

MIP 4

MINI BATCH TEMPERING

Versatile Mini Tempering Oven Offers Speed, Control, Convenience and Cost Savings.



Tempering to Order

Food service operations that need to temper moderate quantities of food in a hurry and have limited space, can rely on the Mini Batch Microwave from Ferrite for tempering on demand.

The MIP 4 is ideal for batch tempering of frozen meat, fish, poultry, fruit or bakery products in a fast-moving food preparation environment, such as that aboard cruise ships.

This unit can temper up to 1,500 pounds (680 kg) of raw, frozen product per hour. It automatically raises the average temperature of frozen product to between 22 and 29 degrees Fahrenheit (-2 degrees to -1 degree Celsius) at the touch of a button.

A complete system, the MIP 4 consists of a compact microwave oven and a 75 kilowatt microwave transmitter.

Even, Consistent Tempering

The MIP 4 provides uniform heating and enables tempering from lower starting temperatures with consistent heating and Ferrite's unique rotary table.

Precise computer control of processing time provides predictable temperature rise - or tempering - and end temperature. Typically, this microwave oven can temper a 55 pound (25 kg) box of beef in 65 seconds.

Advanced Technology

Decades of diligent research and development, as well as real-life tempering trials for customers in widely varied areas



MIP 4 Highlights

- Eliminates tempering rooms or racks, saves space and multiple handling sequences and the related mess
- Allows predictable ending product temperature
- Adds processing flexibility with tempering on demand for better service
- Improves quality and yield
- Retains flavor and protein compounds for consumers
- Improves sanitation and saves labor stripping cartons
- Reduces disposal of waste cardboard
- Simplifies compliance with government sanitation regulations and guidelines
- Reduces potential for airborne contaminants to infect food through the use of shortened tempering process

of the food processing industry, have driven the industry-leading technology contained in the MIP 4 transmitter.

A Mini System

The MIP 4 has a 3-foot by 4-foot (.9 meter by 1.3 meter) tempering microwave oven and comes complete with its own 75 kilowatt microwave transmitter.

Ferrite's MIP 4 industrial microwave tempering unit operates at 915 MHz and produces approximately 260,000 BTUs per hour for superior food processing performance.

Precise Computer Control

The transmitter is controlled by a Programmable Logic Controller (PLC) processor. The PLC operates the control software for the transmitter.

The PLC processor enables constant power operation at preset power levels. It also provides a digital display of status information including actual versus set point power, and fault diagnosis.

Warranted For Dependability

The MIP 4 Tempering System is warranted for a period of one year. Both in- and out-of-warranty service support is provided by Ferrite Certified field technicians.

MIP 4

Specification Details

Electrical Specifications (per transmitter) United States:

INPUT LOAD

480 volts, 3 phase, 50 or 60 cycle, 72 amps, 60 KVA

440 volts, 3 phase, 50 or 60 cycle, 80 amps, 60 KVA

0.9 power factor

Specifications:

75 kW, 915 MHz

Magnetron microwave power source

Water Hookups for Cooling System

Ferrite microwave transmitters are water cooled through a heat exchanger using city or local water supply. The system includes a one-inch inflow and outflow pipe. Flow rates depend on the temperature of water entering the heat exchanger. (optional temperature control valve is recommended)

Reliable, Dependable Industrial Systems

Typical food processing applications include around-the-clock tempering of a wide variety of product for the continuous flow of food from cruise ship galleys.

Microwave Isolation

The MIP 4 transmitter is electrically isolated from the process oven by an integral microwave circulator that helps provide long magnetron tube life. Because of the efficiency of Ferrite's waveguide power transmission, it is possible to install the transmitter in a remote location.

Transmitter Controls

All controls for typical transmitter operation are found on the front of the enclosure. This ensures consistent, uniform and efficient operation.

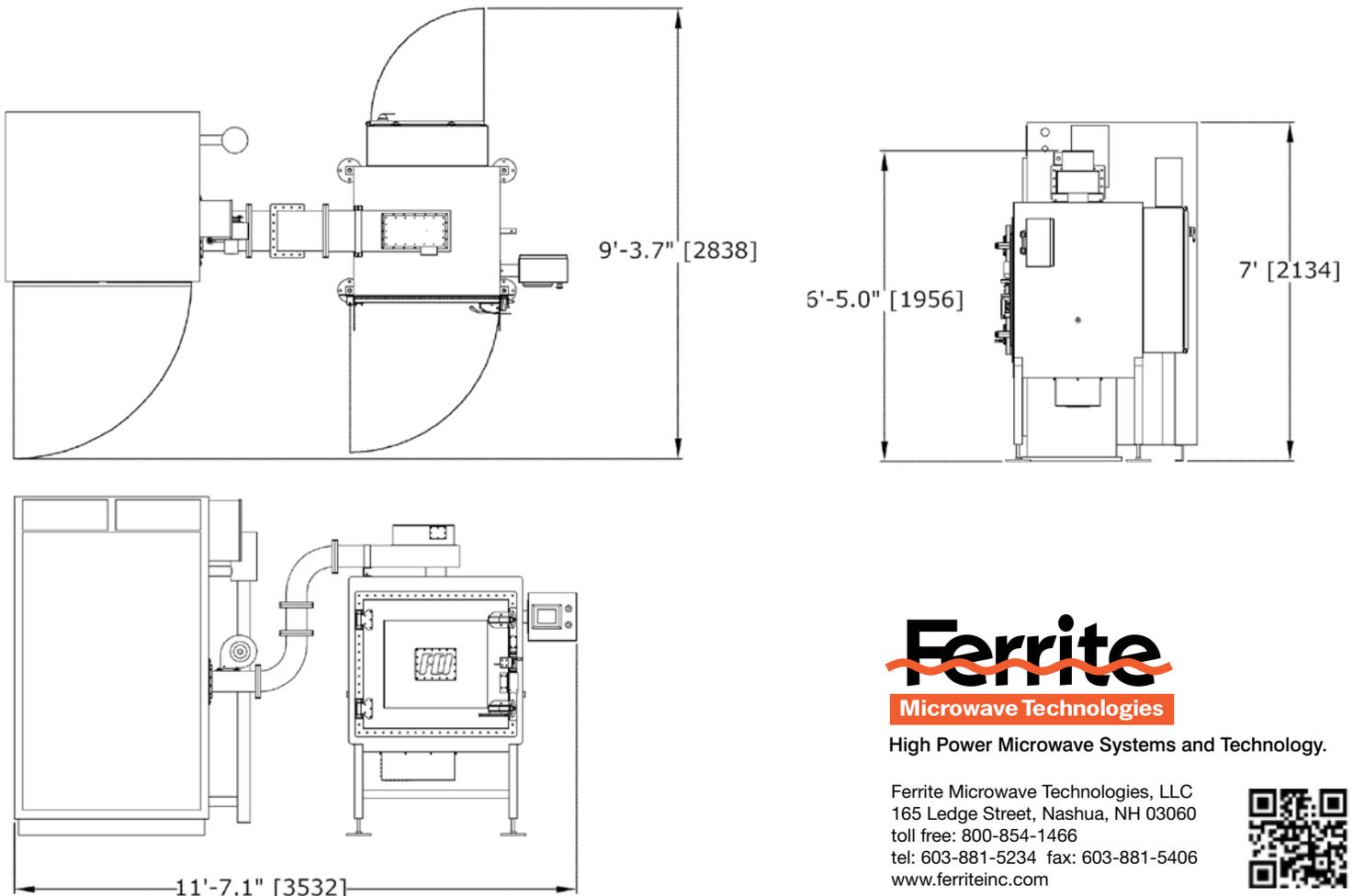
Sanitation

The MIP 4 tempering oven is stainless steel and is washable. The transmitter cabinet is a sealed enclosure.

Safety

Interlocking access doors on the transmitters meet all applicable government (OSHA and Health and Human Services) safety standards, and provide the safest operating environment available.

Fittings are provided on the oven to interface with an optional, customer-supplied fire suppression system. Customer supplied light and temperature sensors may be used in the oven to send signals to trigger the system.



Ferrite
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