

HEAT AND CONTROL

®

AirForce® Impingement Oven



***Fastest, most uniform
impingement cooking!***

AirForce® Impingement Oven

- Proven to deliver faster cooking and greater uniformity than any other impingement oven.
- Cook meat, poultry, seafood and baked products precisely to your specifications.

Higher Production



Rapid cooking

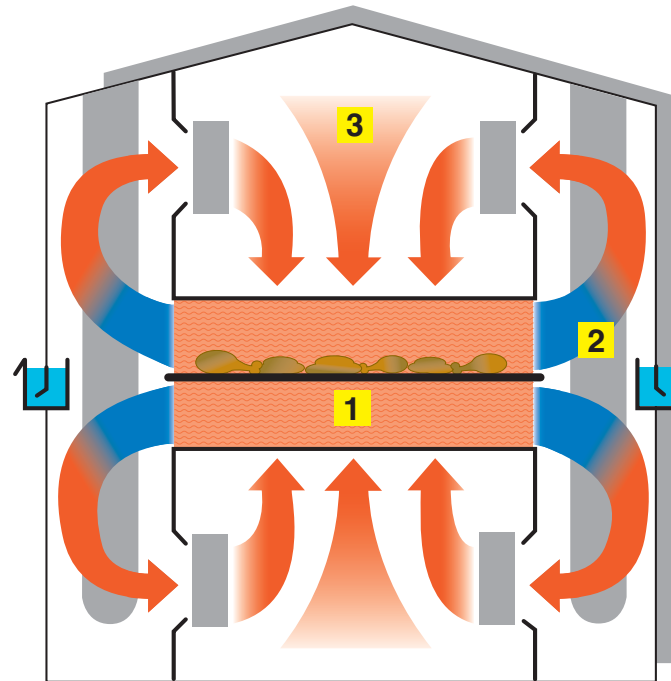
The AirForce oven delivers higher production output because it cooks faster than comparable impingement ovens. This unique process preserves product flavor and moisture, producing higher finished yields.

Precise control

Temperature, humidity and air velocity are independently adjustable above and below the product. Upper air nozzles adjust from 2" to 8" above the conveyor allowing product heights of up to 6".

Indirect heating

Indirect heating prevents product discoloration or "pinking". Choose from compact gas-fired burner or thermal fluid heating systems.



- 1** Hot humid air is uniformly applied across the full width of the product conveyor.
- 2** Return path of air between impingement nozzles does not interfere with incoming hot air.
- 3** Plenum-mounted fans above and below the conveyor force air through nozzles evenly onto product.

All internal surfaces are fully accessible and require minimal time to clean.



Easy Cleaning



Bacteria can't hide

All internal surfaces are fully accessible. There are no air ducts or insulated panels to harbor bacteria.

Easy access

Conveyor and air nozzles separate when the hood is raised providing easy access for cleaning. Dual rotary brushes clean the conveyor belt during operation.

Product-specific cleaning

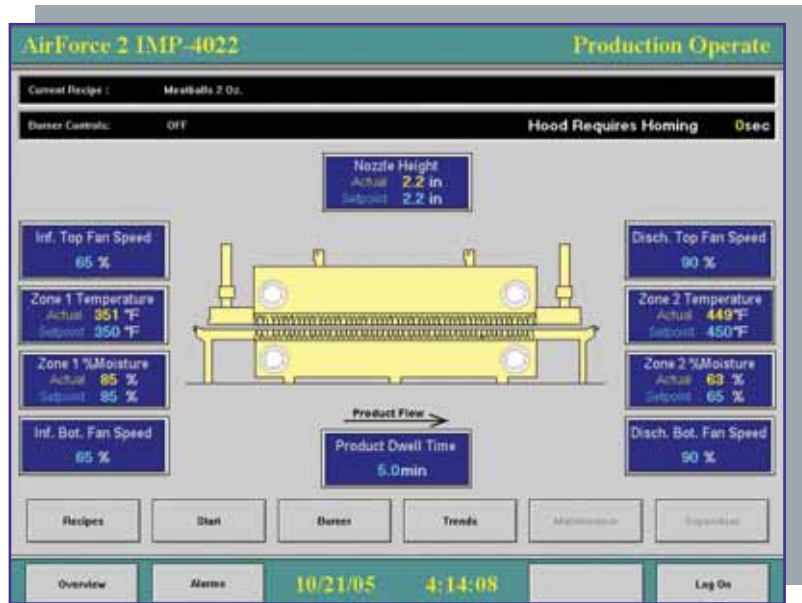
Control the exact amount of cleaning time and chemicals used for different foods with the optional computer controlled clean-in-place system.

Built to USDA guidelines

Common IMP-C222 AirForce 1 & 2 CIP Overview

AirForce 1 CIP		AirForce 2 CIP	
Zone 1	Zone 2	Zone 1	Zone 2
Top Fan: 95%	Top Fan: 90%	Top Fan: 95%	Top Fan: 90%
Bottom Fan: 95%	Bottom Fan: 90%	Bottom Fan: 95%	Bottom Fan: 90%
Temperature: 351°F	Temperature: 443°F	Temperature: 351°F	Temperature: 443°F
CIP Pump: OFF	CIP Pump: OFF	CIP Pump: OFF	CIP Pump: OFF
Steam Supply Valve: CLOSED	Steam Supply Valve: CLOSED	Steam Supply Valve: CLOSED	Steam Supply Valve: CLOSED
CIP Catch Box Cover: DISABLED	CIP Catch Box Cover: DISABLED	CIP Catch Box Cover: DISABLED	CIP Catch Box Cover: DISABLED
CIP Process: DISABLED	CIP Process: DISABLED	CIP Process: DISABLED	CIP Process: DISABLED

Buttons: Overview, Home, 10/21/05, 4:15:09, Log On



Minimal training is needed to control all oven functions using the simple color touch screen.

Computerized Control

Process control and data management

Automated process control, monitoring and information management are available at the touch of a finger using our optional computerized control system.

Simple operation

Fine-tune process conditions with easy-to-read touch keys. All commands are displayed in plain language, requiring minimal operator training.

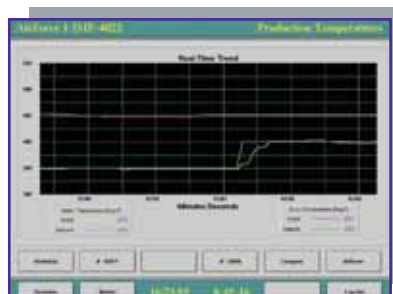
Fine-tune and repeat all process variables

Fan speeds
Temperature
Belt speed
Nozzle height
Menu memory
Conveyor height

Cleaning
Troubleshooting
Process trending
Network access
Security levels/alarms
Data acquisition



Improve product consistency by pre-programming temperature, moisture, air flow, belt speed and other process parameters for each of your products.



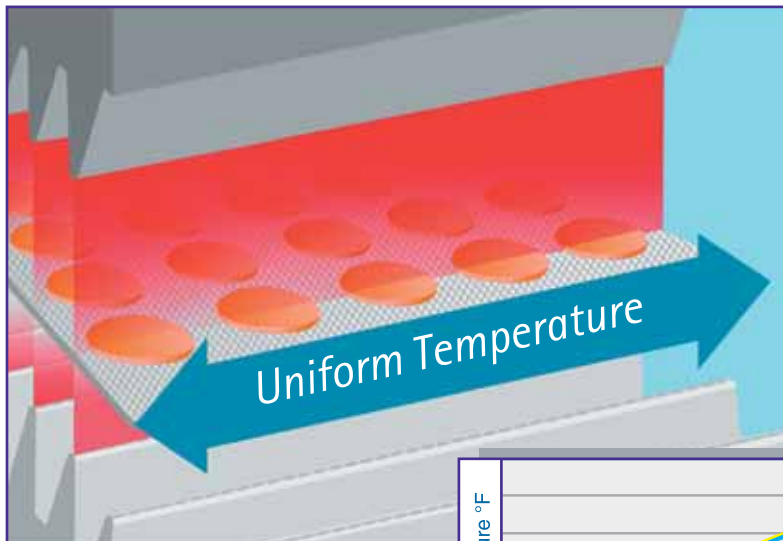
Monitor process trends for selected operation periods to determine optimal processing conditions and efficiency.

Parameter	Units	Status	Actual	Setpoint	Default
Inlet Fan Speed	Hz	ON	65.0	65.0	65.0
Disch. Fan Speed	Hz	ON	90.0	90.0	90.0
Zone 1 Temperature	°F	ON	351.0	350.0	350.0
Zone 2 Temperature	°F	ON	449.0	450.0	450.0
Zone 1 Moisture	%	ON	85.0	85.0	85.0
Zone 2 Moisture	%	ON	60.0	65.0	65.0
Inlet Bot. Fan Speed	Hz	ON	65.0	65.0	65.0
Disch. Bot. Fan Speed	Hz	ON	90.0	90.0	90.0
Nozzle Height	in	ON	2.2	2.2	2.2
Product Dwell Time	min	ON	5.0	5.0	5.0

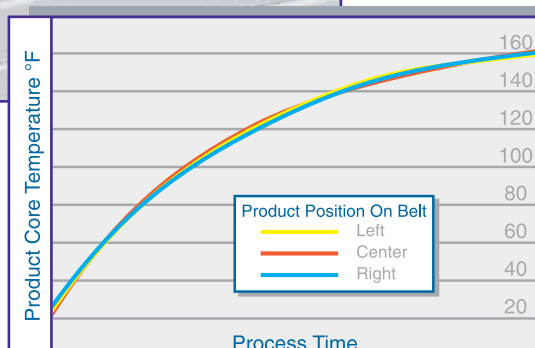
Set points and actual conditions are displayed for all process parameters.



Uniform Cooking



Each product piece is identically cooked regardless of its position in the oven.



High yields and safety

Each piece of product is cooked equally regardless of its location. You never need to overcook some of the product to be assured all of it reaches the target temperature.

Repeatable quality

Precisely control and maintain internal and external product qualities like color, texture, bite and mouthfeel.

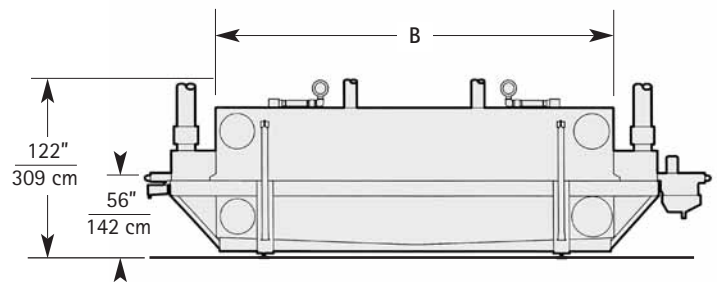
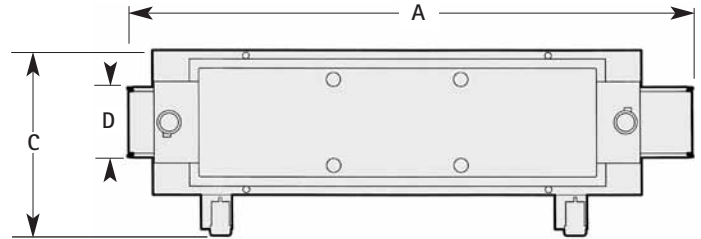
Uniform cooking across the full belt width delivers high product quality and yields.

AirForce® Impingement Oven

Model IMP

Compact modular design requires less floor space.

Combine the AirForce oven with our MPO® convection or microwave ovens, steam chambers, fryers, Rotary Branders or coating applicators to give your line maximum versatility.



Model	A Overall Length	B Cook Length	C Overall Width	D Belt Width
IMP-2406	192"/ 488	72"/183	83"/211	24"/ 61
IMP-2811	257"/ 653	132"/335	88"/224	28"/ 71
IMP-2822	395"/1003	264"/671	88"/224	28"/ 71
IMP-4211	257"/ 653	132"/335	101"/257	42"/107
IMP-4222	395"/1003	264"/671	101"/257	42"/107
IMP-5022	395"/1003	264"/671	109"/277	50"/127

Dimensions are rounded to the nearest inch/centimeter.

U.S. Patents 5,934,178 and 6,146,678. Patents pending worldwide. AirForce® impingement oven is a registered trademark of Heat and Control, Inc.

Constant improvement and engineering innovations mean these specifications may change without notice.

HEAT AND CONTROL®



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