



Cocoa Bean and nut processing plant

Model: **MULTIPROCESS R**

Multiprocess R is the mini-line by **TECNO 3** designed for the production of small amounts of cocoa nibs. It features equipment for roasting beans, debacterisation, crushing and separating nibs. It represents the first phase of the "bean to bar" process (from the cocoa bean to the chocolate bar), which is completed with the other **TECNO 3** mini-line Multiprocess C, able to transform cocoa nibs into chocolate.

This is a compact space saving machine; its essential parts are:

- roasting unit
- debacterisation unit
- Pod splitting unit

The roaster is a parallelepiped that contains 4 15 L baskets (approx. 7/8 Kg of cocoa beans), filled with specific containers to avoid bacterial pollution of the environment.

The treatment is by hot air circulation, separated into two phases: drying, with partial air removal to eliminate the humidity released by the product, and roasting with internal air circulation. Distributing the product in 4 containers favours the uniformity of the process and makes it possible to vary the amount of cocoa to be treated and, consequently, adapt the machine productivity to ones needs. Different temperatures and times can be set for the two parts of the process.

After roasting, the bottom of the baskets opens and the beans fall into the hopper below. A vibrating chute extracts the product and inserts it into a horizontal screw feeder, with brush spiral, which leads it to an ascent belt. This feeds the debacterisation unit, consisting of 3 overlapping belts so that the beans, passing from one to another, can overturn and uniformly expose themselves to the action of the very effective debacterisation unit.

The cocoa then enters the pod splitting unit where the beans are crushed, sieving to 4 different formats and the skin is separated from the nib in the 4 corresponding containers. The nib can be collected into a single container or in 4 different containers.

The peculiarity of the Multiprocess R is the possibility of processing the various types of nuts (hazelnuts, almonds, pistachios, etc.) by roasting, peeling (if necessary), debacterisation, picking of the whole fruit or possible transformation into nib. The two roasting phases, with the possibility of varying temperatures and times, allow to apply the correct technology that prevents oil leaks. The replacement of the brush in the screw conveyor transforms it into a peeler and the insertion of the extractor at its end removes the peel.

A specific chute-diverter placed at the debacterisation unit outlet allows you to collect the dried fruit whole (the same opportunity is had with the cocoa beans). You can obtain the nib in the same cocoa winnowing unit without extraction in the containers. In this case, dust will come out from the first sieve and nibs in different formats in the 3 subsequent ones.

The system is made of Aisi304 stainless steel and is mounted on wheels to easily move it. It is equipped with touch-screen operator panel where all recipe parameters are set, stored and recalled, where you can choose between manual and automatic cycle.

All parts in contact with the product can be easily removed for thorough sanitation. The extractor, positioned inside the machine, is equipped with an absolute filter so as to introduce perfectly clean air into the environment. The harmonious design and the continuous view of product as the production cycle evolves, thanks to the various protective guards made of Lexan, in full compliance with health and hygiene standards, make it possible to display the plant to customers in shops or laboratories.

Certifications:

Compliant with Directive 2006/42/EC.

Production capacity:

Model: MULTIPROCESS R 30

30 kg/batch

