# CONTINUOUS COOKING

# Industrial Microwave Oven Prepares up to 1,800 Pounds of Product Per Hour.



# For Preheating, Postheating, or Cooking

Smooth, efficient and continuous cooking are essential ingredients for meeting today's production demands. Ferrite's reliable MIP 11 Microwave Oven Continuous Cooking System is ideal for preheating, postheating or complete cooking of portion-controlled bacon, other meats, poultry, fish and other food products.

Precise computer control gives you the flexibility to process up to 1,800 pounds (817 kg) of product per hour, depending on the product and process variables. You control the speed and power at which your product is prepared for maximum flexibility.

# **A Complete Modular System**

The basic system consists of multiple 4-foot wide by 12-foot long (1.3 meters by 3.7 meters) cooking cavities, a 3-foot-wide (0.9 meter) continuous conveyor system, and one or two GET 2024 microwave transmitters per cavity.

Each transmitter provides up to 75 kilowatts of power at 915 MHz. In addition, the system includes all controls and input and output conveyors. On time delivery, detailed operator training and complete assistance for a fully operational installation are hallmarks of Ferrite service.



# **MIP 11 Highlights**

- · Provides flexible, continuous cooking
- Automates system monitoring and control with exclusive Ferrite Product Sensors (FPS)
- Expands at any time to increase production
- Remote system monitoring and tracking using the exclusive Ferrite Information Management System (FIMS)
- Remote system troubleshooting by Ferrite service technicians via modem access to PLC controls
- Industry proven, user-friendly Ferrite system software and Allen-Bradley controls

The basic system product opening is 3 inches (76 mm) high by 36 inches (864 mm) wide. Overall length of a basic single cavity system is 24.5 feet (7.5 meters). System layouts can be designed to accommodate specific customer requirements.

# **Uniform Microwave Cooking**

The MIP 11 provides efficient, uniform microwave cooking to provide consistent, proven results. Products up to 3 inches thick can be uniformly heated by Ferrite's microwave feed technology which efficiently and evenly applies microwave energy.

The MIP 11 can meet the requirements of a broad range of product applications, including bacon cooking.

## **Warranteed For Dependability**

The MIP 11 Cooking System is covered by a one year warranty. Both in- and out-of-warranty service support is provided by Ferrite Certified field technicians.

MIP 11

# Reliable, Dependable Microwave Systems

Ferrite offers a variety of options for the Continuous Cooking Oven, including:

- A complete 2-inch (50 mm) thick insulated cavity for heat containment and energy efficiency
- Ferrite Information Management System (FIMS) that permits remote monitoring via a PC
- Ferrite Product Sensors (FPS), which detect the presence or absence of product on conveyor belt as it enters the oven, automatically adjusting the power.
- Ferrite Belt Cleaner (FBC) system employing high pressure water to remove product residue and grease from the oven belt
- Ferrite Air Dry high pressure blow-off system to remove excess grease and water before packaging, or water from conveyor belt after washing

# **Transmitter Water Cooling Requirements**

Each Ferrite microwave transmitter is water cooled through a heat exchanger using city or local process water supply. The system includes a one-inch inflow and outflow pipe.

# Customization

System design can be customized to meet specific requirements.

#### **Modular Units to Fit Your Needs**

<u>Model</u>	Microwave Power**	Overall Length?	<u>'/ M</u>
MIP 11 - 1	75 or 150 kW	24.5 ft.	7.5
MIP 11 - 2	225 or 300 kW	37.5 ft.	11.5
MIP 11 - 3	375 or 450 kW	50.5 ft.	15.4
MIP 11 - 4	525 or 600 kW	63.5 ft.	19.4

# **Product Transport**

A standard 3-foot-wide (0.9 meter) positive drive, articulated belt of microwave transparent material transports the food product through the oven. Belts in other widths also are available.

# **Product Transport**

Each GET 2024 transmitter is electrically isolated from the process oven by an integral microwave circulator that helps provide long magnetron tube life.

#### **Sanitation**

The MIP 11 ovens and microwave transmitters are manufactured from stainless steel, are 4-rated and washdown safe.

# Safety

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

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

# **Export**

166 KVÁ

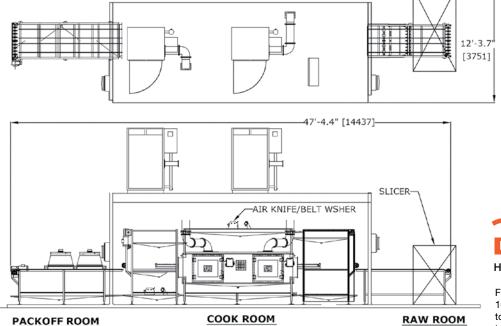
Ferrite provides other configurations for world-wide use. Specifications available on request.

Electrical Specifications (per transmitter) United States:

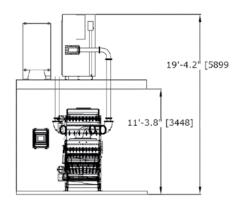
Input Load Microwave Output 480 volts 75 kW CW 915 MHz 50/60 cycles 0.9 power factor 200 amps

\*Note: Length includes microwave suppression assemblies, but does not include extension conveyors on either end.

<sup>\*\*</sup>Note: Expansion beyond 600 kW is available.



PRODUCT FLOW





High Power Microwave Systems and Technology.

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