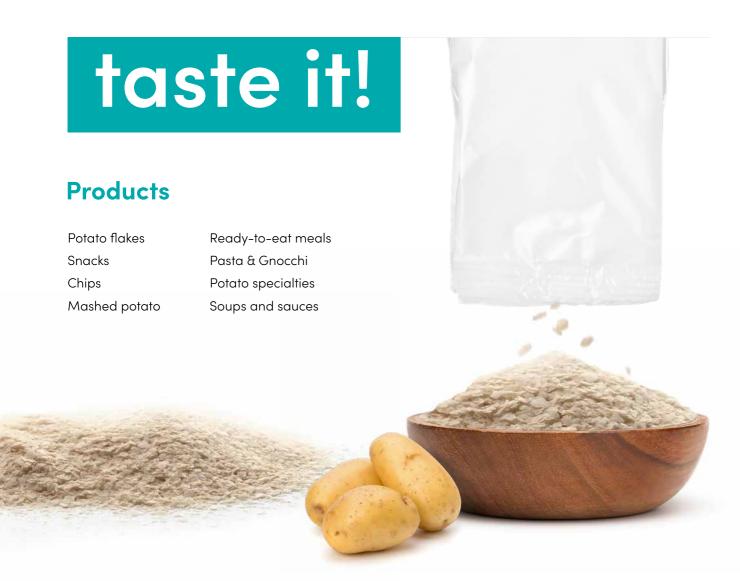
## About Gpi De Gouwe

## Experts in food process equipment for heating, cooling and mixing

With over 70 years of experience, we understand the challenges in food and cosmetics manufacturing processes like no other. Our equipment and systems are therefore perfectly tailored to optimize your process. With in-house testing facilities, the personal involvement of our (process) engineers in your project and specialized partner companies, we can solve any problem with a standard product or a customized solution.

#### **Gpi Group**

Gpi De Gouwe has become an established name in the process equipment industry. Within the Process Equipment division of the Gpi Group we connect our knowledge and experience with process equipment and offer the right solutions for your process. Gpi De Gouwe stands for involvement, innovation & quality.





# Any questions about the Additiveline? We are happy to help!

Goudkade 8 2802 AA Gouda The Netherlands

T +31 (0)182 513644

E info@gpi-degouwe.com



