

Cashew Nut Processing manual – the basics



Cashew is highly appreciated in a large number of countries and cultures. In Mozambique, the Maconde tribe refer to it as the “Devil’s Nut”. It is offered at wedding ceremonies as a token of fertility and is considered by many to have aphrodisiac properties. The cashew nut world production in 2000 was estimated at 2 million tones of nuts – in-shell, with an overall estimated value exceeding USD 2 billion.

Cashew Nut Processing



The cashew industry ranks third in the world production of edible nuts. The major exporters of cashew in the world are India and Brazil with 60% and 31% respectively of the world market share. The major cashew nut importers are the United States (55%), the Netherlands (10%), Germany (17%), Japan (5%) and the UK (5%). Cashew kernels are ranked as either the second or third most expensive nut traded in the US. The retail prices in the US range between USD 9 – 23 per kilogram.

Before the market

Shelling/Cutting

Two people work together at each shelling machine.

The first cuts the nuts and the second person opens them by a pin separating the kernel from the shell. Daily production is about 30 kgs per team.



Drying

The raw kernels are put in aluminum perforated trays and then put in an electric / steam drying machine for three hours at a constant temperature of 80 deg. C. The moisture content of the raw kernel is reduced from 7% to 3% to prevent natural deterioration.



Peeling

Manual peeling is done by gentle rubbing with fingers or by use of special peeling knife; with this operation 10-12 kg of kernels can be peeled per day.



Grading and Packing

There are 27 specific grades of cashew nut kernels obtained from peeling. The major work is to select the kernels according to size, shape color and count. Once the kernels have been graded, and after going through final quality control; they are packed in pouches of 25 lbs/11.34 kg net weight. The pouches are vacuum-packed to extract air and carbon dioxide; then, nitrogen gas is injected in and the pouch is automatically sealed. The final process prevents the product deterioration and extends the storage / shelf life of the kernel up to 5 years if the pouch is not punctured.

Cashew Products

Raw Cashew Nuts

The raw cashew nut is the main commercial product of the Cashew Tree, though yields of cashew apple are eight to ten times the weight of the raw nuts.

Cashew Kernels

It is estimated that 60% of cashew kernels are consumed in the form of snacks while the remaining 40% are included in confectionery.

Cashew Nut Shell Liquid

The liquid inside the shell represent 15% of the gross weight and has some attractive medicinal and industrial uses. The liquid is one of the natural resin that is highly heat resistant and is used in braking systems and in paint manufacturing.

Three main cashew products are traded on the international market; these are Raw Nuts, Cashew Kernels and Cashew Nut Shell Liquid (CNSL). A Fourth product, the Cashew Apple is generally processed and consumed locally.