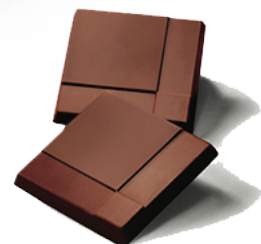
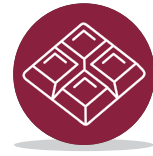


MULTIPROCESS



C hocolate



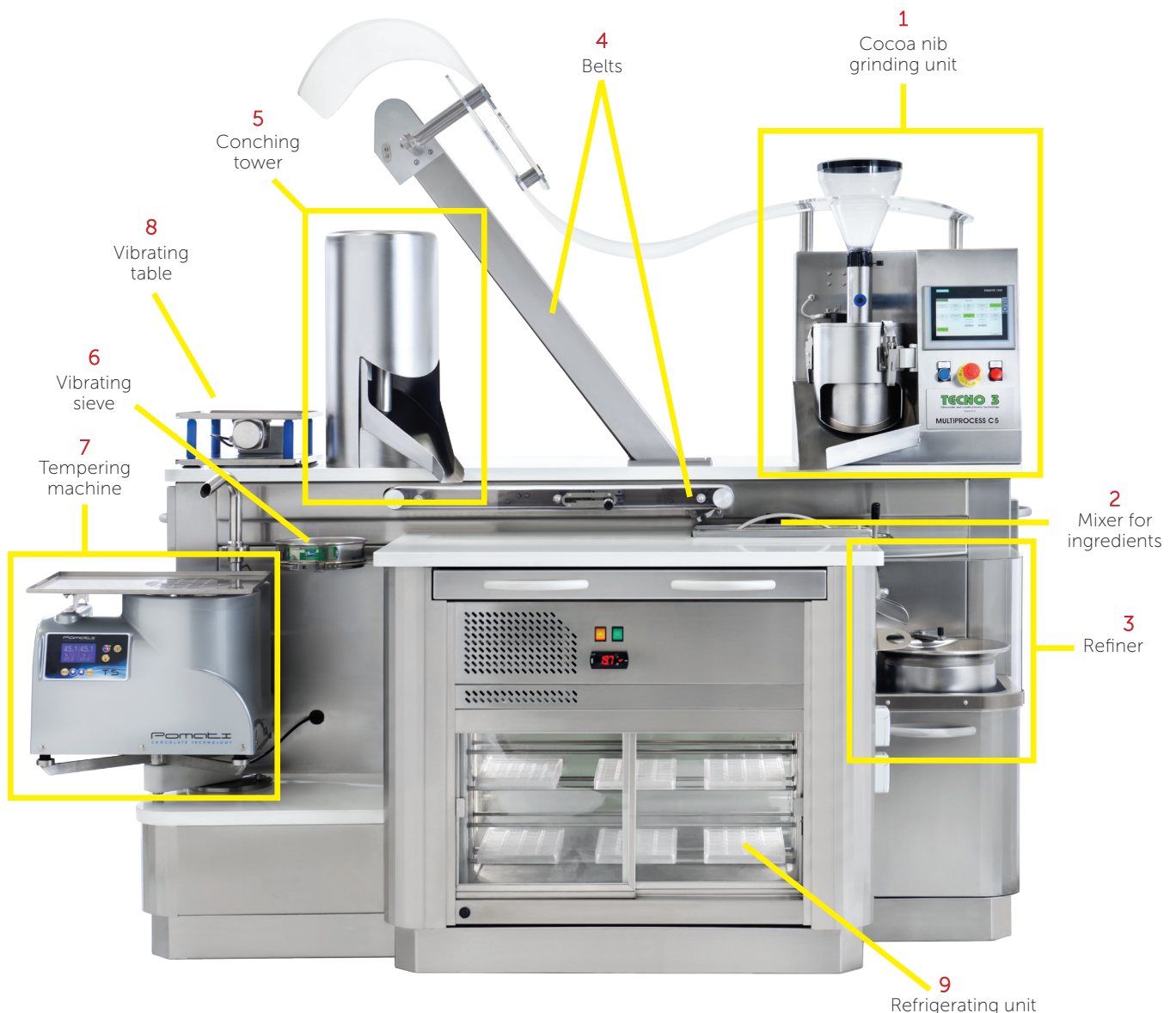
Plant for chocolate, compounds and creams processing

Multiprocess C is the mini-line by **TECNO 3** designed for the production of small amounts of chocolate. It features equipment to grind cocoa nibs, mix ingredients, as well as refining and conching equipment, to obtain the liquid chocolate that will need to be shaped.

This is a compact machine with very small overall dimensions, consisting of:

- 1 - Cocoa nib grinding unit
- 2 - Mixer for ingredients
- 3 - Refiner
- 4 - Belts
- 5 - Conching tower
- 6 - Vibrating sieve
- 7 - Tempering machine (mod. Multiprocess C5)
- 8 - Vibrating table (mod. Multiprocess C5)
- 9 - Refrigerating unit (mod. Multiprocess C5)
- 10 - Discharging belt (mod. Multiprocess C25 - C50) or collection container

The process starts with the introduction of the dosed amount of cocoa nibs in the grinding unit to form the paste. At the end of the process, this passes through the mixer, where other ingredients of the recipe are added (cocoa butter, sugar, powdered milk, etc.) after being suitably weighed. The maximum capacity of the mixer depends on the line model and can vary between 5, 25 and 50 kg.



After the mixing stage, the outlet connecting to the refiner is opened: the product flows down due to the effect of gravity and the refining stage starts. The product comes out on a tilted conveyor belt that leads it to the upper part inside the cylindrical conching tower.

The mass falls on a rotating disc that distributes it on the internal surface of the tower and creates a thin and even layer that slowly descends to the base. The cylinder is heated to the desired conching temperature. Heat is transmitted to the product through contact. An upward flow of heated air promotes the evaporation of water and unwanted volatile substances.

The chocolate that arrives at the base of the cylinder is conveyed back, via a belt, to the initial mixer.

The cycle with the described operations is repeated for a set period of time, until the desired fineness is obtained.

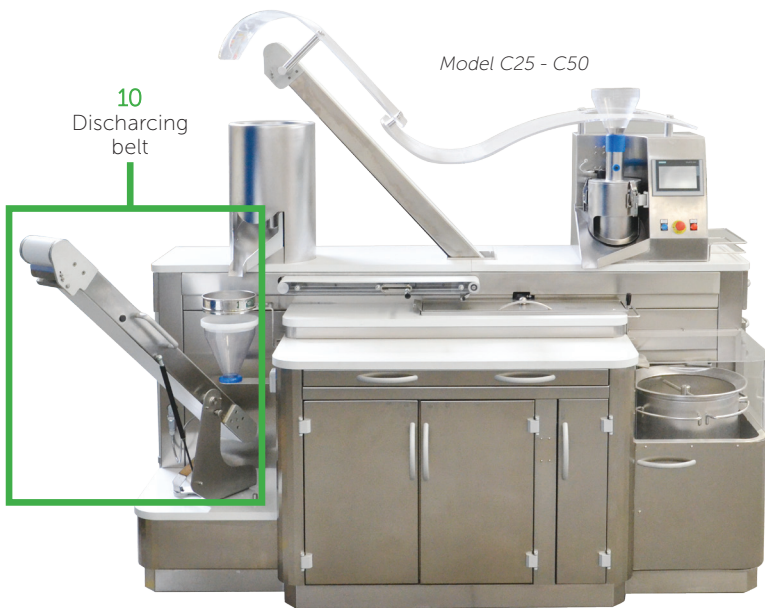


If, after reaching the desired degree of fineness, the result of the conching stage is still not satisfactory, the rotation speed of the refiner can be reduced to a minimum. Doing so, the refiner is only used as a passage for the product and the process continues with the conching in the tower. Once the process has been completed, the chocolate is diverted on a vibrating sieve and collected in a designated removable container.

With Multiprocess C it is possible to create all types of chocolate: dark, milk, ganuja and white. It will be necessary, when changing recipe, to clean the machine thoroughly to prevent cross-contamination.

The peculiarity of this machine is centred at facilitating the cleaning operation in fact there are no pumps and/or connection pipes. Each single part of the system can be easily disassembled and removed to ensure thorough cleaning and sanitation. The system is made entirely of AISI 304 stainless steel.

The machine can also be used to create compound, spreads and fillings. In this case the conching tower is not strictly necessary, but it will only be used as passage to the product.



In order to obtain the nut paste, the nuts must first be pre-refined in the same grinding unit as the nibs. In the case of nuts, if roasted in Multiprocess R, it is advisable to crush them into grains to facilitate the pre-refining process. The coarse paste is then recirculated until the desired fineness is obtained, without the need of additional heating and of the use of the conching tower.

The control parameters for the temperature for the various areas of the line and for the rotation speed of the mixer, the refiner and the disc can be set on the screen of the electrical control panel.

The 5 kg model comes with the optional insertion of a tempering machine, a vibrating table for the mould and a refrigerating unit to create the finished product. In this case, the refined and conched chocolate falls through the vibrating sieve directly into the tank of the tempering machine, which is installed where the simple collection container would be located. The refrigerating unit is inserted at the bottom of the system, without involving any increase of the overall dimensions compared to the basic line.

Certifications:
Compliant with Directive 2006/42/EC

Production capacity:	
MULTIPROCESS C 5	5 kg/batch
MULTIPROCESS C 25	25 kg/batch
MULTIPROCESS C 50	50 kg/batch

TECNO 3

Chocolate and confectionery technology

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