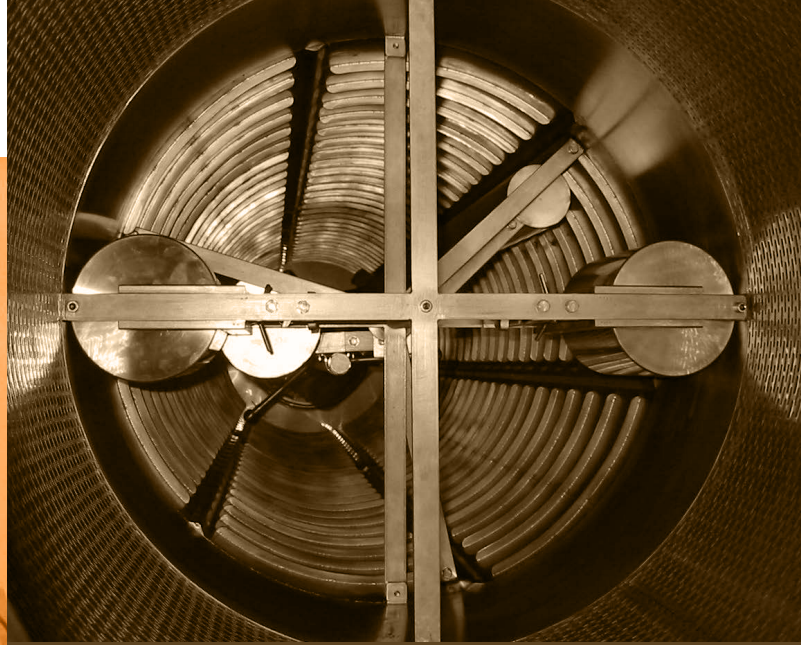


# FECOATEC

INSTANTPLUS AGGLOMERATING PRODUCTION PLANT



## INSTANTPLUS AGGLOMERATING PRODUCTION PLANT

Available plant sizes are  
400 kg/h to 1.000 kg/h

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FECOATEC





## WHO WE ARE?

FECOATEC is a company founded in year 2000 in Madrid (Spain) by qualified engineers, with great experience in food industry, specially in confectionary and chocolate sectors.

Our customers are from small and medium companies to the biggest multinationals in the sector.

The custom-made projects, technical quality of the works, and constant technology evolution allowed us to achieve a remarkable position in market.

Our technical-focused company structure, allow us to offer excellent technical solutions at competitive prices.

All equipment shown is designed / manufactured by FECOATEC.



FECOATEC



## WHAT IS INSTANTPLUS?

The production plant INSTANTPLUS, designed and manufactured by FECOATEC, is used to produce powdered / granulated products, soluble both in cold and in hot liquids such as water or cold milk.

The throughput is continuous and completely automatic, and the powder granules are formed by humidification with treated and saturated steam, in a fluidized bed.

It is remarkable the hygienic design of the plant and the ease of mounting/dismounting for inspection and maintenance, as well for the quickness in recipe change for produce different granulated products.



Example of products:

- Instant coffee.
- Instant tea.
- Milk powder.
- Cocoa powder with milk powder.
- Soup extracts.
- Mixture of sugar with fruits-flavor.

From small to big productions, the available plant sizes are:

- **INSTANTPLUS 400.** Production of 400 kg/h.
- **INSTANTPLUS 600.** Production of 600 kg/h.
- **INSTANTPLUS 1000.** Production of 1.000 kg/h.

It is the ideal solution for production of agglomerated/granulated products in continuous way.

# INSTANTPLUS AGGLOMERATING PRODUCTION PLANT

## WHAT IS INSTANTPLUS?



The necessary adjustments for the production adjustment are done through the HMI and from operator side.

Possibility of working with recipes.

Hygienic design, fully made of stainless steel for maximum ease of cleaning.

Compact floor size, for easy factory installation.

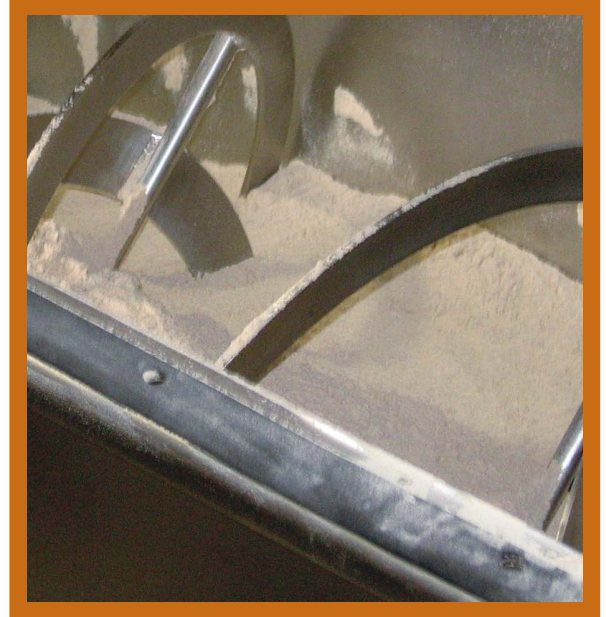
Installation and turnkey project adapted to needs.

Fully automatic, no operator presence required during production.



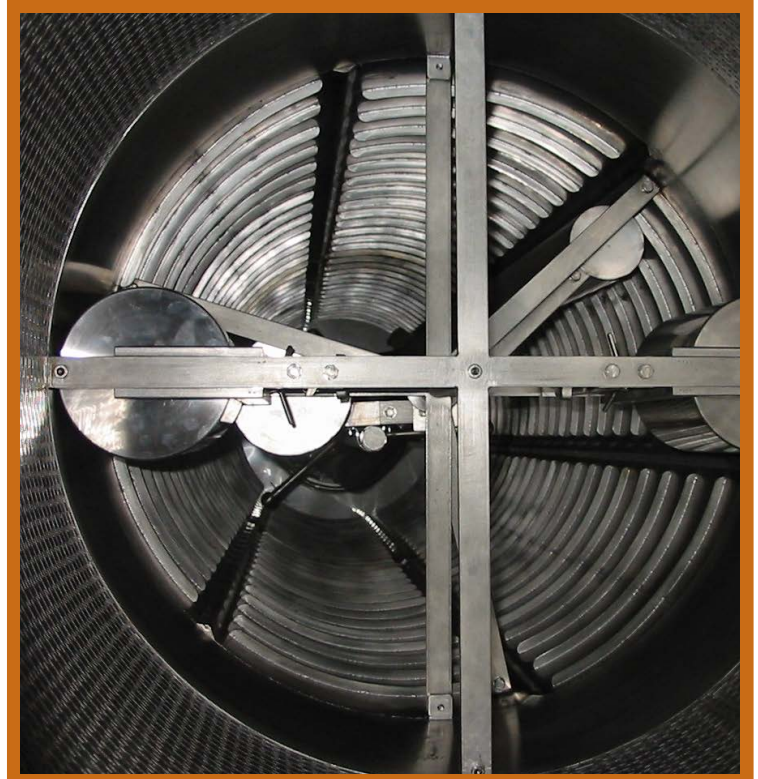
## PLANT COMPONENTS

- **POWDERS MIXER** The different ingredients that make up the product are poured into the mixer, to achieve a homogeneous mixture. The mixer, entirely made of stainless steel, works continuously. Solids must be added with previously controlled granulometry.
- **RECEPTION HOPPER.** The reception hopper, with standard capacity of 500 liters, made of stainless steel, and equipped with filling control levels. It is loaded by the top and unloaded from the bottom of it. The loading of product comes from previous POWDERS MIXER.
- **SOLIDS DOSING SYSTEM.** The solids mixture is dosed in a constant and controlled manner by a special design SOLIDS DOSING SYSTEM located in the discharge part of the receiving hopper. The solids flow control is performed by means of frequency inverter of the main gear motor drive.



- **HUMIDIFICATION IN FLUIDIZED BED.** The solids are transported to a fluidized bed by vibration. The residence time in this fluidized bed is adjustable by frequency inverter. In it, an adjustable flow of saturated steam is injected onto the solids, creating the granules. In the vibrating bed occurs the first stage of agglomeration of the solids. Fluidized bed conditions are controlled: Humidification occurs in a closed chamber with hot air recirculation.
- **DRYING AND COOLING DRUM.** The rotating drying drum, entirely made of stainless steel, is paneled and with rotation speed adjustment. The drum has 2 distinct zones for the treatment of granules. In the first area, the granules are heated up by hot air injected into the drum, to stabilize and dry them completely. In the second area, by injecting cold air, the product is finally cooled and stabilized.

- **SEPARATION DRUM.** The separation drum is a rotary drum, made of stainless steel, and with rotation speed adjustment. In it, the bigger granules are separated and rejected from the regular ones and has 2 separated discharge zones: Suitable product and thick product. The sieve is easily interchangeable to work with different recipes.
- **AIR FILTRATION AND EXTRACTION SYSTEM.** Air extraction and filtration system from the DRYING AND COOLING DRUM, by means of a high-pressure centrifugal fan, with a self-cleaning filter, heated by recirculation of hot water and internal filter cleaning system. With removable residues vessel, at the bottom of the filter.



**OPTIONALS:**

- **FEEDING / DOSING OF POWDERS.** It is possible to offer automatic systems for dosing and transport of powders (by means of screw or by pneumatic transport) to feed the INSTANTPLUS plant. These systems can have electronic weight control through load cells, to make controlled dosage of all ingredients through recipes.
- **UNLOADING CONVEYOR.** The belt conveyor is located at outlet of the INSTANTPLUS, to convey the product and elevate it to a determined height, according to the following process, usually packing.
- **MINOR INGREDIENTS DOSING SYSTEM.** An automatic system composed of a tank, dosing pump and pipes can be supplied to add minor additives to the mixtures, such as soy lecithin.

# PRODUCTS MADE WITH INSTANTPLUS

Instant Coffee



Mixture Of Sugar With Fruits-Flavor

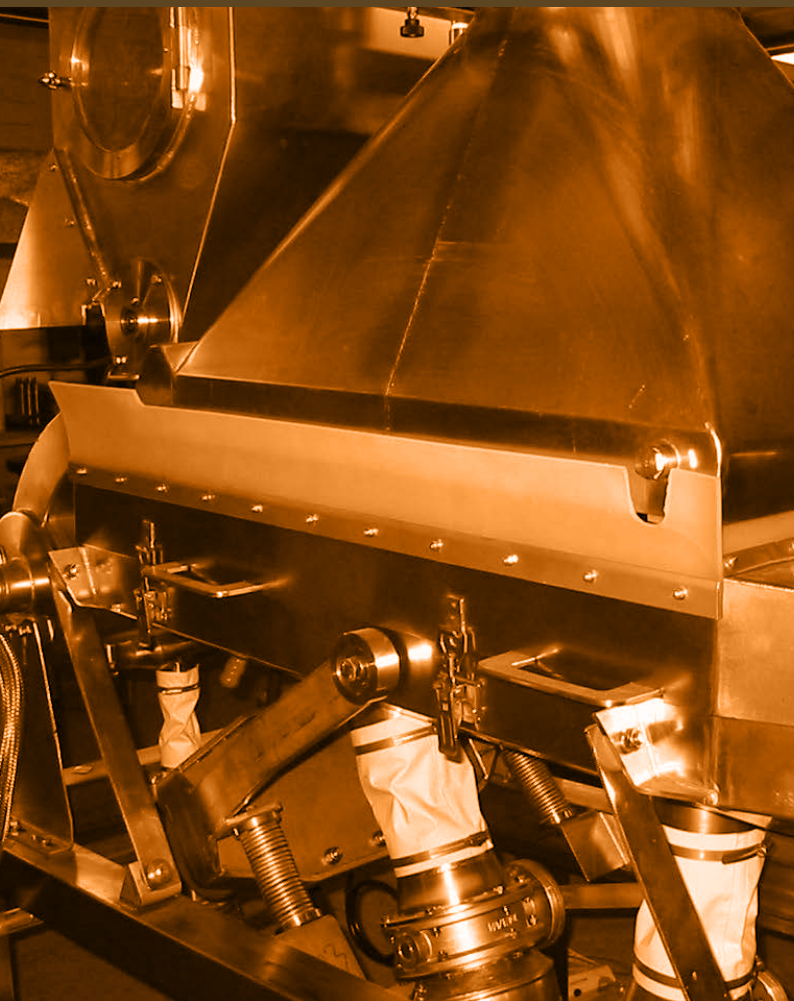
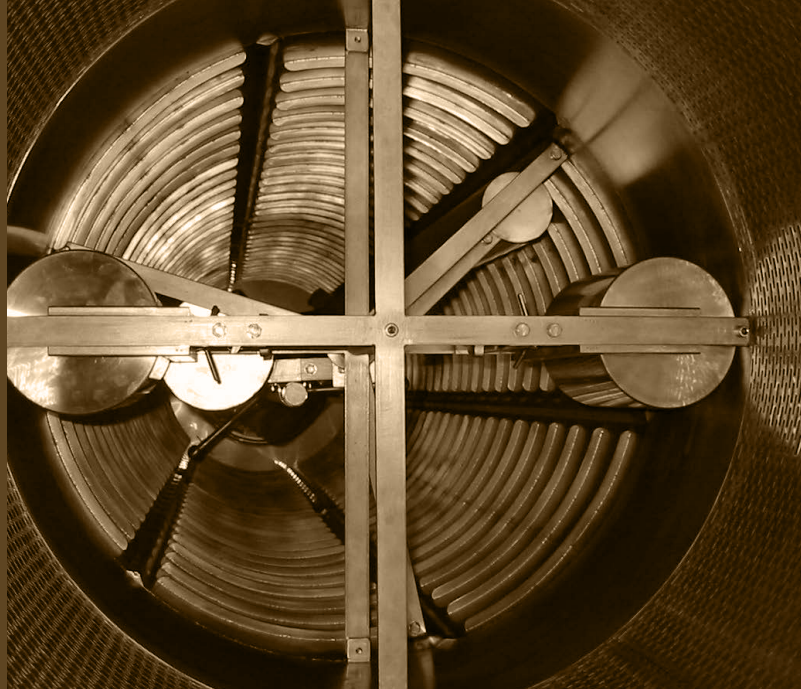


Cocoa Powder, Sugar And Milk Powder



Milk Powder





# INSTANTPLUS

AGGLOMERATING  
PRODUCTION PLANT

