# **BATCH TEMPERING**

# **Customized Batch Tempering**

Set up precise batch tempering of frozen meat, fish, poultry, fruit or bakery products in just minutes with Ferrite Microwave Technologies' (FMT) MIP10 Batch Processor Microwave Oven.

This tempering unit is ideal for portion-control plants, ground beef and poultry operations, sausage kitchens, bakeries and frozen prepared-food manufacturing. During a single shift, it automatically and precisely raises the temperature of up to 3,000 pounds (1360 kg) of frozen product to 28 degrees Fahrenheit (-2 degrees Celcius).

# A Complete System

The basic system consists of a 50-inch by 42-inch (1.3 meter by 1.1 meter) microwave oven, one FMT GET 2024 75 kilowatt microwave generator and a loading table on convenient rollers. The oven size permits a uniform loading procedure for the simultaneous processing of one 10-inch high (254 millimeter) tier of containers placed on the 40-inch by 48-inch (1.02 meter by 1.22 meter) loading table.



#### **Precision Control**

Precise computer control of processing time enables predictable temperature increases (tempering) and target final product temperature attainment. Typically, this microwave oven tempers a load of about 300 pounds (136 kg) in four minutes (see the chart on the reverse page for examples).

# **FMT Keeps Your Facility Clean**

Tempering food with the FMT microwave oven retains protein and flavor compounds for tastier, fresher products. With the MIP 10 installed, tempering rooms and the resulting drip or liquid runs that are common in the food processing industry are eliminated.

# **Uniform Product Heating**

As a leader in industrial microwave oven development, FMT offers the widest variety of cooking and tempering microwave ovens on the market. The MIP 10 provides uniform heating for consistent, efficient tempering of product at very low starting temperatures.

### **Warranteed For Dependability**

The MIP 10 is covered by a full one-year warranty. Both in- and out-of-warranty service support is provided by FMT Certified field technicians.



# MIP 10 Highlights

- Adds processing flexibility with tempering on demand
- Enables predictable product tempering for consistent, quality production
- Eliminates tempering rooms or racks, saves space and multiple handling sequences
- Improves quality and yield
- Improves sanitation and saves labor costs associated with stripping cartons
- Retains flavor and protein compounds for consumers
- Simplifies compliance with government sanitation temperature control regulations and guidelines

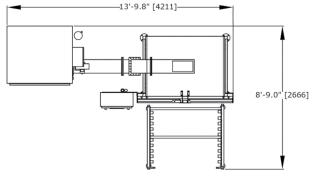
# MICROWAVE TECHNOLOGIES

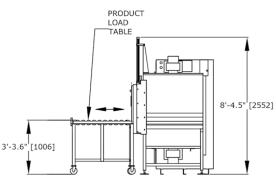
# **Product Transport**

A 5-foot by 5-foot (1.5 meter by 1.5 meter) heavy duty plastic pallet mounted on rollers.



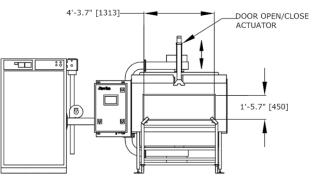
The MIP 10 Batch generator is electrically isolated from the process oven by an integral microwave circulator that helps provide long magnetron tube life.





#### **Sanitation**

The MIP 10 tempering oven and microwave generator are manu-factured entirely from stainless steel. The process oven is washable.



# Safety

Interlocking access doors on the generators meet all applicable government (OSHA and Health and Human Services) safety standards, and provide a safe operating environment.

# **Specification Details**

Typical time required to temper 300 pound loads in 75 kW unit from Zero degrees (-18 Degrees Celcius) starting temperature.

Product:	End Temp:	Time:
Lean Beef (85%)	26°F	4
Lean Beef (50%) or pork	22°F	2
Poultry	27°F	5
Cod Blocks	22°F	3
Cored apples	21°F	3

Electrical Specifications (per Transmitter) United States:

**INPUT LOAD** MICROWAVE OUTPUT

480 volts **75 kW CW** 3 phase 915 MHz

50/60 cycles 0.9 power factor

135 amps 103 KVA



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