



Filling Systems


Piston Filling Equipment

Production Pie Systems

Pizza Topping Systems

Heat Sealing Systems

Material Handling Systems



High speed production pie lines that range from high-rim crusts to cheesecake (or crumbshell) crusts, precision filling and sealing of single and multicompart food containers, and pizza creation in either border-free or waterfall applications. Raque Food Systems! Delivering the quality you need today for tomorrow's competition.

Filling Systems

Raque Food Systems makes a variety of filling equipment. From Individually Quick Frozen (I.Q.F.) solids to viscous fluids, Raque Food Systems sets the industry standard in volumetric placement of product.

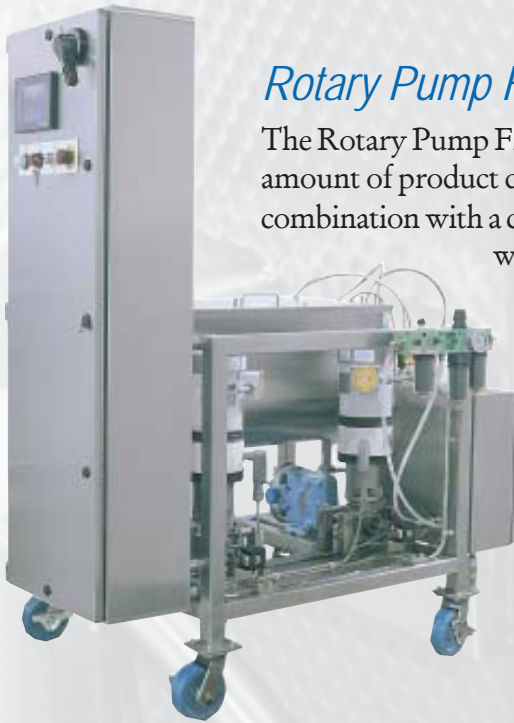
Rotary Plate Fillers

The Rotary Plate Filler, also commonly called the Rotary Vegetable Filler because of its frequent use with Individually Quick Frozen (I.Q.F.) solids, is used to accurately deposit I.Q.F. or similar product into moving (or stationary) conveying lines. Using rotary motion and a specially designed product diverter arm, the system is considered a first-in/first-out (FIFO) process; product placed in the machine first is deposited before product that enters afterward. Features and options available with the Rotary Plate Filler include a fill adjustment range of 0.1 in³ (1.6-cm³) - 37 in³ (606.3-cm³) blowoff air (for products that stick together), portability, and the ability to rapidly add the machine to most systems.



Rotary Pump Fillers

The Rotary Pump Filler is a positive displacement pump used to precisely control the amount of product dispensed to a ready-meal package. Use of the machine in combination with a checkweigher is extremely popular in designing automated makeup weight systems. Based on current package weight in makeup filling applications, the Rotary Pump Filler calculates the amount of product required to meet quality assurance guidelines and, by electronically sensing revolutions of the pump, deposits the necessary makeup weight.



Loop Buckets

Loop Buckets, designed to work in combination with multihead weighers, are used on continuous motion applications to fill dry product into ready-meal packages. Manufactured with a top production speed of 150 containers per minute, Loop Buckets can include such options as weight reject, controls integration, line management, and use of phase variation for timing of the product deposit point.



Piston Filling Equipment

Features:

- *USDA Approved Construction*
- *Clean Without Tools*
- *System Integration*
- *No Container / No Fill*
- *Large Fill Volume Range*

Raque Food Systems' Volumetric Piston Fillers are mainstays of food production facilities across the United States and are rapidly becoming a leader in overseas markets. Designed completely of USDA approved materials, all Raque machines are built to the highest standards.



PF2.5 Piston Fillers

The PF2.5 Piston Filler is a volumetric pump used to dispense *extremely precise* fills into ready-meal packages. The filler uses a programmable logic controller (PLC) based control system to maximize machinery speed, efficiency, and reliability. The PF2.5, or 135°, Piston Filler's two-position rotor travels 135° between pump suction and discharge. The larger rotor travel provides a less torturous product path between the product hopper and product placement. The latest advancement in PF2.5 Piston Filler technology allows touchscreen control over the actual volume pulled from the product hopper during operation. Using a servo-operated product cylinder, operators can now not only access setup, operation, and troubleshooting data but (with the touch of a screen) rapidly change fill weights. Raque piston fillers can incorporate a blender, auger, gravity, aseptic, or jacketed product hopper.



PF2 Piston Fillers

The PF2 (or 90°) Piston Filler uses a pneumatic control system that maintains excellent volumetric precision without requiring the added cost or overhead from the more advanced PF2.5 Piston Filler. The PF2 Piston Filler requires only an air source of 80 psi (5.5 bar) for operation and has a small footprint to maximize the use of valuable production floor space.

Production Pie Systems

Raque Food Systems, Inc. manufactures Production Pie Systems for both meat/fruit and cheesecake/crumbshell pies. Regardless of the pie system designed, Raques' 25 years of experience making pie systems ensure that your line will be fast, effective, and efficient.

Meat & Fruit Pie Systems

Meat and Fruit Pie Systems produce Double Crust Pies (top and bottom crusts) or High-Rim Crust (formed shell). Designed with efficiency in mind, the Double Crust Pie Line reclaims trimmed dough to the infeed of the bottom crust hoppers. Similarly, the High-Rim Crust machines prevents trimming altogether by using 100% of the dough when forming the shell. Raque Meat and Fruit Pie Systems include an entire range of production machinery, including:

- Container Dispensers
- Carrier Conveyors
- Cross Grain Sheeters
- Sheeters
- Forming Heads
- Dockers
- Fillers
- Crimpers
- Egg/Milk Wash Sprayers
- Crumb Dispensers
- Checkweighers
- Metal Detectors
- Freezer/Over Feed Systems



Cheesecake & Crumbshell Pie Systems

Cheesecake & Crumbshell Pie Systems produce pies with a bottom crust (or shell) made from compressed crumbs (such as graham crackers). To achieve the crumbshell crust, an in-time traveling carriage with attached spinning heads is used. The spinning heads lower into the package and shape the crusts without interrupting the continuous motion line. Systems can be designed to allow crust to rise on the sidewall or rest flat in the package. The Cheesecake and Crumbshell Pie Systems also include options like:

- Container Dispensers
- Crumble Dispensers
- Spinning Heads
- Piston Fillers
- Rotary Pocket Fillers
- Carrier Conveyors
- Variety of Container Transfers
- Checkweighers
- Freezer/Oven Feed Systems

Pizza Topping Systems

Raque Food Systems has long served the frozen pizza market. Machines built by Raque Food Systems are capable of handling every aspect of pizza production. Ranging from individual fresh, frozen, french bread, and bagel machines all the way up to complete turnkey pizza lines, Raque Food Systems can handle every stage of the process, including:

- Receiving random pizza shells and orienting them
- Depositing sauces onto the traveling shells in either a border-free or waterfall application
- Depositing cheeses, meats, green peppers, mushrooms, onions, and any other chopped or shredded product in either a border-free or waterfall application
- Collating and positioning shells for delivery to third-party machinery

The best part of all, the line can perform the entire process at speeds of up to 200 shells per minute.

Topping Units

Topping Units deposit products that “top” a pizza shell in either a border-free or waterfall application. The machines are designed to assemble and disassemble without the use of tools and (the combination of stainless steel construction and USDA approved materials common to all Raque machines) will withstand the harshest of sanitation requirements. Excess product that misses the shells during production can even be reclaimed and recycled into the product hopper minimizing costs. Typical products that run in the topping unit include:

- Grated or Shredded Cheeses
- Chopped or Sliced Peppers
- Chopped or Sliced Mushrooms
- Chopped or Sliced Onions
- Chopped or Sliced Pepperoni
- Ground or Crumbled Sausage
- Ground or Crumbled Hamburger

Sauce Units

Raque Food System’s Sauce Units are designed for continuous motion applications and are available in two styles: Border-Free and Waterfall. A Border-Free Sauce Unit works in conjunction with a piston filler. The piston filler deposits a precise amount of sauce in the center of a pizza shell. A sauce spreader is then used to spread sauce around the shell without interrupting the flow of the line. Using a variety of heads, borders (and even the shells themselves) can be rapidly changed over for increased production line flexibility.

The Waterfall Sauce Unit creates a pizza with sauce covering the entire face of the shell. To completely cover the shell, each shell is conveyed under a solid layer of flowing sauce (waterfall). Sauce that misses the shell is reclaimed and recirculated back into the product hopper for reuse. An option is also available for the Waterfall Sauce Unit that will allow automatic refilling of the product hopper when the sauce drops below the required levels.



Heat Sealing Systems

Features:

- *Platen / Drum Sealing Heads*
- *Vacuum/Gas Flush*
- *Film Registration*
- *Die-Cut Knife with Rewind*
- *Adjustments without Interrupting Flow*
- *Heated Knife*
- *Lineshafting for Additional Machinery*

Heat Seal machines seal paperboard, or film to the surface of ready-meal packages. Available in a variety of styles, the machines can be designed to work in stationary, intermittent, and continuous motion applications and can even be designed as small as tabletop sealers. Using a combination of heat, force, and time to create the optimum seal, Raque Heat Seals set the industry pace with speeds that range from 20 containers per minute more than 275.

Board-Lid Heat Seals

Board-Lid Heat Seals are used to seal a paperboard lid to the surface of plastic or paperboard packages. The heat seals use a lid dispenser to pull paperboard lids from a magazine stack and place them over the packages. The Board-Lid Heat Seal then seals the lid to the package surface.



Using the latest advances in technology, heat seals can incorporate a completely customized operator interface terminal (or touchscreen) into the control system. Touchscreens provide increased machinery security, setup options, and replace many of the traditionally hardwired controls.

Because space on the production line space is at an all-time premium, Raque can build each machine to accommodate more than one container size (or in some cases, more than one type of sealing). Using rapid changeover platens and carriers, production lines can be changed over to run other product in short periods of time.

The Board-Lid Heat Seal offers a one-step seal and packaging process, which reduces the amount of package material and ultimately reduces waste.

New Technology

Intermittent Motion Heat Seals States. Already highly successful Intermittent Motion Heat Seal p Food Systems at a smaller cost containers per minute, the machine designed to combine a sealing platform. The machine offers the continuous motion machines.

Film Heat Seals

Film Heat Seal machines are used to seal plastic film to the surface of ready-meal packages. Designed to pull the film from special mandrels, the film is guided over the tops of traveling packages, sealed, and, finally, cut. The cutting knife itself has several options available, including die-cut, straight-cut and rotary drum cutting applications.

The Raque Food Systems' Film Heat Seal can integrate into an existing line or serve as the integral controls component to a new production line. Features can be added to the machine that extend mechanical power and communication signals to remote areas. By extending mechanical power and by sharing line information with other machinery, Raque Food Systems can effectively integrate line management to make your production runs a smooth and efficient process.



Technology

are fast becoming popular in the United States. In the European markets, the machine provides the quality you expect from Raque Food Systems. With a maximum production rate of 60 packages per minute, the machine is highly configurable and can even be adapted for a crimping operation on a single production line. It offers the same features and options found of the larger



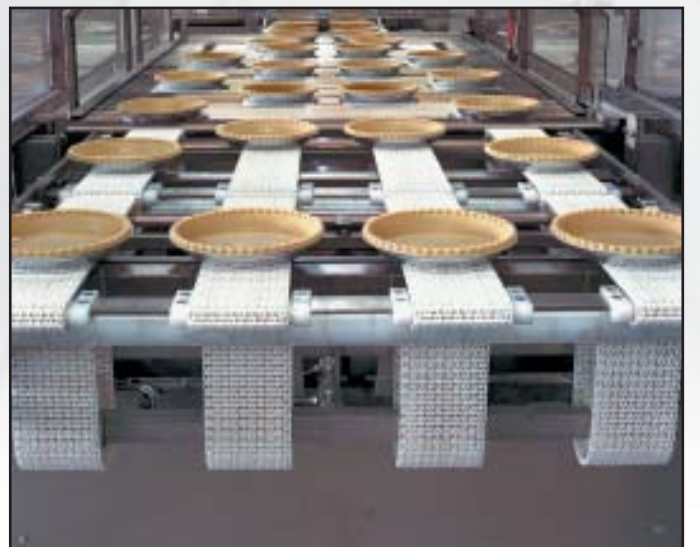
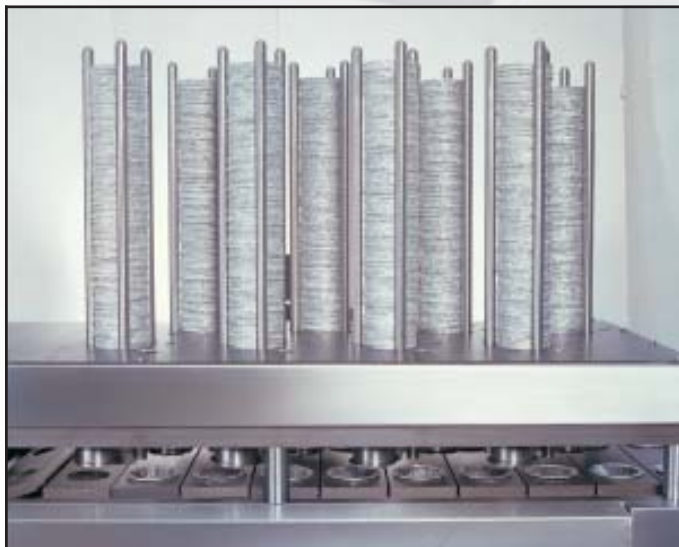
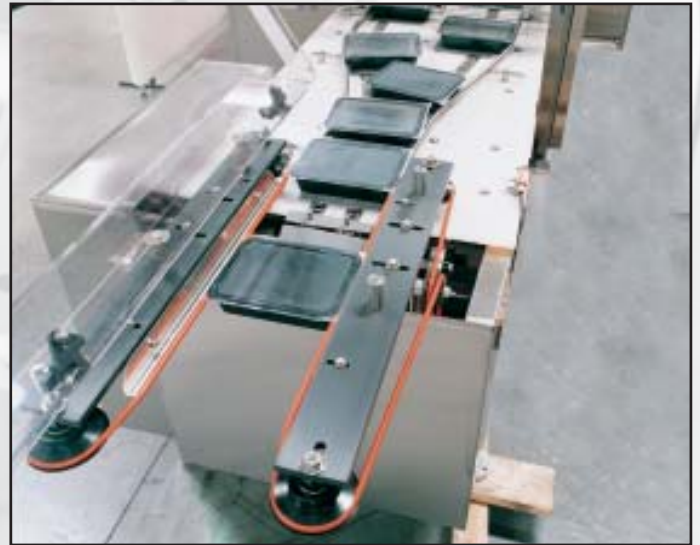
Material Handling Systems

Features:

- *USDA Approved Construction*
- *Custom Designs*
- *System Integration*
- *Line Management*
- *Unified Drive Train*
- *Redundancy in Control Logic*
- *Adjustments without Interrupting Flow*

With our expertise in the design and manufacturing of packaging machinery, Raque combines a knowledge of the industry with the unique ability to customize any system to meet your needs. Whether it's a space constraint or a completely new material handling application, contact Raque! Our machines provide USDA approved construction, durability, and the backing of Raque Food Systems.

Material handling is a term used for a system of conveyors, transfers, channelizers, and indexers designed to move product from one point to the next. All Raque Material Handling Systems can be incorporated into any of our (or someone else's) machinery to form fully functional turnkey systems that handle every stage of you ready meal, pizza, or packaging concerns.





Raque Food Systems



Founded in 1975 with the goal of providing top quality packaging machinery to the Frozen-Food Industry, Raque Food Systems has grown into a world-class manufacturer of industrial food-plant machinery. Raque manufactures:

- Turnkey material-handling production lines for preformed packages that come complete with *touchscreen-based controls, centralized line management, multitiered security, and statistical analysis.*
- Entire pizza systems for border-free or waterfall applications.
- State-of-the-art heat seal machinery with speeds from 20 to 275 Units per Minute.
- Extremely accurate filling equipment for solids, viscous fluids, and non-viscous fluids.
- Fully automated Production Pie Systems in either double crust, high-rim, or cheesecake pie crusts.

Raque Food Systems has the ability to customize and design almost any machine to fit your needs. Today Raque Food Systems operates with the same management and with the same dedication to the sectors that gave us our start. With 30 industrial food-plant machinery patents in 6 different nations and independent sales offices in Louisville, Kentucky (U.S.A.) and in Crowthorne, Berkshire (U.K.), Raque Food Systems, Inc. is truly a world-class manufacturer. Although we ship machinery to companies all around world, we have not forgotten our roots. The majority of our sales still come from repeat customers—customers who have purchased machinery from us, customers who have experienced firsthand the post-sale service we provide, and customers who look to Raque as the industry standard. Give us a call and find out where we can help you.



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