

# Green Tea Sencha Production Processes

Tea processing had been done by human hand rolling until 1990 around.  
Today, it is all done by modern and clean machine.



Check the movie.

## ① Harvesting

First tea shoots are harvested carefully by several ways as bellow.



Hand-held type



Riding type

- ☆ First flush season starts from end of April to May.
- ★ In case hand plucking, tea leaf should be 1 stem with 2 or 3 leaves. On the otherhand, In case by machine, it should be 4 or 5 leaves.
- ☆ Evaluation of raw tea is depend on quality of harvested tea leaves. Therefore, tea harvesting needs lots of concentration and carefulness.
- ★ In order to keep freshness, tea leaves are brought to the factory quickly.

## ② Fresh leaf container

Storing leaves temporary with air blowing for keeping freshness.



Storing



Tea leaves after harvesting



Fresh leaf container

- ☆ Because harvested leaves are not able to be accepted for processing at once due to big volume, container accepts tea leaves temporary.
- ★ After harvesting, tea leaves are becoming hot due to its increasing of respiration volume. Then, air blowing is preventing its temperature increasing for keeping freshness.

## ③ Steaming

Steaming process is for stopping oxidation of leaves.



Tea leaves after steaming

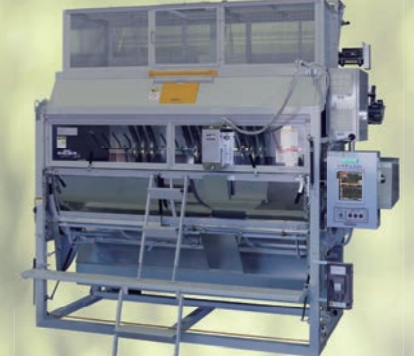


Steaming machine (Cylinder type)

- ☆ Fermentation starts quickly after harvesting. Steaming is for stopping fermentation, keeping leaves as green color, and removing grassy smell.
- ★ Steaming is the most important process because this process decides 90% of its final quality.
- ☆ Taste, flavor, brewing color are depend on steaming time. Around 40 sec (Normal steaming), tea becomes fresh and clear taste. In case over 80 sec (Deep steaming), flavor will be weakened but taste becomes more mellow.

## ④ Primary drying and rolling

Rolling is for removing moisture (drying) of tea leaves inside.



Primary tea rolling dryer



Tea leaves after tea rolling dryer



Inside of the machine

- ☆ Tea leaves are processed by high pressure rolling with hot air blowing.
- ★ "Umami" is brought by rolling. And when brewing tea with water, it is more extracted.
- ☆ It is said since ancient times that "Tea leaves temperature should be same as human body's". During processing, blowing air is around 100 degree but tea leaves are kept approx 35 degree. This makes possible to produce good color and flavor.

## ⑧ Drying

Drying for being able to preserve and increasing flavor.



Tea dryer



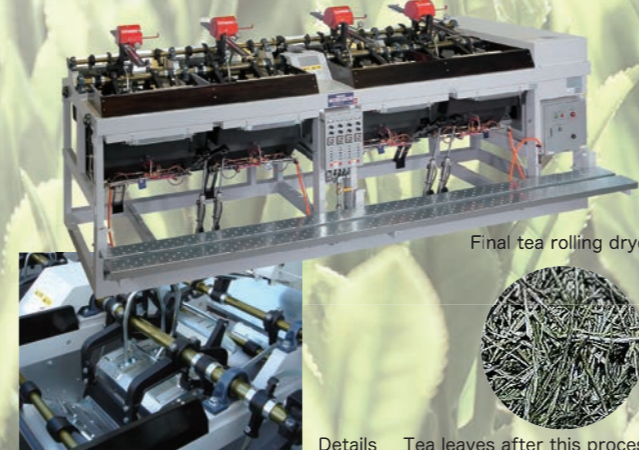
Aracha (Raw tea)

- ☆ Drying is continuing until moisture contents volume becomes 5~6%. (For preserving)
- ★ If stem is broken when bending by hand, it is time of good condition.
- ☆ Tea leaves which are passed all these processes are called "Aracha". Aracha is purchased by tea manufacture as material of tea products with adding roasting (Processed tea). After that, final products are completed with packaging and go to the market.

\*\*\*Raw tea" doesn't mean "Just harvested tea" in this document.

## ⑦ Shaping

Shaping as needles.



Final tea rolling dryer



Details Tea leaves after this process



- ☆ This process is for shaping with heat drying and pushing.
- ★ Rolling is fixed direction and removing moisture of stem part by drying. It makes tea leaves to needle shaping with glossy appearance as essential green tea feature.
- ☆ This process makes possible to extract "Umami" from tea leaves and makes easier to feel flavor and mellow taste.

## ⑥ Secondary drying and rolling

Enough rolling is beginning to make good shape for the final process.



Tea leaves after this process



Secondary tea rolling dryer

Inside the machine

- ☆ Restart rolling from previous process with hot air.
- ★ This process is the part for making good shape also, and done by stirring, pushing, and blowing hot air.
- ☆ When tea leaves tend to open softly after rubbing by hand, it is time to finish this process.

## ⑤ Rolling for moisture controlling

This process is for equally distributing the moisture volume that each tea leaves have.



Tea roller

The bottom panel



Tea leaves after tea roller



- ☆ This rolling adjusts moisture contents volume of each leaves and stems as equally.
- ★ Tea leaves roll on the bottom panel and are processed evenly.
- ☆ This process makes tea leaves as more harden, and "Umami" is born from stem part.
- ★ When stem and leaf becomes same color, it is time to finish this process.

