

# TahinaPlus – Microwave Process

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**01**

## Hulling



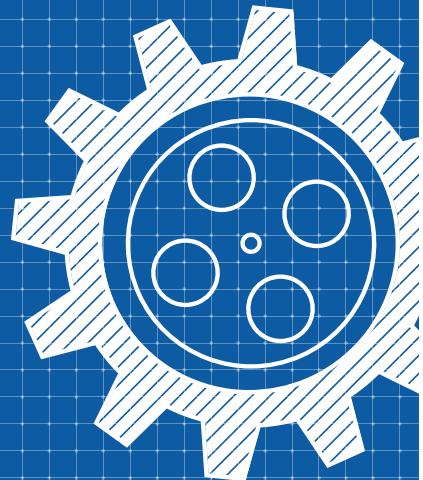
# Hulling

- Eliminated the entire mixing process with water.
- First cylinder is removed (in the reference photo).
- Ability to control the moisture level that the seed requires.



02

## Conveyer Belt





## Conveyor System

- No Direct Water Mixing: Instead of mixing seeds with water, they are placed on a conveyor belt for approximately 30 minutes to absorb moisture.
- Precision Moisture Control: This method allows for uniform moisture distribution, ensuring consistency in processing.
- Less Oozing & Breakage: Eliminating direct water exposure means fewer structural weaknesses in the seeds, reducing leakage and breakage in subsequent steps.



03

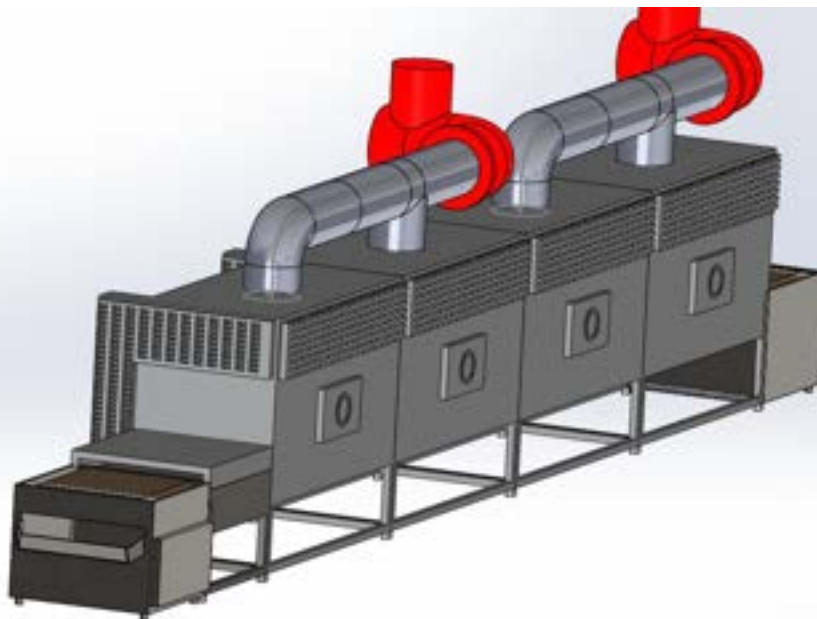
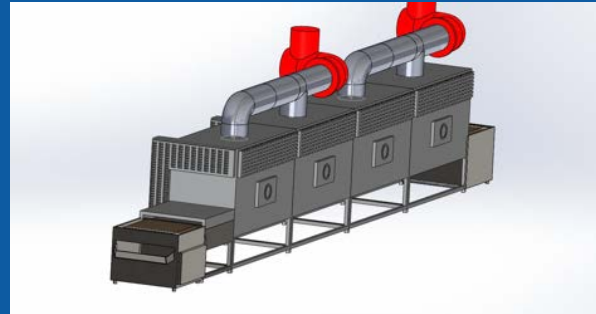
## Microwave Process





# Microwave Machine

- High Efficiency: The microwave process uses less energy while achieving higher heat efficiency, ensuring thorough cooking with minimal waste.
- Inside-Out Cooking: Unlike conventional heating methods, microwaves penetrate and heat seeds evenly from the inside out, preserving their integrity.
- Improved Quality: The reduction in external heat exposure leads to less seed degradation and a more controlled roasting process.





04

# Sifting & Cooling



## Sifting & Cooling Process

- Ensures Consistency: The sifting process removes any uneven or improperly processed seeds, ensuring uniformity.
- Temperature Stabilization: The cooling stage prepares the seeds for grinding, maintaining their structure and preventing heat-induced degradation.





05

# Grinding Process



## Grinding Process

- 1st Grinding Stage: Initial coarse grind to break down the seeds.
- 2nd Grinding Stage: Further refinement for a smoother texture.
- 3rd Grinding Stage: Final milling to achieve the desired consistency, depending on product requirements.



06

# Benefits



## Benefits

- **Reduced Processing Steps:** Eliminating excess steps means less handling, less breakage, and greater efficiency.
- **Energy Efficiency:** The microwave process reduces the total heat required, saving energy and lowering costs.
- **Higher Yield & Better Product Quality:** Less seed breakage ensures more usable product and higher consistency in texture.
- **Improved Moisture Control:** The controlled absorption method ensures better processing and uniform seed structure.