PiGo®

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MADE IN ITALY

Food Processing Machinery

Infused Dried Fruit

Reimagining Fruits

Infused Dried Fruit Plant

Infused Dried Fruit

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PIGO INFUSED DRIED FRUIT - IDF

PIGO systems are concepted to create a “High Added Value Fruit” production plant, which contains dozens of small innovations and a few large improvements for a more reliable system, all together improving natural fruit characteristics.
PIGO is also providing CONTINUOUS INFUSION TECHNOLOGY and KNOW-HOW to our clients.
PIGO srl has established itself as a world-class leader in the design and manufacture of high technology freezing and drying equipment, as well as fruit and vegetable entire processing lines.

INFUSED DRIED FRUITS

Modern consumer is more and more oriented to the natural products and products which natural properties are improved. At the same time it is necessary to improve the preservation ability and expand the use possibilities – shelf life. Infused dried fruit meets all the above criteria. Fresh fruit, especially forest fruits, which has exceptional organoleptic characteristics, receives new qualities with infusion process, for example improvement of the natural characteristics of the fruit. Infused dried fruit preservation is possible without special packaging and storage conditions. Finally, in the infused dried fruits it can be introduced also other useful and important to the health substances, such as microelements, etc.
The manufacturing process of infused dried fruits is based on the natural processes of membrane diffusion, that is trough the membrane - the cells membrane of the fruits diffuse the material aiming to equalize the concentration.

Unlike the classical process of fruit drying, the infusion drying process mostly preserves the original shape and color of fresh fruits.
In this unique way can be obtained the dried raspberry, cherry and other fruit, with a high content of healthy fruit sugar (fructose), preserving as much as possible the form (without the deformation of the conventional drying), which is not possible with any other technological process (besides freeze drying).
A very important feature of this process is that during the process of infusion disaccharides of the sugar syrup turn into healthy, natural monosaccharides, or fruit sugar - fructose, which improves the natural qualities of the fruit.
The final product – **INFUSED DRIED FRUIT – is not SWEETENED. It containes NO ADED SUGAR, but ply natural healthy FRUTCTOSE – fruit sugar contained naturally by fruit. It is NATURAL BEST, containing up to 65 % of fructose**.

Basic steps of Infused Dried Fruit Process:

- Solution preparation for the fruit pre-treatment
- Fruit treatment with stabilization solution
- Preparation of the solution for infusion
- Infusion process
- Infusion solution recycling and regeneration
- Surface washing of infused fruits
- Application of oily materials to prevent clumping of the finished fruits

MACHINE EXECUTION

Material

- All containers (sugar solution and product containers) are entirely made in stainless steel;

Mixer for the eparation of stabilisation solutions

- The mixer is positioned on the wheelchair and is equipped with a mixer and pomp

Installation for sugar dissolving

- system for dispensing sugar, recirculation syrup pump, Heat correction / heating, stabilisation solution or depleted syrup

The finishing line that consisting in device for emptying containers, Collecting container for depleted syrup and a pump for pumping syrup to a large container, washing conveyor, Air blower to remove drops, Drum with spray system for spraying oil, Device for measuring products on the pan if the drying is performed in a batch oven or system to add products to spiral belt.

Advantages of Infused Dried Fruits

- It minimizes the effect of temperature on food quality and preserves the wholeness of the food, as no high temperature/ phase change is required in the process
- Mild heat treatment favours colour and flavour retention resulting in the product having superior organoleptic characteristics. It is more when sugar syrup is used as osmotic agent
- Acid removal and sugar uptake by fruits modifies the composition and improves the taste and acceptability which is called candying effect
- It protects against the structural collapse of the product during subsequent drying. It helps to retain the shape of the dehydrated products
- It improves the texture and rehydration properties
- Constant immersion of product in osmotic agents avoids the O_2 exposure, so the product retains better colour

Infused Dried Fruit Key benefits

- less sugar than fruit candied
- fruit contains only fructose
- natural appearance and flavor
- soft texture
- attractive price
- does not stick

All machinery parts (chambers, shelves, door closing systems, stoppering system, condensers and all interconnections) are manufactured and controlled in-house.

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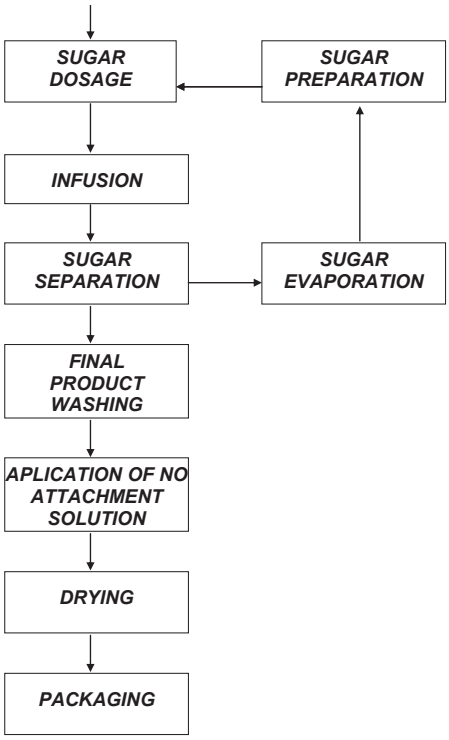
Basic technical data for few industrial units:

MODEL	IDF 1000	IDF 2000	IDF 5000
Capacity of infeed fruit	2000	4000	10000
Infusion process duration (approx.):	20 days	20 days	20 days
Capacity of dried fruit(kg/day)	1000	2000	5000
Min infusion volume for one line l/day	4000	8000	20000
Number of the infusion tanks (x line):	80/160	80/160	80/160
Suggested production area (m^2)	600	1000	1400
Suggested fruit lines	4	4	4
Suggested infustion tanks:	80	160	400
Drying capacity (evaporated water)	700-1000 l	1400-2000 l	3500-5000 l
Sugar sirup tank	2 pcs	2 pcs	2 pcs
Total installed el. Power (without dryer)	40/60 kW	40/70 kW	50/80 kW

Stabilisation solution tank, Regal type tanks holding construction and Final processing line are included; Dryer Heating system depends of available energy sources on site;



Our future is your future, and we are addressing it today with: product-based design, high-technology, maximum of automation for loading and unloading as optional

Together they pave the way for the future of fruit processing

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PIGO provides complete, turn-key freezing and processing solutions:

- Fluidized bed freezers
- Freeze Drying
- Spiral Freezers
- Spiral Coolers
- Spiral Pasteurizers
- Spiral Dryers
- Spiral Proofing
- Pitting systems
- Infused dried fruit plants
- Fresh-cut preservation systems
- Vegetables processing solutions
- Complete processing lines for washing, separating, blanching, peeling, sorting, cutting and more.

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