

# *MD113 Fill-O-Matic Donut Depositor*



***For automatic production of filled cake donuts.***

The Moline MD113 Fill-O-Matic cake donut depositor is designed to continuously and uniformly cut, fill and deposit cake donuts into a continuous fryer. The exclusive Moline donut pressure cutting system maintains accurate control of product weight, size and filling while assuring a uniform and consistent product. The cutting action is synchronized with fryer flight speed so that each row of product falls accurately into the fryer flight pockets.

Dough is mixed and placed in the depositor hopper. Rotors, turning inside each of the continuous feed housings, along

with air pressure from the air chambers, forces the dough down into the cutters for depositing. Up to two filling pumps provide filling to the manifolds and filling valves. A ring of filling is automatically pumped into the product via the filling valves as the product is extruded from the cutter.

Once the desired settings are achieved, the operator need only provide adequate levels of both dough and filling -- the depositor does the rest, eliminating the labor-intensive process that filled product can require.



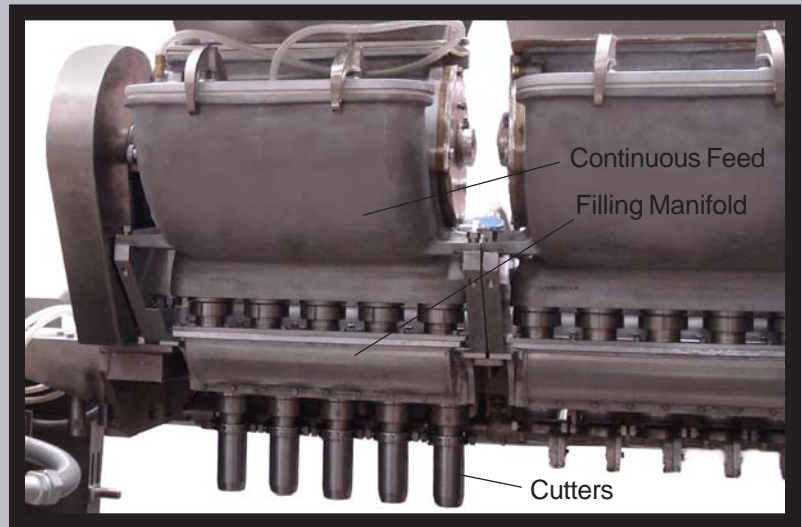
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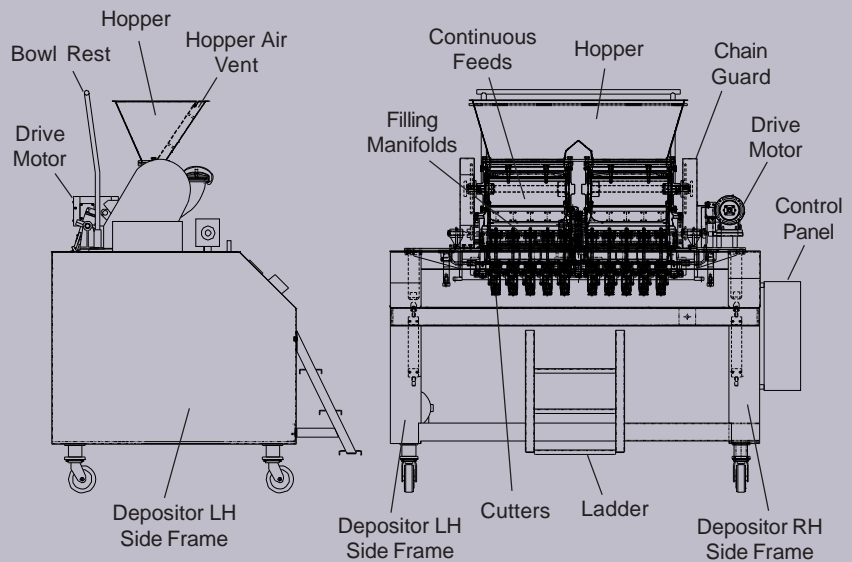
# Depositor Features

## Features

- Mounted on casters for portability, the depositor easily rolls into position over the fryer flight pockets for operation.
- Constructed of heavy-gauge stainless steel and aluminum. Precision machined components.
- Positive alignment of cutter head and fryer flights is achieved with adjustable locating pins, providing fast and efficient depositor positioning at the fryer.
- The large capacity dough hopper with air vent provides smooth dough travel.
- Pressurized continuous feeds assure instant, precise control of product weight, symmetry and consistency. Rotors, inside the continuous feeds are driven by a drive motor, drive chains, sprockets and shafts.
- The filling system includes filling manifolds with air-actuated valves. Many different filling flavors can be used to create a wide variety of products.
- Two filling pumps continuously provide filling to the two filling manifolds from customer-supplied vats.
- The hydraulic system smoothly raises and lowers the entire upper assembly to the desired height over the fryer.



Continuous Feeds, Filling Manifolds and Cutters



## Technical Specifications

### **Pneumatic Requirements:**

- 100 psi @ 15 cfm (6.9 bar @ 7.1 liters/second)

### **Electrical Specifications:**

- 460 Volt, 60 Hertz, 3 Phase. Other voltages available.
- Water resistant control panels and interface.
- UL and CE certifications optional.

### **Drive System:**

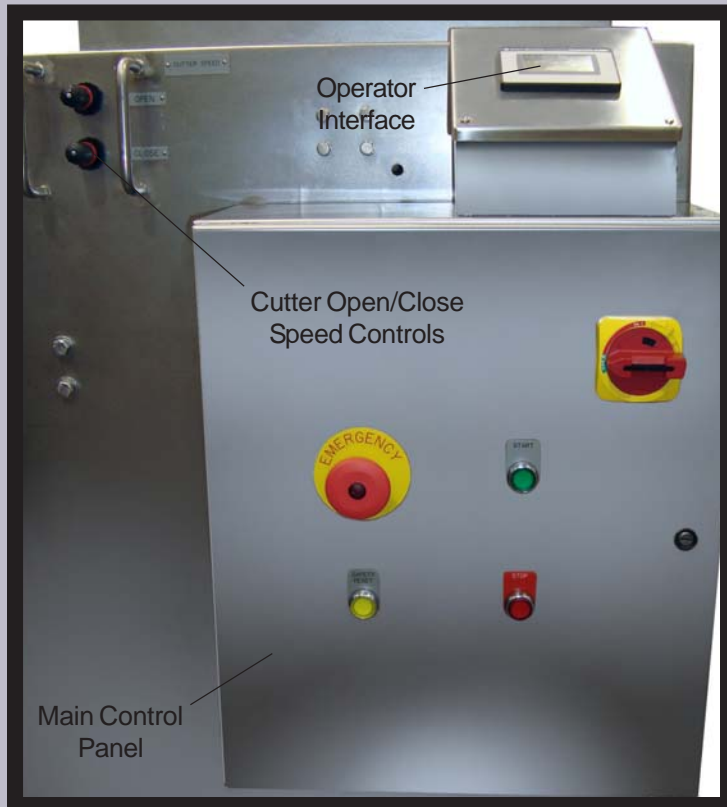
- 1/3 hp, 1725 rpm drive (for rotor actuation).
- Chain driven with a series of sprockets and shafts.

# Depositor Functions

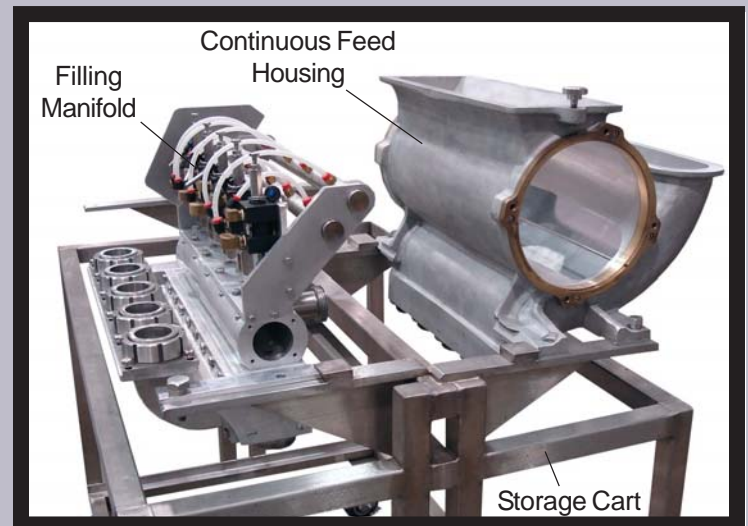
Variable control of product size and filling specification is built into every Moline Fill-O-Matic Depositor allowing the operator to maintain product uniformity and quality under varying production conditions. To control both filling application and product size, few control procedures are necessary. Once optimum settings have been reached, only dough and filling supply must be maintained.

The depositor eliminates the labor-intensive process that filled product can require. The cutting action itself is electronically synchronized with fryer operation. Changes in dough consistency or error in dough handling can be offset by adjusting the cutter action during operation. In-process timing eliminates misshapen product and production delays.

The control panel also contains the electrical components necessary to operate the depositor. An electrical disconnect provides lockout capability for the machine.



All machine control functions are easily accessed from the depositor control panel (see photo above) and provide precise operation and efficient control. The easy-to-use operator interface provides touch-screen operation. Emergency stops are located in two locations on the depositor for emergency shutdowns.



Storage Cart for Continuous Feeds and Filling Manifolds

A portable storage cart is provided for use during sanitation, assembly and disassembly. Continuous feeds and filling manifolds are mounted to the cart for easy access during cleaning and other processes (see photo above).



***“Setting the standard for dependable performance and economy of operation. Custom-engineered to provide the flexibility and product variety that the industrial baking market demands.”***

# Cutter Assemblies

Moline cutters are precision-engineered and manufactured to high tolerances to provide concise and efficient production. Cutter assemblies are stainless steel and consist of a sleeve, nozzle, filling valve and cutting disc. The depositor can be built to accommodate 8 or 10 cutters.

During operation, the sleeve slides up and down over the nozzle and cutting disc to cut batter into product with each cycle of the depositor. Filling is deposited via the filling valve and stem as the batter is extruded from the cutter. Cutter assemblies are in matched sets and can be quickly disassembled for sanitation.

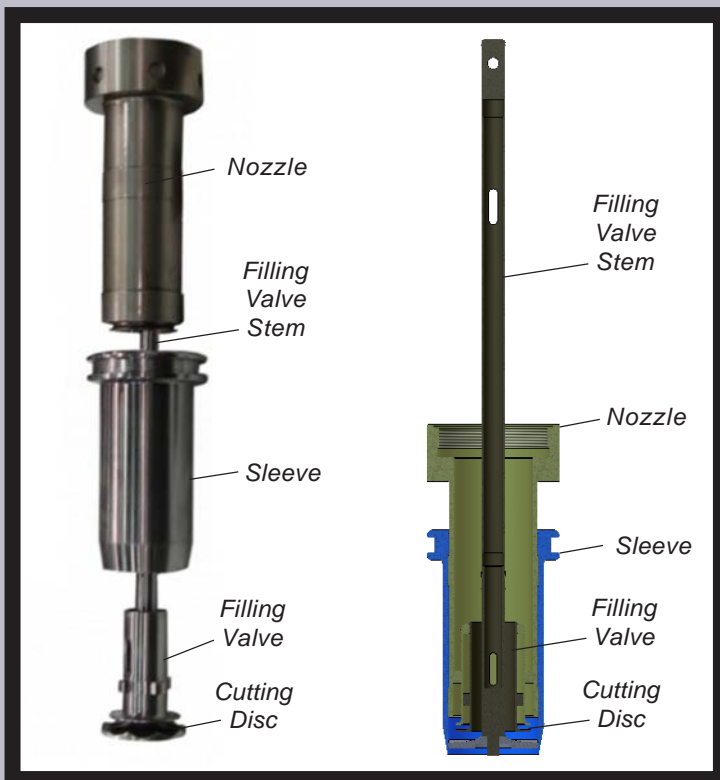


*Cutters in Production*

## Fill-O-Matic Cutter Sizes Available

<i>Product Description</i>	<i>Cutter Dia.</i>
Ring Donuts:	1-1/4" 1-1/2" 1-3/4" 1-7/8"
Large Ring Donuts:	2-3/16"
Ball (cutting 4 balls each)	1-7/8"

The cutters are precision machined in matched sets and held to high tolerances. They must be handled carefully to prevent damage. To facilitate cleaning, maintain matched cutter sets and to prevent damage when not in use, a cutter storage cart is provided. The cart contains individual holes for each cutter component and trays for cleaning tools and other items.



*Cutter Components (disassembled and assembled)*



*Cutter Storage Cart*



## Moline MD113 Fill-O-Matic Depositor