

MD81 Mobile Cake Donut Depositor



For automatic pressure cutting of cake donuts.

The exclusive Moline donut pressure cutting system maintains accurate control of product weight and size while assuring uniform and consistent product.

The Moline MD81 Mobile Cake Donut Depositor is designed to continuously and uniformly cut and drop cake donut dough into a fryer kettle. The depositor consists of five major assemblies or systems: the dough hopper and continuous feeds, the air/dough extrusion system, the air cutter actuation system, the hydraulic lifting system, and the electrical control system.

Dough is mixed and placed in the depositor hopper. A rotor, turning inside each of the continuous feeds, carries the dough to an air chamber. From the chamber the dough is forced into the cutter nozzles by air pressure. The cutting action is synchronized with fryer speed so that each row of cuts falls accurately onto the fryer's moving drop plate.

- ***Provides optimum control of product size and weight.***
- ***Quick product change-over for variety production.***
- ***Available with 6 to 18 cutters in sizes from 1-1/8" to 2-3/16" diameter.***



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MD81 Mobile

Cake Donut Depositor

Built-In Variable Controls

The size of the donut is regulated by the amount of air pressure in the housing chamber, the size of the cutter, the dwell time at the opening and closing of the cutter and cutter speed. Variable control of these actions is built into every Moline MD81 Depositor allowing the operator to maintain product uniformity and quality under varying production conditions.

The cutting action itself is electronically synchronized with fryer operation via the fryer operator interface.

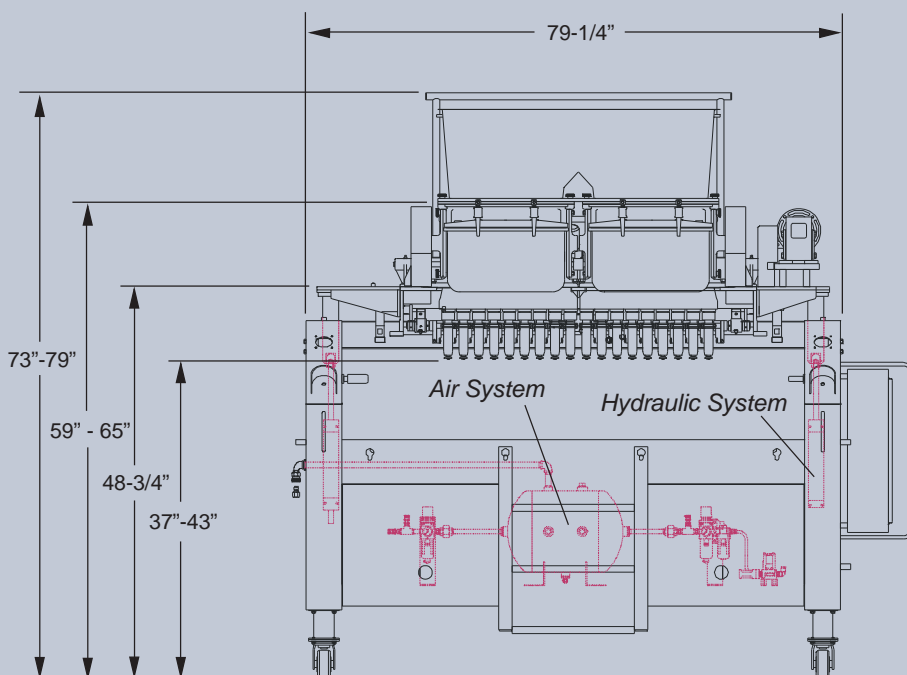
Changes in dough consistency or error in dough handling can be offset by adjusting the cutter action during operation.

In-process timing eliminates misshapen product and production delays.

All machine functions are easily accessed from the depositor control panel and from the fryer operator interface.

The operator controls the size of the donut by regulating only two functions while the cutters are in operation:

- 1) Dwell time of cutter (amount of time cutter is open).
- 2) Opening and closing speed of cutter (air pressure controlled).



MD81 Features

- Quick product change-over for variety production.
- Complete disassembly for cleaning without tools.
- Safety treads, sturdy stainless steel frame.
- Hydraulic system to raise and lower complete feed support assembly.
- Positive alignment to fryer of cutter head through precision locating pins.
- Stainless steel and aluminum construction.
- Continuous feeds assure instant, precise control of product weight and symmetry.
- Rolls into position over fryer and is ready for operation in minutes.

Cake Donut Cutter Assemblies

Moline cake donut 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 and cutting disc. 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. Cutter assemblies are in matched sets and can be quickly disassembled for sanitation.



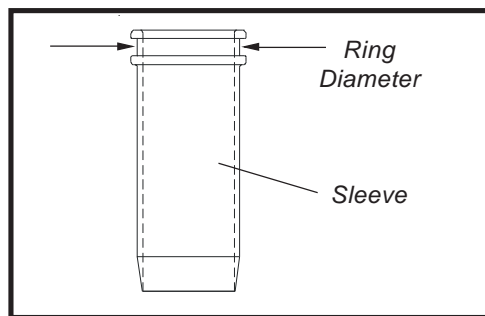
Cake Donut Cutters Mounted in the Depositor

Three cutter styles are available: Standard, Conversion and Super-conversion. Each style refers to a different range of diameters. Standard cutters are available in diameters from 1-1/4" to 2-3/16". Conversion cutters are available in diameters from 1-1/8" to 1-7/8". Super-conversion cutters are available in diameters of 1-1/8", 1-1/4" and 1-3/8".

To determine which cutter style an existing cutter is, measure the ring diameter of the cutter:

Standard Ring Diameter	2-7/16"
Conversion Ring Diameter	2-1/8"
Super-Conversion Ring Diameter	1-3/8"

Plain donuts and old fashioned donuts (old fashioned



Ring Diameter on Cutter Sleeve

donuts raise higher and have a crack around the top of the donut) can be produced using cutters with plain discs for a smooth, circular center or using cutters with fluted discs for a star-shaped center.

Swirl-shaped cake donuts can be extruded with standard or conversion cutters. They are available in three sizes: 1-3/8", 1-1/2" and 1-5/8" diameter.



Cutters and Components

Weight Per Dozen Per Cutter	
Cutter Size	Weight Per Dozen (oz.)
1-1/4"	5 - 6
1-3/8"	5 - 8
1-1/2"	6 - 9
1-5/8"	8 - 10
1-3/4"	10 - 15
1-7/8"	14 - 17
2"	16 - 20
2-1/8"	19 - 21
2-3/16"	20 - 26

The weights given are recommended fried donut weights. Product and packaging requirements may cause them to vary slightly.



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