

Glossary (English)

Traceability:

ability to track a coffee's journey from the farm to the final consumer, including all processing and handling steps

In-fruit fermentation:

a processing method where coffee cherries are fermented without removing the fruit skin or pulp, allowing natural microbes to act on the whole fruit.

Dry fermentation:

a method where coffee is fermented without adding water, allowing natural microbes to break down the mucilage in a dry or low-moisture environment.

Anaerobic:

without the presence of oxygen.

Aerobic:

in the presence of oxygen.

Encapsulation:

uneven drying due to direct sunlight causing the outer surface of the coffee beans to dry too quickly.

pH:

a scale that measures how acidic or alkaline a liquid is, ranging from 0 (acidic) to 14 (alkaline).

Nitrogen (N):

an essential nutrient in coffee production that supports healthy plant growth and improves yield

P (Phosphorus):

a vital nutrient in coffee production that promotes root development and flowering for better crop yield.

K (Potassium):

an important nutrient in coffee production that helps strengthen plants, improve drought resistance, and enhance bean quality.

Ventilation:

movement of air into and out of a space to ensure proper airflow, fresh air supply, and removal of heat, moisture, or contaminants.

List of tools and equipment

Cherry paddle:

a simple tool used to check the ripeness or density of coffee cherries, often by stirring cherries in water to observe their floatability during sorting.



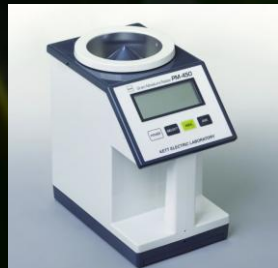
Brix meter:

a measuring device used to determine the sugar content (°Brix) of coffee cherries, juice, or mucilage, often used to assess cherry ripeness and fermentation potential.



Moisture meter:

a measuring device used to determine the moisture content of coffee parchment or green beans, helping ensure proper drying and safe storage.



pH meter:

a handheld device used to measure the acidity or alkalinity (pH level) of coffee-related materials such as fermentation water, coffee pulp, or mucilage during processing.



Air-tight tank:

a sealed container designed to prevent air from entering, used in coffee processing to maintain anaerobic conditions and control fermentation.



GrainPro bag:

a hermetic bag used to ferment coffee cherries or parchment in an oxygen-limited environment, helping create controlled anaerobic conditions and enhance flavor development.



How and Why We Use Those Tools and Equipment

Using the right tools at each stage of coffee processing helps ensure consistent quality, better decision-making, and reduced risk of defects. The tools below are used to objectively assess cherry quality, control fermentation, and protect coffee during drying and storage.

Cherry paddle:

WHY: Used to check cherry quality during sorting.

STEP1: Randomly select 100 cherries from the bag and place them on the cherry paddle.

STEP2: Define the acceptable color range for ripe cherries.

STEP3: Count the number of ripe cherries based on this color range and calculate the percentage out of 100.

STEP4: The average percentage of ripe cherries collected from farmers must be above 70%.

STEP1



STEP2



STEP3&4



Brix meter:

WHY: Used to check cherry ripeness and fermentation potential by measuring sugar content.

STEP1: Calibrate with water (it must be 0)

STEP2: Randomly pick 3 collected coffee cherries.

STEP3: Place a few drops of the juice on the Brix meter sensor.

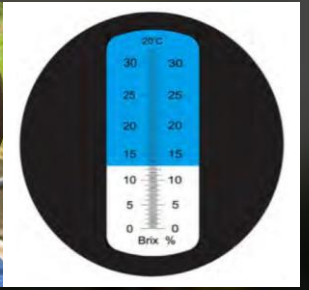
STEP4: Read and record the °Brix value.

STEP5: Use the average result to decide the processing method and fermentation time.

STEP1&2&3



STEP4&5



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Moisture meter:

WHY: Used to check moisture content to ensure proper drying and safe storage

STEP1: Set the mode according to what you check (parchment, dried cherry or green coffee)

STEP2: Take a small sample of parchment, dried cherry or green coffee.

STEP3: Measure the moisture content using the moisture meter.

STEP4: Read and record the moisture percentage.

STEP5: If moisture is too high, continue drying. If it is within the target range, move the coffee to storage.

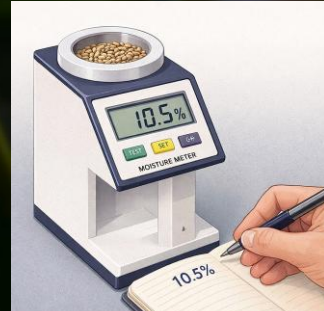
STEP1



STEP2



STEP3&4&5



pH meter:

WHY: Used to monitor acidity during fermentation.

STEP1: Check if it is calibrated or not with water. It must show around pH 7.0.

STEP2: Collect a sample of fermentation water, mucilage, or juice.

STEP3: Place the pH meter probe into the sample.

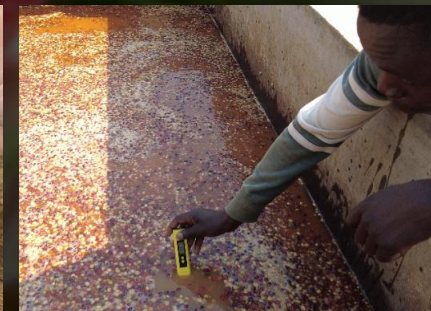
STEP4: Read and record the pH value.

STEP5: If pH drops too fast or too low, stop or adjust fermentation.

STEP1



STEP2&3



STEP4&5



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Air-tight tank:

WHY: Used to control fermentation by limiting air exposure to create an anaerobic condition.

STEP1: Clean the tank to avoid any contamination.

STEP2: Put coffee cherries or parchment into the tank.

STEP3: Seal the tank tightly to prevent air from entering.

STEP4: Use an S-hook to check whether anaerobic fermentation is occurring.

STEP5: Allow the coffee to ferment for the planned time.

STEP6: Open the tank and check pH to see if fermentation is well done as planned.

STEP1



STEP2



STEP3&4&5



STEP6



GrainPro bag:

WHY: Used to control fermentation by limiting air and protecting coffee quality.

STEP1: Put coffee cherries or parchment into the GrainPro bag.

STEP2: Remove excess air and seal the bag tightly.

STEP3: Store the sealed bag in a clean, shaded place.

STEP4: Allow the coffee to ferment for the planned time.

STEP5: Open the bag and continue processing or check quality (smell, pH, condition).

STEP1



STEP2



STEP3&4



STEP5



Appendix A: Lot management sheet (example)

Lot management sheet

CWS: _____ Name: _____

-Variety: _____

-Receiving date: dd/mm/yyyy

-Receiving cherry weight : _____ kg

-Process: FW / HN / NR / Other (_____)

-Certificate: _____

-Lot ID: _____

-Main production area: _____

-Fermentation: _____ hours (from ____:____ to ____:____)

-Soaking: _____ hours (from ____:____ to ____:____)

-Grade: A1 / A2 / A3 / Triage

-Start drying: dd/mm/yyyy ____:____

-End drying: dd/mm/yyyy ____:____

-Moisture content : _____%

-Final parchment weight: _____ kg

CWS: *the name of the coffee washing station where the coffee lot is received and processed.*

Receiving date: *the exact date when coffee cherries are delivered to the washing station.*

Process method: *the processing method applied to the lot (e.g. Fully Washed, Honey, Natural, or other specified methods).*

Certificate: *the certification status associated with the lot, if any (e.g. Organic, Fairtrade, Rainforest Alliance).*

Lot name: *the unique identification name or code assigned to the lot for traceability.*

Main area: *the main origin of the coffee cherries, such as the sector, cell, or village where they were harvested.*

Fermentation: *the total fermentation duration in hours, including the exact start and end time.*

Soaking: *the soaking duration in clean water after fermentation, including the start and end time.*

Drying start/end date: *the dates when drying begins and ends, indicating the total drying period.*

Moisture content: *the final moisture level (%) of the coffee after drying, measured before storage or milling.*