



Test Protocol

Test date	July, 2024 (or TBD)
Client	Tarboosh Restaurant
Problematic	Dry sesame seeds
Objective	<ul style="list-style-type: none">– Reach the moisture contents from 5% to 0.5%– Keep temperature level below 118 °C¹

Product

Sesame seeds
(weight and volume TBD)

Technologies:

Microwave
Radio Frequency

Equipment

FL12000²
Maximum power: 12 kW
Frequency: 2450 MHz

TRF04
Maximum power: 4kW
Frequency: 27.12 MHz

Operating mode

- We will track the temperature and reflection power changes of sesame seeds during radio frequency heating and microwave heating.
- On-off cycle will be applied if the temperature of products were too high.
- If the sample cannot reach the target moisture during microwave processing, we will switch to RF heating method to achieve the final moisture contents.
- Moisture will be directly measured after processing.
- Sample will be packed in the bag, but relative humidity is very high in Georgia area which may increase the sample's moisture during storage.

Monitoring of the temperature during the process by the thermometer

Analysis

Temperature, moisture contents, appearance (by camera)

Product quantity

TBD based on the customer's request

¹ Based on the customer's question.

² System can be changed depending on the quantity of samples from the customer.