

MIP9

BOOST HEATING & DRYING

Upgrade Your Conventional Cooking System

With increases in throughput of up to 25%, the Ferrite Microwave Technologies' (FMT) MIP 9 Boost Oven can dramatically improve the performance of an existing cooking line. Typically located prior to a conventional line, the boost oven increases both throughput and yield by raising the temperature of the entire product. Throughput is increased as a natural result of the "boost." The resulting increases in product yields are even more impressive. By raising the core temperature of the product there is less reliance on conductive heat transfer to achieve minimum cook temperatures. This in turn results in less moisture being driven from the outer portion of the product and a higher final yield.

Use Microwaves For Industrial Drying

The use of microwave energy for both food and non-food applications is increasing. FMT customers are utilizing the energy efficiency of microwave heating to evaporate water from items like; snack foods, spices, biomass, industrial foam, and coal.



Cavity and Conveyor System

The system will consist of one fifteen (15) foot long heavy duty stainless steel multi-mode cavity. Each cavity is equipped with two (2) access doors for easy cleaning, along with a sloped bottom pan leading to a waste collection pipe system. Each cavity comes equipped with two (2) high-power microwave rotary feeds, one top and one bottom, to enhance energy distribution. Suppression tunnels on the input and output prevent microwave leakage into the surrounding work area. The cavity features half and full product detection and arc sensing.



MIP 9 Boost Heating Highlights

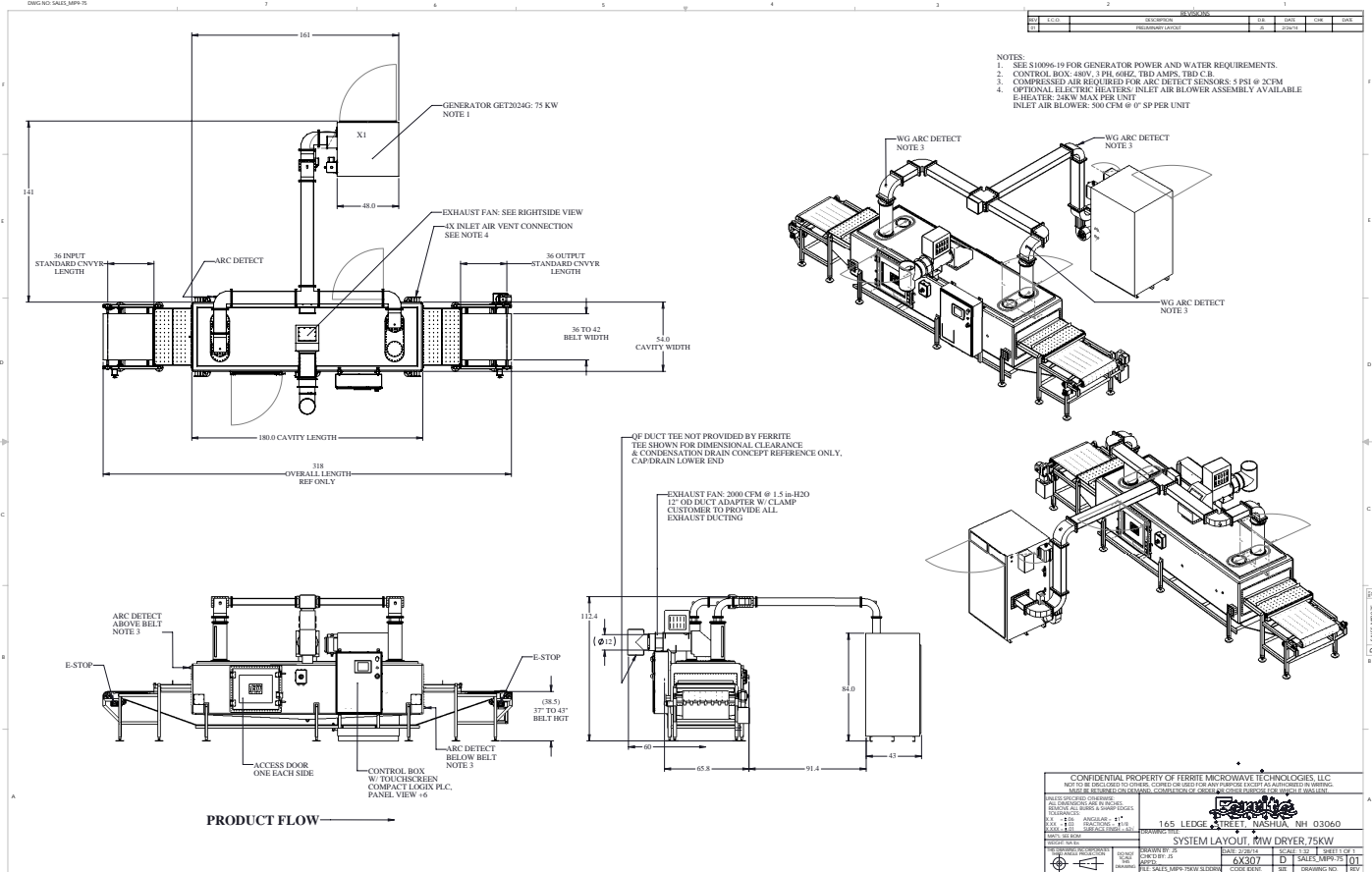
- Increases yield
- Increases throughput
- Preferential denaturing of bones and bone matter
- Touch screen controls

MIP 9 Drying Highlights

- Increased efficiency
- Decreased energy usage/cost
- Increased throughput
- Flexibility through instantaneous control

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Product Transport

A 36-inch wide positive drive, articulated belt of microwave transparent material transports the food product through the oven. Standard tunnels accommodate beds of material 34"x3" (86cmx8cm); other tunnel sizes are also available.

Sanitation

The MIP 9 ovens and microwave transmitters are manufactured from stainless steel, and the process oven and conveyor belt are washdown safe.

Safety

Interlocking access doors on the generators and process ovens, as well as passive microwave suppression tunnels, meet applicable government (OSHA and Health and Human Services) safety standards, and provide the safest operating environment available. Safety exposure limits of 5 mW/cm² measured 5 cm away from the equipment are twice as stringent as OSHA's voluntary standard.

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

Microwave Isolation

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



High Power Microwave Systems and Technology

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