

The MIT system can be used for up tempering of meat, fish and fruit, typically from -18OC to -40 C, depending upon the product type and water content.

Microwave Tempering System Series MIT

Tempering offers these advantages:

1. Microwave tempering gives consistent temperatures throughout a block of frozen product up to 15 cm thickness.
 2. Drip loss is virtually eliminated.
 3. Precise temperature control improves downstream processes.
 4. The DanTech MIT tempering system requires a small footprint.
 5. Less product handling reduces your labour costs.
 6. Just in Time processing improves productivity and flexibility to cope with short time delivery orders.
 7. Rapid controlled tempering allows less time for bacterial growth. This improves product quality and taste, increases shelf life, and reduces risk.
 8. The elimination of leaching valuable proteins leads to higher hygiene standards.
 9. Yield of many prepared foods can be improved because controlled microwave tempering does not allow valuable protein to leach from the raw product.
 10. Reduced wear on downstream process equipment such as grinders, cutters etc because the temperature is suited to the process.
 11. Improved portion control because the temperature control is consistent.
- Finally, the clean and controlled microwave tempering process reduces the potential confrontation with customer auditors , over-crowded and messy work areas, unsanitary handling procedures, proteins on the floor, etc. This will save money in hygiene costs, downtime and non-productive labour costs.



Continuous Tunnels:

Single or multiple tunnel applicators served by a single or multiple of microwave generators / transmitters, 60 cm width belt, 896 or 915 MHz.

Standard Specifications Include:

- High pressure carbon dioxide fire suppression system to comply with the latest IEC regulation IEC 60519-6
- Stainless steel construction with glycol/water mix attenuation tunnels.
- RF leak detection system.
- Rotary antenna boomerang feed top and bottom.
- Full PLC touch screen control panel with Ethernet connection.
- Belt wash system and air blow-off system connected to local water supply.

Batch Ovens:

The batch oven is a compact solution for processing up to 150 kg of product in a single batch limiting the power input to a single 75 kW generator / transmitter. This is an ideal solution where space is restricted and a continuous throughput is not specifically required for the downstream process.

Standard Specifications Include:

- High pressure carbon dioxide fire suppression system to comply with the latest IEC regulation IEC 60519-6
- Stainless steel construction with a food grade silicon double choked guillotine door.
- Rotary antenna boomerang feed, top and bottom.
- Full PLC touch screen control panel with Ethernet connection.
- Loading table for up to 6 x 25 kg cartons of product.

All machines are subject to continuous improvement

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Tempering System Configurations

Tunnel System Configurations:

MIT-1.36.6.75 Single oven applicator, length 3.6m , 75 kW power input

MIT-1.36.6.150 Single oven applicator, length 3.6m, 150 kW power input

MIT-1.36.6.225 Single oven applicator, length 3.6m , 225 kW power input

MIT-1.36.6.300 Single oven applicator, length 3.6m , 300 kW power input

MIT-2.36.6.150 Double oven applicator, each length 3.6m , 150 kW power input

MIT-2.36.6.225 Double oven applicator, each length 3.6m , 225 kW power input

MIT-2.36.6.300 Double oven applicator, each length 3.6m , 300 kW power input

Batch System Configurations:

MIT-1.1212 Batch oven applicator with 129 x 106.5 cm loading retraction table.

MIT-1.6000 Batch oven applicator with 60 cm Ø rotary table for single cartons.

Oven Controls and Software Package

Systems are delivered complete with the PLC control package for monitoring of the entire process. System software is included for easy system operation and troubleshooting. Housed in IP 54 (Listed NEMA 4 Rated) enclosures with Allen Bradley Compact Logix, Ethernet Based PLC control box assembly or equivalent.

PanelView 1250E Touch screen control panel or equivalent, for complete control of the entire process.

Variable Frequency Drive Control assembly for digital control of the oven conveyor from the operator panel.

Screens for complete oven data with automatic loading and unloading features.

Modem / Ethernet switch assembly for remote access to the entire system for customer required modification or remote troubleshooting of the entire system.

IMOS 'Pulse' software for enhanced tempering and full digital control of the entire process.

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