

High Volume. Continuous. Optimal Performance.



MARLEN, REAL, SMART,

# RELIABLE CONTINUOUS TWIN PISTON STUFFING AND PUMPING

**Our high volume Marlen Opti Series stuffing and pumping systems** feature twin-piston pumps for the gentlest handling while providing optimal vacuumization for the most superior particle definition and highest product integrity. From whole muscle to sectioned, formed and emulsified meat and poultry products to sliced peaches, diced tomatoes and lobster filled ravioli, our Opti stuffers and pumps can be equipped with a variety of hopper options designed to match application and product requirements.

## BENEFITS / FEATURES

### Superior particle definition and product integrity.

With its product inlet valve measuring 8 9/16" in diameter, the Opti stuffing and pumping system allows product to be diffused across the pump's sheeting valve for the gentlest handling while maximizing vacuumization. This highly engineered design delivers premium whole muscle meats with the least amount of product damage. Producers of products with particulates such as pepperoni, salami and mortadella along with those who manufacturer whole muscle meats rely on our Opti series pumps for best-in-class particle definition and product integrity.

### **Optimal vacuumization.**

Marlen's patented twin-piston and sleeve design allows for maximum vacuumization throughout the system's hopper and pumping chamber. By exposing the product to optimal removal of entrapped air and achieving up to 29" of mercury, better weight control is achieved; shelf life extended, and increased casing savings result through the delivery of denser products.

#### Continuous flow.

Constant pressure and speed is maintained via Marlen's hydraulic powered units which retain the same pressure while stopped as when in motion. The result: a precise metered flow for better weight control at the speeds required for high volume production environments.

### **METHOD OF OPERATION**

The Opti's twin-piston positive displacement pumping design is engineered for maximum versatility. As the piston and sleeve retract, a perfect vacuum is created to facilitate loading of product into the pumping chamber. As product enters the sheeting valve, maximum surface area is exposed. This feature along with auger assist allows the pump to utilize full vacuum in the hopper, resulting in the highest vacuumization possible.

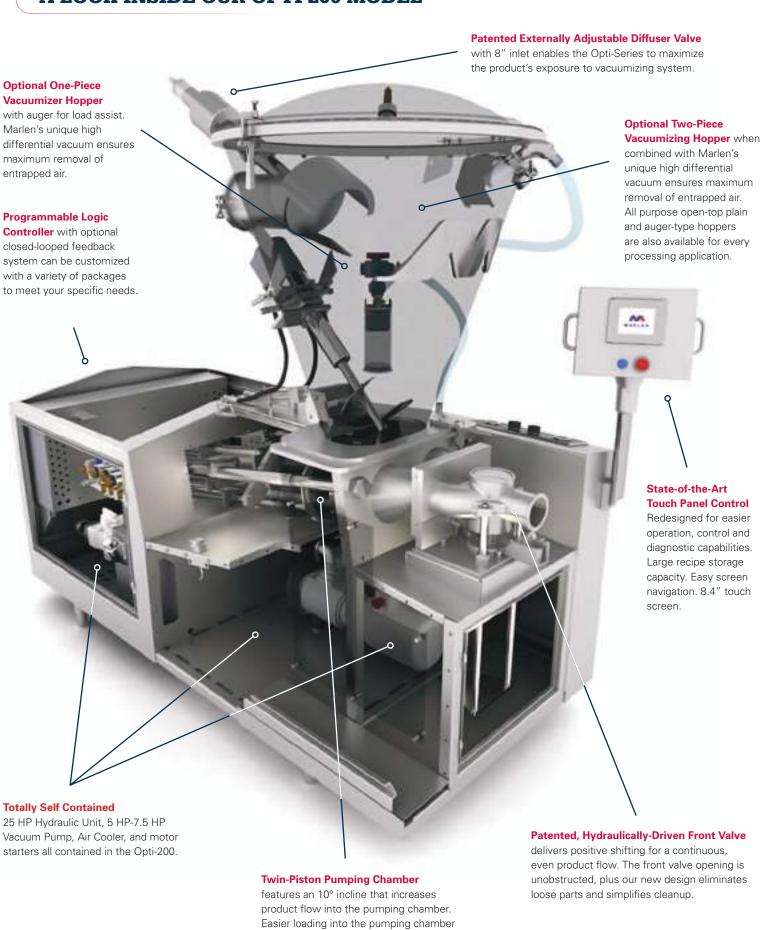
Finally, continuous stuffing and pumping action without pulsation and precise metering allow the Opti to maintain constant pressure and speeds for a continuous product flow.

With pumping capacities up to 34,000 pounds per hour, a variety of hopper options, and a host of auxiliary equipment such as in-line grinders, transfer valves, portioners and depositors, the Opti series features a wide range of models for ultimate versatility and an endless number of applications.



# SYSTEMS DESIGNED TO DELIVER OPTIMAL QUALITY PRODUCTS WH

### A LOOK INSIDE OUR OPTI 200 MODEL



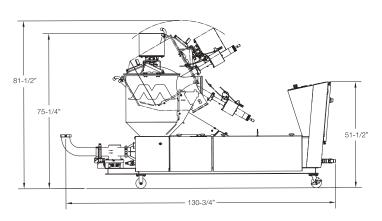
ensures maximum operating efficiencies.

# ILE PROCESSING AT MAXIMUM CAPACITIES.

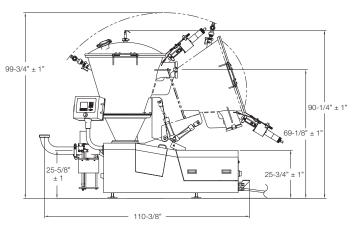
## **MARLEN OPTI SERIES TECHNICAL SPECIFICATIONS**

Model	Piston	Piston	Maximum (wt.)	Maximum	Product	Max Product	Machine
	Diameter	Stroke	Capacity	Volume	Outlet	Pressure	Weight
Opti 100	7-1/8"	14"	10,000 lbs/hr	20.0 gpm	4"	250 psi	2,300 lbs
	181 mm	355 mm	4,536 kg/hr	76 lpm	102 mm	17 BAR	1,043 kg
Opti 140 HP	6-1/2"	10"	12,000 lbs/hr	22.7 gpm	4"	500 psi	3,400 lbs
	166 mm	250 mm	5,443 kg/hr	86 lpm	102 mm	34 BAR	1,542 kg
Opti 140 HS	8-9/16"	10"	20,000 lbs/hr	37.8 gpm	4"	250 psi	3,400 lbs
	217 mm	250 mm	9,071 kg/hr	143 lpm	102 mm	17 BAR	1,542 kg
Opti 200	8-9/16"	14"	20,000 lbs/hr	37.8 gpm	4"	250 psi	4,270 lbs
	217 mm	355 mm	9,071 kg/hr	143 lpm	102 mm	17 BAR	1,937 kg
Opti 280	8-9/16"	14"	28,000 lbs/hr	55 gpm	4"	500 psi	4,000 lbs
	217 mm	355 mm	12,701 kg/hr	208 lpm	102 mm	34 BAR	1,815 kg
Opti 340	8-9/16"	14"	34,000 lbs/hr	66 gpm	4"	250 psi	4,000 lbs
	217 mm	355 mm	15,421 kg/hr	250 lpm	102 mm	17 BAR	1,815 kg

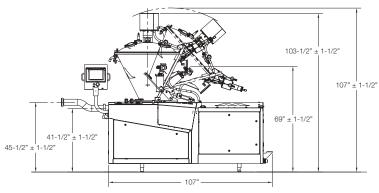
Model	Pump Utilities	Air Requirements	Power Unit Utilities	Cooling Water	Vacuum Pump
Opti 100	110 V 10 Amp (single phase)	3 CFM at 100psi	25 hp, 230/460 V (3 Ph/60Hz 68/34 Amp)	Up to 8 gpm	5 hp, 230/460 V (7.6 Amp)
Opti 140 HP	110 V 10 Amp (single phase)	3 CFM at 100psi	25 HP 230/460 V (3 Ph/60Hz 68/34 Amp)	Up to 8 gpm	5 hp, 230/460 V (7.6 Amp)
Opti 140 HS	110 V 10 Amp (single phase)	3 CFM at 100psi	40 HP 230/460 V (3 Ph/60Hz 104/52 Amp)	Up to 8 gpm	7.5 hp, 230/460 V (11.4 Amp)
Opti 200	460 V 60 Amp (3-ph)	3 CFM at 100psi	Onboard power unit	Up to 8 gpm	5 hp, 230/460 V (7.6 Amp)
Opti 280	110 V 10 Amp (single phase)	3 CFM at 100psi	40 HP 230/460 V (3 Ph/60Hz 104/52 Amp)	Up to 8 gpm	7.5 hp/10 hp, 230/460 V (11.4 Amp)
Opti 340	110 V 10 Amp (single phase)	3 CFM at 100psi	40 HP 230/460 V (3 Ph/60Hz 104/52 Amp)	Up to 8 gpm	7.5 hp/10 hp, 230/460 V (11.4 Amp)



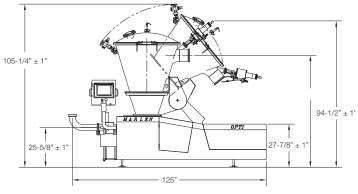
**OPTI 100** 



OPTI 140 HP-HS



OPTI 200

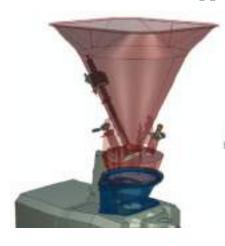


**OPTI 280-340** 

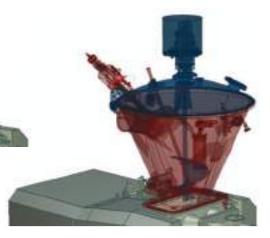
# **HOPPER STYLES**

## **Vacuumizer Combo Hopper**





Flat Plate



One-Piece Load Assist Auger Hopper

**Two-Piece Auger Hopper** 





**AUXILIARY EQUIPMENT** 

## **Volumetric Portioners**

# In-line Grinder





(multi-depositor pictured)



### **High Volume, Continuous Vacuum Stuffing** and Pumping Systems

From twin-piston pumps and stuffing systems to extruders, transducer portioning systems, depositors, forming systems and volumetric portioners, Marlen's stuffing and portioning offering assures value through the highest consistency, accuracy, and product integrity and has long set the standard for quality and performance.

### **About Marlen International**

Recognized as a premium manufacturer of highly engineered food processing equipment and systems, Marlen International designs and builds equipment to process meat, poultry, pet food, fish, vegetables, fruit, bakery goods, confectionaries, snacks, dairy goods and many other products.

Whether it's stuffing, pumping, portioning, size reduction, thermal processing or food handling, our teams of expert engineering, design and technical personnel act as industry consultants and process partners and have been trusted by the world's leading food brands for over 60 years.

Marlen International delivers the optimum customer experience through Marlen Care predictive maintenance - an operational excellence program - and 24/7, 365 days/year factory-direct support. Marlen International is a Duravant Company.

QUALITY, PERFORMANCE, INNOVATION.





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