TECNO 3

Chocolate and Confectionery Technology

"The passion to create together innovative, stimulating and pleasant technologies for the daily life in the world"



COCOA BEAN PROCESSING

The TECN03 line for the cocoa processing allows to develop the entire production cycle: from cleaning the beans to debacterization, roasting, winnowing, refining of cocoa nibs to obtain the cocoa mass with the desired granulometry, until to alkalinization to obtain a product intended for squeezing.

The particular technology used, combined with the continuous production cycle allows to maintain and enhance the organoleptic qualities of the various types of cocoa and helps to maintain a low bacterial threshold.





NUT PROCESSING



TECN03 has developed the entire nut processing line: from cleaning, we pass to drying, eventual roasting, peeling if necessary, separation of the whole fruit intended for specific use, refining to get to the paste with the predefined granulometry.

The process technology applied to the treatment of the **whole fruit** allows it to be **preserved over time**, slowing down the oxidation phenomena.







CHOCOLATE PRODUCTION

The continuous chocolate production line developed by **TECN03**, based on the application of **liquid conching**, differs significantly from traditional schemes.

The plant can operate **autonomously** and fully **automatically**, from the preparation of the mixture to the discharge of the chocolate into the storage tanks.

The continuous, three-stage controlled process, preserves the organoleptic qualities of the product. The entire production process, developed in a totally closed environment, minimizes the risk of product contamination with the outside room.







TECN03 has developed systems with increasingly automated technologies to meet the different economic and production needs.

From simple manual loading ball refiners of various capacities, we pass to semiautomatic mixing and refining systems, to automatic ones, up to arrive at **continuous production lines**.

As complementary systems, TECN03 is able to supply horizontal mixers, single and double shaft vertical mixers, continuous dosers-mixers for adding other liquid and solid ingredients to creams.





CONTINUOUS DOSING AND MIXING

Compact and versatile, the continuous dosing and mixing MDC system it is normally used for the addition of solid ingredients (powders, whole and granulated nuts, puffed and extruded cereals, etc.) and liquids (flavors, colorants, etc.) to various types of chocolate, compounds and fat creams in the production of semi-finished and finished products.

The recipes are stored on the operator panel and managed by a PLC which also controls the various process parameters. All the parts in contact with the product can be easily **disassembled**, **removed and sanitized** for an absolute guarantee both from the hygienic-sanitary point of view and from the overlapping of tastes.







- products with and without inclusions
- chocolate chips and solid products
- products in rework dedicated areas or to be continuously and directly reintegrated into the line
- loaves and large blocks of:
- anhydrous fat
- cocoa butter
- cocoa mass
- chocolate
- compounds
- hydrated fat loaves (vegetable fat, cow butter)

The entire range can meet the requirements of **continuous or batch production**, allowing high productivity, reduced energy costs and labor savings.



TECNO3, technical process partners of the leading confectionery companies









TECN03 is an Italian business enterprise, landmark of the sector for technological innovation in the production process of the confectionery industry.

We are constantly developing and improving technologies, to help people in their daily life and companies in new working and strategic challenges in a rapidly challenging market.

In 1988 TECNO3 has opened its first production site with the aim of creating innovative technologies, and provide industrial solutions for chocolate, cream and nut processing.

As of 2020, **TECN03** expanded their competences with three production sites, each specialised to guarantee the best technology, quality and reliability.

TECNO3 focuses on the needs of the food industry to design, engineer and supply turnkey systems based on new technological knowledges.

TECN03 is committed to improving the processes and enhancing the characteristics of the final product:

- Ensuring the reliability of the systems
- Significantly reducing the amount of product required for recipe changes
- Streamlining production thanks to continuous processing
- Facilitating the disassembly and sanitation of the equipment
- Optimising space with company-sized systems
- Reducing consumption and promoting energy saving
- Providing a test area to reproduce the production cycle
- Maintaining a high level rating thanks to the industrial know-how and the ISO 9001 certified quality system
- Providing an excellent after-sale service to our customers all over the world
- Respecting the nutritional and organoleptic properties of the raw materials up to the final product
- Favouring increased and optimised productivity





We operate and export into 5 continents and 30 countries







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