



The DonutKing provides maximum efficiency and flexibility in producing a complete line of cake donuts with one machine.

Industrial design, washdown duty and stainless steel construction equal long life, low maintenance and easy cleanup for high volume cake donut production.



The Moline DonutKing Depositor is designed to continuously and uniformly cut and drop cake donut batter into a fryer kettle. The depositor consists of the following assemblies and systems: the hopper, the cutter head (and plunger) drive system, the bridge lifting system, the pneumatic system, and the electrical control system. Product size is easy to regulate by turning the cutter head adjustment knob. Batter is placed in the hopper and forced, by gravity, toward the plungers. As the batter moves down, an electrically signaled mechanical drive system opens and closes the plungers, "cutting" the batter into a row of product in the fryer flight pocket. The DonutKing is electronically synchronized with the fryer so that each cut falls into a flight pocket and is recorded on the fryer control panel.



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Depositor Features

Operation:

- Rolls into position over the fryer, is easily aligned with precision locating pins and is ready for operation in minutes.
- The "dual cam" drive design provides reliable and durable operation for high volume production.
- Maximize production rates by selecting the optimum cutting plate for your fryer (see diagrams on page 4).
- Vary product quantity as desired with a wide range of forming cylinders and plungers.
- The new cutter head design (with individual cutter head clutches) allows only the affected head to disengage if a jam occurs -- production can continue until the remaining batter is gone, thus eliminating inefficient shutdowns.
- Utilities: 208,240,380,460 volt, 50 60 hertz, 1.2 kw. Air supply: 60 PSI (4 BAR)

Construction:

- Severe duty construction with TY-304 stainless steel frame and cast aluminum cutter heads.
- Stainless steel user-friendly control panel.

Sanitation:

- Washdown duty components.
- Quick and easy disassembly for sanitation.



Product weight can be easily controlled during operation by adjusting the cutter head adjustment knob.



Stainless steel control panel with user-friendly controls for easy operator access.

Cutting System

The DonutKing cutting system consists of two parts: the forming cylinder and the plunger. When operating, the plunger slides up and down through the forming cylinder, cutting batter into product with each plunger cycle. Cutter assemblies are stainless steel and consist of a plunger, a forming cylinder and a cylinder clamp (each component is sold separately). The depositor must have a compatible cylinder plate (also sold separately) for the type of cutter to be used.

Plunger/forming cylinder combinations include: plain, star, French cruller, mini donut, ball, bar/stick, kringle, old fashioned and others. A plain donut cutter is shown at right.



Cutter assemblies are easy to remove from the depositor and can be quickly disassembled for sanitation.



DonutKing Depositor

Cutter / Donut Size Table											
Plunger/ Cylinder	* Appro Wt./F		* Approx Wt./Pi		Approx. Fried Size O.D.						
Dia. (d)	ounces	grams	ounces	grams	inches	mm					
7/8"	.25	7	.32	9	1	25					
1"	.38	11	.48	14	1-1/4	32					
1-1/8"	.50	14	.62	18	1-3/8	35					
1-1/4"	.65	18	.80	23	1-1/2	38					
1-3/8"	.80	23	1.00	28	1-5/8	41					
1-1/2"	.95	27	1.18	33	1-7/8	48					
1-5/8"	1.10	31	1.38	39	2-1/4	57					
1-3/4"	1.25	35	1.56	44	2-5/8	67					
1-7/8"	1.50	43	1.88	53	3	76					
2"	1.75	50	2.18	62	3-3/8	86					
2-1/8"	2.00	57	2.50	70	3-3/4	95					
2-1/4"	2.25	64	2.80	79	4-1/8	105					

* Weight range is approximately -5% for donuts with Star Plungers and +5% for donuts with Plain Plungers.



The new cutter head design (with cam follower bearing) is more efficient, more durable and promotes longer component life.



5-Step Cutting Principle







3) Charge Cylinder With Batter



4) Form Donut



5) Cut and Deposit Donut



Due to the Moline policy of continuous improvement, specification are subject to change without notice.



DonutKing Depositor

Plunger Styles and Sizes





Plunger Sty	Plain			111.	Star	Ð	French			Mini		
Depositor Configuration						r Plun Max.					reme	n ts Assy.
Belshaw MD, MDD Moline DonutKing MC/MS and Belshaw MS, MSPF	3.75 & 1.88 & 4.00 & 3.20 & 2.67 & 2.00 &	7/8 7/8 7/8 7/8 7/8 7/8 7/8	2-1/4 1 2-1/4 1-7/8 1-1/2 1-1/8	A C A A B C	7/8 7/8 7/8 7/8 7/8 7/8 7/8	2-1/4 1 2-1/4 1-7/8 1-1/2 1-1/8	A C A A B C	1-1/8 1-1/8 1-1/8		A A A	Use Plain or Star Plungers in 7/8" or 1" diameter.	C

Plunger Style		Ball/Hole			Bar/Stick			Krinkle			Old Fashioned		
Depositor Configuration		Sizes Available for Plunger Dia. (d) in 1/8" Increments											
		Min.	Max.	Assy.	Min.	Max.	Assy.	Min.	Max.	Assy	Min.	Max.	Assy.
Belshaw MD, MDD	3.75	1-1/2	2-1/4 N/A	А	1-1/2	2-1/4 N/A	А	1-1/2	2 N/A	А	1-1/2	2-1/4 N/A	А
Moline DonutKing MC/MS and Belshaw MS, MSPF	4.00 & 3.20 & 2.67 & 2.00 &	1-1/2	N/A N/A	A A	1-1/2	2-1/4 1-7/8 N/A N/A	A A	1-1/2 1-1/2	2 1-7/8 N/A N/A	A A	1-1/2 1-1/2	2-1/4 1-7/8 N/A N/A	A A
		Specify 2, 3 or 4 Holes			Specify 1 or 2 Holes								

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DonutKing Depositor

Fryer Output and Cutting Patterns

Maximize production rates by selecting the optimum cutting plate for your fryer (see diagrams below). Multiple cutting patterns can be achieved with a variety of cutting plates, plungers and cylinders.



* Capacities are nominal based on a single cut assembly producing 2-ounce cake donuts. Output will vary significantly with product size, fry time and fryer configuration. Contact Moline Customer Service for specific capacity information.

