



The MIB system is used for pre or post heating processes in the food industry or for heating up material quickly and efficiently in the non-food industry.

Boost Heating with Microwave Energy

Microwave boost heating is the latest development to give a real gain in yield improvement to cooked products such as formed chicken, nuggets, wings, patties, meat ball, potatoes in fact almost all products that are cooked in fryers and grills then chilled before packing.

In fact, many food & non-food materials can be pre-heated or post-heated using microwave energy which is fast, efficient and in most cases requires a smaller footprint.

There can also be organoleptic and microbiological benefits from the rapid heat transfer when dealing with food and pasteurisation.



Microwave booster heating can give you these benefits:

- 5-15% yield improvement
- 35-50% higher capacity
- Reduced oil uptake and consumption
- Cleaner cooking medium
- In-line production
- Integrates to conventional ovens
- >65% thermal efficiency (Compares to about 35% with other heating mediums)



The oven or applicator is designed according to the product requirements and our technical team can advise the best methods for optimum end result. Applicators are built by DanTech as modules for easy expansion.

DanTech always installs high pressure carbon dioxide fire suppression systems for operator safety to comply with the new IEC 60519-6 safety standard for industrial microwave equipment and installations.

Continuous Tunnels:

Single or multiple tunnel applicators served by a single or multiple of microwave generators / transmitters, 90 or 120 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 pin-choke attenuation tunnels.
- Rotary antenna boomerang feed top and bottom.
- Full PLC touchscreen control panel with Ethernet connection.
- Extract ports for vapour extraction.
- Belt wash system for the belt conveyor with air blow-off system connected to local water supply.
- 1.5 m standard infeed conveyor.
- 1.5 m standard outfeed conveyor.

Options:

- Vision image monitoring, automatically adjust power setting to input load.
- Different belt and applicator types.

All machines are subject to continuous improvement

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Boost Heating Tunnel System Configurations:

90 cm belt width

MIB-1.36.9.75 Single oven applicator, length 3.6m, 75 kW power input

MIB-1.36.9.150 Single oven applicator, length 3.6m, 150 kW power input

Intimidate module with 75kW transmitter or 2 x 75 kW transmitters

120 cm belt width

MIB-1.36.12.75 Double oven applicator, each length 3.6m, 150 kW power input

MIB-1.36.12.150 Double oven applicator, each length 3.6m, 150 kW power input

Intimidate module with 75kW transmitter or 2 x 75 kW transmitters

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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