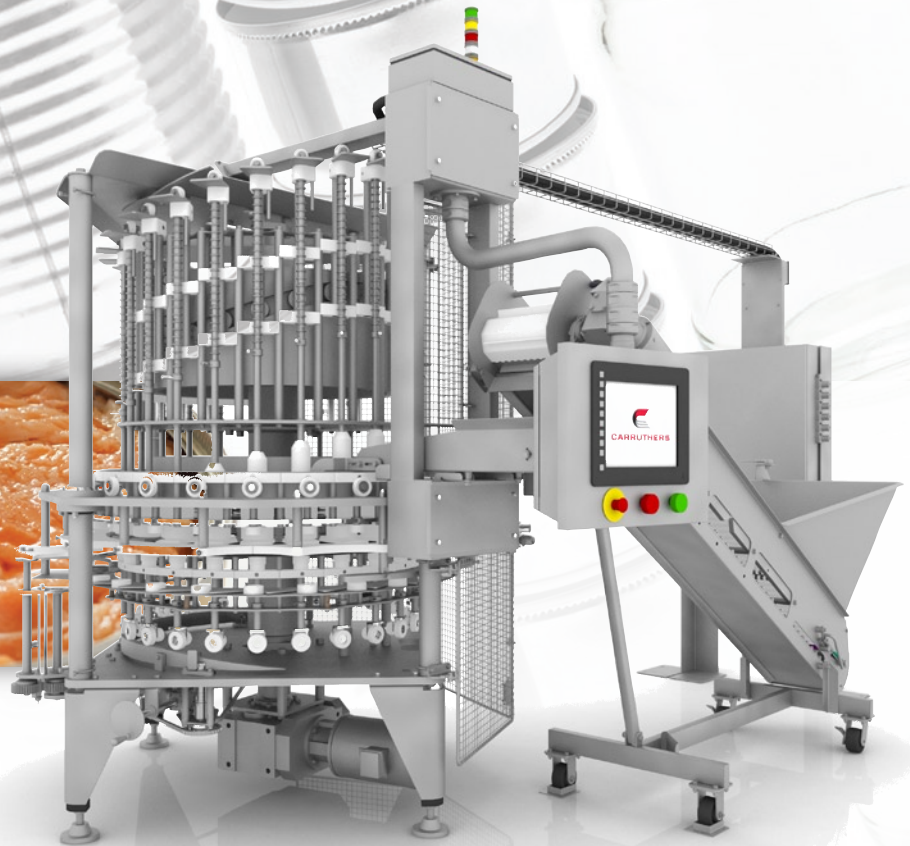


# HIGH-SPEED VOLUMETRIC FILLERS



12/20/24-PAK Models

**Accurate,  
Gentle, and  
Versatile Filling**



**CARRUTHERS**

# CARRUTHERS VOLUMETRIC FILLING TECHNOLOGY

**Carruthers' high-speed rotary filling machines** use innovative volumetric filling technology to solve hard-to-fill product problems. Our 12/20/24-PAK models are designed to fill non-liquid solids such as meat, poultry, seafood, rice, pasta, vegetables and more.

Capable of filling cans, jars, and cups, our high-speed PAK fillers reach speeds up to 600 cans per minute with fill weights up to 1-lb. per portion. Featuring 12, 20 or 24 single fill stations respectively, Carruthers fillers accurately portion product at very high volumes – products that are often referred to as “hand fill only”.

## BENEFITS / FEATURES

### Maximizes product yields and minimizes waste.

- Target fill sonic sensor assures fill weight accuracy ( $\pm 2\%$ ) is achieved within each fill station
- Bowl-fill process minimizes fines and reduces product damage due to more efficient processing
- Accurate product placement into containers as a result of tightly formed portions
- Non-stick tamper heads assure product is accurately deposited/filled

### Enables versatile, flexible filling.

- Quick and easy ‘on the fly’ adjustments to fill weights
- Designed to enable indexing between containers for labeling, weighing, and rejects
- Allows for connection with product infeed systems
- Models are easily adaptable for future applications

### Reduces maintenance and downtime.

- Simplified design for ease of maintenance and service due to less complex parts
- Direct drive results in less maintenance and reduced downtime (e.g. no chains and sprockets)

### Features easier cleanability and superior hygiene.

- Few parts and less intricate parts (e.g. fewer sharp edges and oddly shaped features) enables easier cleaning and improved hygiene

### Equipped with easy to use controls.

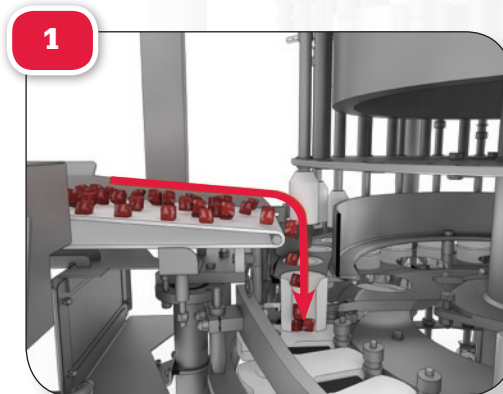
- Operator interface is equipped with a user-friendly color touch screen equipped with troubleshooting, diagnostics and service data.

### Designed for safer filling.

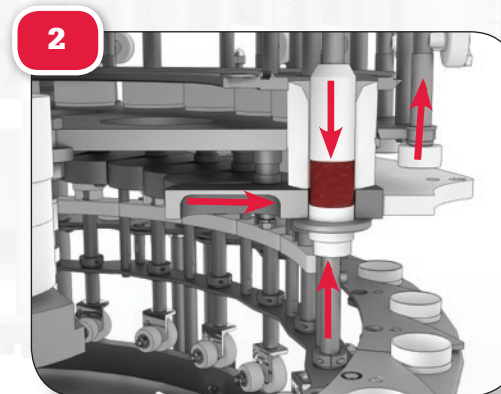
- Interlock guarding system to protect operators from hazardous motion. Meets highest safety ratings and standards.

# Accurate, Gentle, and Versatile Filling

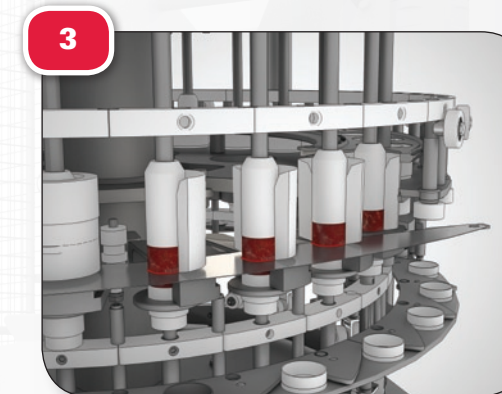
## METHOD OF OPERATION



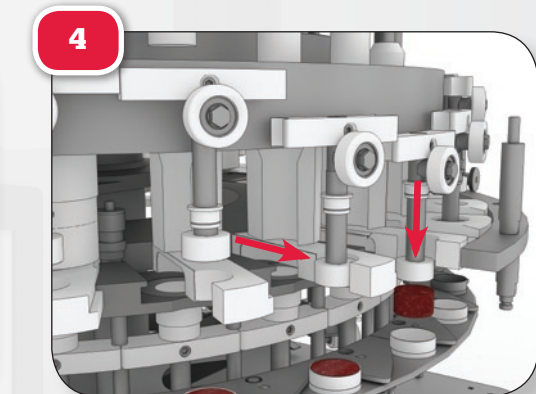
Product feeds into the fill basin. The pockets are shuttled out and block product from falling into the pocket holes. The lower plungers are down and the upper plungers are up in position.



The pockets shuttle in and product is compressed to form the set volume and density. The lower plungers extend up to a height set by the operator through an adjustment to the lower plunger cam position while the upper plungers extend down in position.



A stationary knife cuts the portion as the machine rotates the end of the compression zone past the knife's edge.



Lower and upper plungers retract while the pocket shuttles out to the tamping orbit. The tampers push product out of the pocket into the container.



## TECHNICAL SPECIFICATIONS:

FEATURE	24-PAK	20-PAK	12-PAK
<b>Maximum Container Size</b>	307 diameter can size	404 diameter can size	404 diameter can size
<b>Electrical requirements</b>	208/230 VAC; 380/460 VAC ± 10%, 3-Phase, 15 KVA 50/60 Hz	208/230 VAC; 380/460 VAC ± 10%, 3-Phase, 15 KVA 50/60 Hz	208/230 VAC; 380/460 VAC ± 10%, 3-Phase, 15 KVA 50/60 Hz
<b>Electric Motor</b>	3-hp, 3-ph	3-hp, 3-ph	3-hp, 3-ph
<b>Controls</b>	PLC Touch Screen	PLC Touch Screen	PLC Touch Screen

## CAPACITIES:

MODEL	QTY FILL STATIONS	CANS PER MINUTE	MAXIMUM PORTION DIAMETER	MAXIMUM PORTION HEIGHT	MAXIMUM PORTION WEIGHT
12-PAK	12	300	3.625 in. (92.07 mm)	2.375 in. (60.3 mm)	1 lb (.45 kg)
20-PAK	20	500	3.625 in. (92.07 mm)	2.375 in. (60.3 mm)	1 lb (.45 kg)
24-PAK	24	600	3.125 in. (79.37 mm)	2.375 in. (60.3 mm)	3/4 lb (.34 kg)



**CARRUTHERS**



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