

CALORMATIC®

Multi-Purpose Heat Processor

Lower Cost | Assured Quality | High Performance

Toast • Dry • Roast • Cook • Sterilize • Parch

Thaw • Dehydrate • Bake • Sanitize



Made in USA



Unique Concept in Roasting and Drying:

- No direct contact with flame
- Maximum flexibility with uniform drying
- Provides consistency in product quality and nutrient values
- Low-cost processing and maintenance



CALORMATIC®

Chimney Inspection Window

Plug Chute

- Emergency switch that will shut down the unit should the discharge chute become plugged

Rotary Inlet

- Designed to regulate flow of product into CalorMatic®
- Straight vane option for bulkier products
- VFD speed control standard

Gas Train

- Flow of gas monitored and regulated through control panel

Rotary Outlet

- Designed to regulate flow of product out of CalorMatic® for improved cooling and ease of system integration
- Straight vane option for bulkier products

Inspection Windows

Control Panel

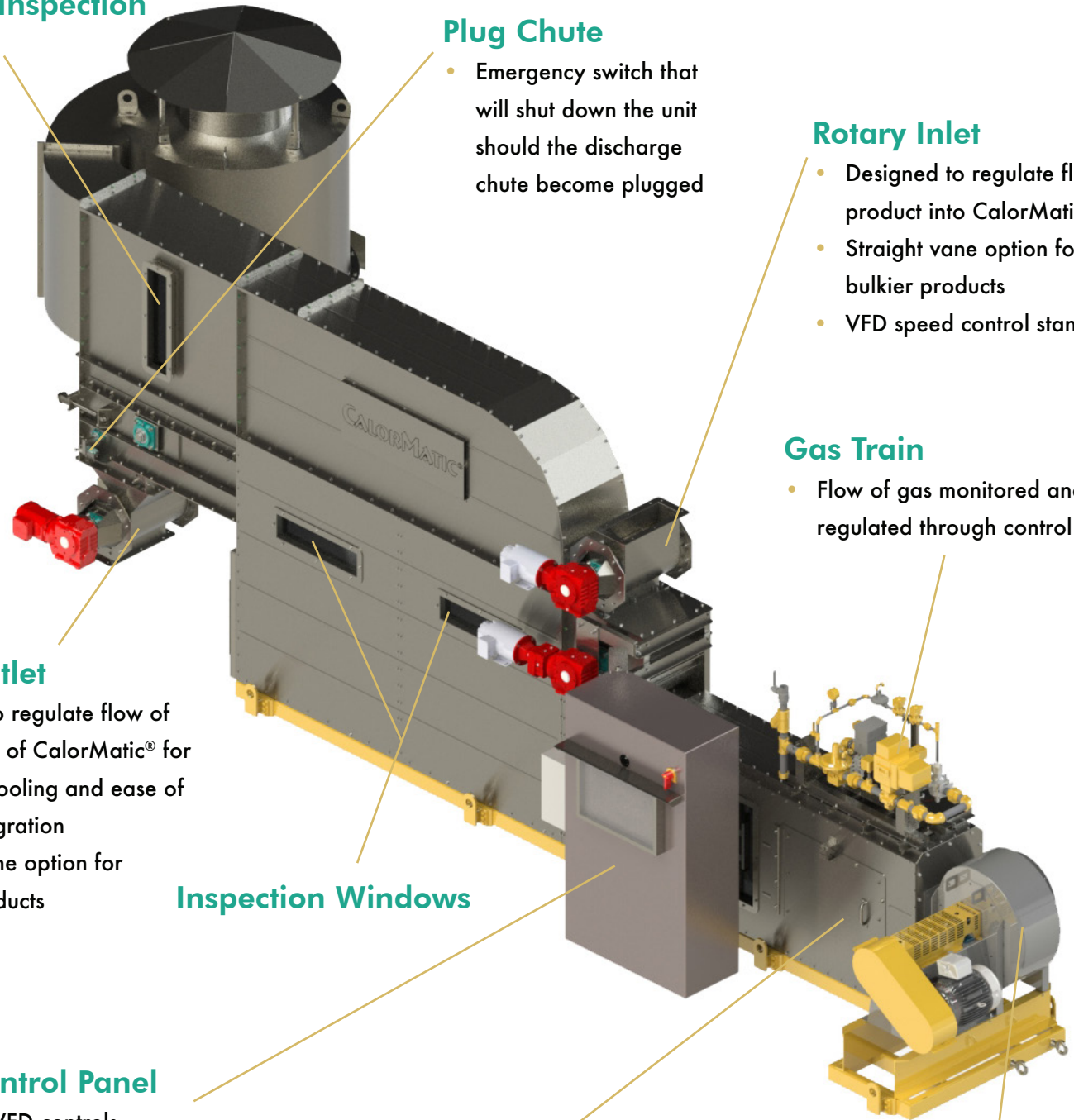
- VFD controls
- Local and remote installation
- AC control for adjustability to speed, air flow and conveyance

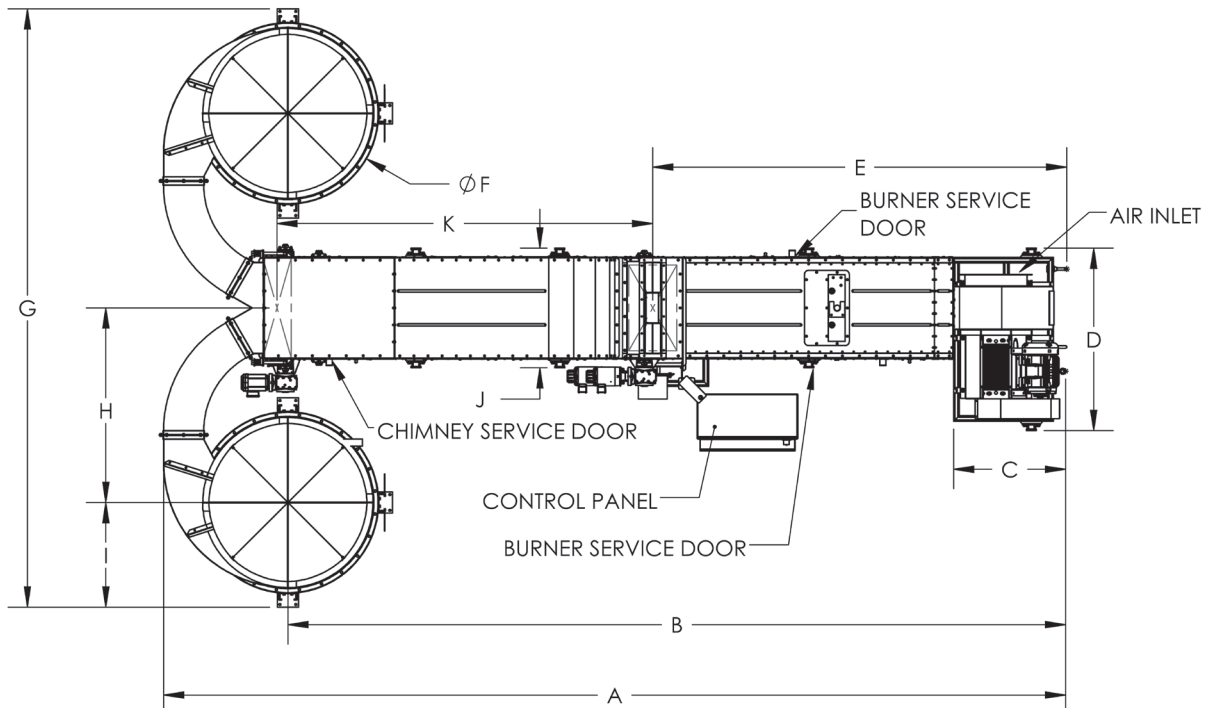
Burner Service Door

- Access to burner and ignition system

Centrifugal Fan

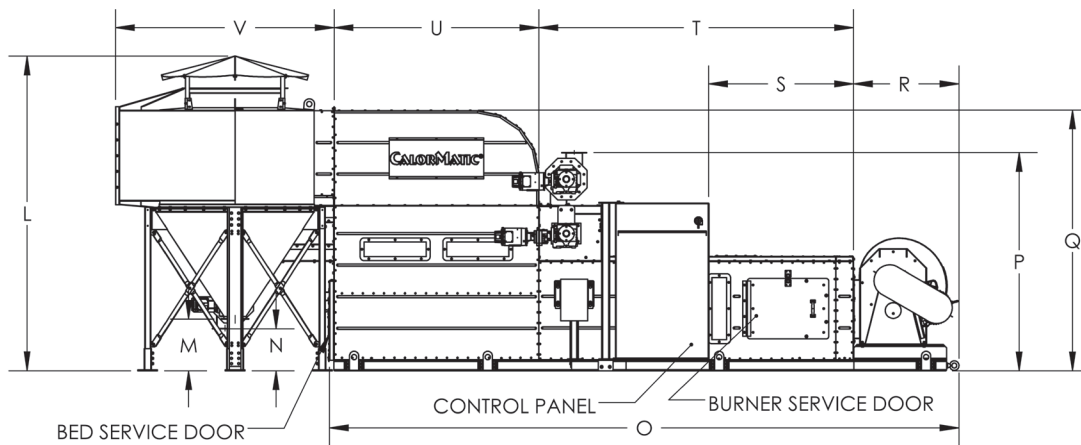
- Used for the fluidization of product
- The transfer of ambient air across the burner, not allowing flame contact to product
- VFD speed control standard





Dimensions

Standard Model	A	B	C	D	E	F	G	H	I	J	K
Cardinal II	25' - 11"	23' - 6"	2' - 7"	4' - 4"	10' - 1"	ø4' - 4"	-	3' - 5"	2' - 7"	2' - 3"	12' - 7"
Blue Jay	29' - 10"	26' - 11"	3' - 1"	4' - 5"	12' - 2"	ø5' - 4"	-	4' - 1"	2' - 7"	2' - 3"	14' - 1"
Hawk	26' - 7"	22' - 11"	3' - 4"	5' - 5"	12' - 2"	ø5' - 4"	17' - 8"	5' - 9"	3' - 1"	3' - 6"	11' - 1"
Eagle I	32' - 11"	28' - 3"	4' - 7"	6' - 2"	14' - 11"	ø6' - 4"	19' - 4"	6' - 1"	3' - 7"	3' - 7"	14' - 1"
Eagle II	35' - 8"	29' - 10"	4' - 10"	6' - 7"	15' - 4"	ø7' - 4"	24' - 10"	8' - 4"	4' - 1"	3' - 7"	15' - 10"
Eagle III	42' - 5"	36' - 9"	5' - 4"	7' - 10"	19' - 1"	ø7' - 8"	25' - 6"	8' - 6"	4' - 3"	3' - 7"	18' - 10"
Eagle IV	47' - 2"	40' - 9"	5' - 4"	7' - 10"	19' - 1"	ø8' - 4"	26' - 2"	8' - 6"	4' - 7"	3' - 7"	23' - 7"



Standard Model	L	M	N	O	P	Q	R	S	T	U	V
Cardinal II	9' - 10"	2' - 1"	1' - 4"	19' - 5"	6' - 11"	8' - 3"	2' - 7"	3' - 3"	8' - 8"	8' - 0"	6' - 8"
Blue Jay	10' - 0"	1' - 8"	1' - 4"	22' - 11"	6' - 11"	8' - 3"	3' - 0"	4' - 10"	10' - 3"	9' - 6"	7' - 1"
Hawk	9' - 11"	1' - 8"	1' - 4"	20' - 0"	6' - 11"	8' - 3"	3' - 4"	4' - 7"	10' - 0"	6' - 6"	6' - 11"
Eagle I	9' - 11"	1' - 4"	0' - 7"	25' - 7"	6' - 11"	8' - 3"	4' - 5"	6' - 3"	11' - 7"	4' - 9"	12' - 1"
Eagle II	10' - 3"	1' - 4"	0' - 6"	27' - 10"	6' - 11"	8' - 3"	4' - 10"	6' - 3"	11' - 8"	6' - 6"	12' - 8"
Eagle III	10' - 3"	1' - 3"	0' - 7"	34' - 7"	6' - 11"	8' - 3"	6' - 9"	8' - 6"	13' - 5"	9' - 6"	12' - 9"
Eagle IV	10' - 3"	1' - 4"	0' - 7"	39' - 4"	6' - 11"	8' - 3"	6' - 9"	8' - 5"	13' - 5"	14' - 3"	12' - 9"

NOTE: M = CYCLONE DISCHARGE HEIGHT N = PRODUCT DISCHARGE HEIGHT E = ϕ OF INLET TO END OF CALORMATIC K = ϕ OF INLET TO ϕ OF OUTLET P = PRODUCT INLET HEIGHT

Choose the Model to Best Suit Your Production Requirements

Sweet Manufacturing Company offers seven CalorMatic[®] models, ranging from 2-18 Tons Per Hour (TPH).

Specifications

Model	Capacity TPH*	Fan Air Flow CFM	Motor HP	Fan RPM	Burner Size MMBTU/HR	Fuel Combustion BTU/HR	Natural Gas FT ³ /HR	Operating Temperature
Cardinal II	2 - 3	5,000	10	3,700	3.0	1,827,590	1,828	Min. 150°F Max. 600°F
Blue Jay	3 - 5	7,500	15	3,650	4.0	2,749,690	2,750	Min. 150°F Max. 600°F
Hawk	5 - 7	9,600	20	2,900	5.0	3,871,501	3,872	Min. 150°F Max. 600°F
Eagle I	7 - 10	18,481	40	2,054	9.5	6,507,591	6,508	Min. 150°F Max. 600°F
Eagle II	10 - 12	22,167	50	1,816	10.5	7,806,851	7,807	Min. 150°F Max. 600°F
Eagle III	12 - 15	27,722	50	1,397	12.0	9,761,491	9,761	Min. 150°F Max. 600°F
Eagle IV	15 - 18	33,259	75	1,552	14.0	11,712,062	11,712	Min. 150°F Max. 600°F

* Capacity based on finished product using clean, whole soybeans 13% incoming moisture at 70°F (21.1°C) ambient air and product temperature when roasting to a 245°F (118°C) finished product. Changes in operating air or product temperature will affect output capacity. Natural gas calculations based on 1000 BTU/FT³, 23165 BTU/LB.

New Control Panel

The new control panel of the CalorMatic[®] now features AC controls for easy integration with remote control rooms, enabling remote access and monitoring. This, combined with the enhanced safety shutdown features, delivers continued automation.

The rotary inlet, outlet, centrifugal fluidizing fan and chain drive feature VFD controls that allow for adjustability for retention time, product flow and temperature adjustment. These new features enable end-users to diversify their machine so they can run a variety of materials and products with easy adjustments to speed, temperature and air flow.



Why Roast/Cook Grains & Soybeans?

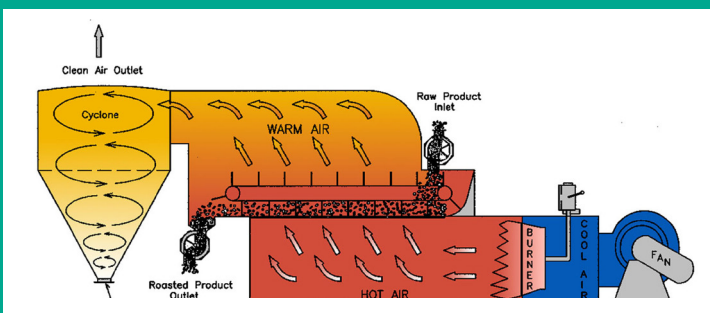
- Reduce mold and bacteria content
- Inactivate antinutritional factors
- Inactivate trypsin inhibitors
- Increase metabolizable energy
- Increase feed efficiency
- Increase palatability
- Increase nutrient availability
- Increase digestibility
- Improve feed aroma and flavor

Handles Full Range of Materials



Unique Concept in Roasting and Drying

CalorMatic® is also the Economical Choice



The CalorMatic® employs a fluidized air bed to dry, roast, toast, bake and sterilize a full range of free-flowing materials. This unique concept eliminates direct contact with flame, so there's no scorching.

It delivers consistent product quality and nutrient values, while also preventing product contamination. It removes fines, while gently handling the product.

- Low capital investment
- Low processing cost – produces more tons-per-hour
- Low maintenance cost
- Low space requirement
- Prime USA galvanized steel



CalorMatic® – A Proven Performer
Worldwide Installations



Eagle IV, New York
Specialty Product



Eagle III, Italy
Soybeans



Hawk, Ohio
Soybeans



Cardinal II, Mexico
Pumpkin Seeds

Other Products Available From Sweet:

Silver-Sweet® Bucket Elevators, Silver Span® Catwalk, Goliath® Towers, Flite-Veyor® Flat Bottom Drag Conveyors, Flite-Veyor® Incline Flat Bottom Drag Conveyors, Flite-Veyor® Round Bottom Drag Conveyors, Formed Channel Belt Conveyors and Quick-Key® Spool Belt Conveyors.



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