



Product Line

DONUT ROBOT® Automatic Fryers

Models

Mark II • Mark II GP • Mark V • Mark V GP (Electric)

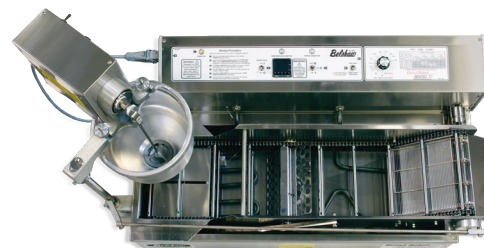
Donut Robot® Mark II
(shown with Roto-Cooler accessory)

Belshaw's Donut Robot® fryers are highly versatile and can produce Cake Donuts, Mini Donuts, Ball Donuts (Donut Holes) and Raised Donuts. Training and labor requirements are minimal to produce a high quality, consistent product.

- Donut size can be adjusted to make smaller or larger donuts. (approx 20%)
- Frying time and temperature can be adjusted through a wide range.
- The electronic controller maintains tight temperature control for a consistent product.
- Donut Robot® fryers can reduce oil absorption in comparison with most kettle fryers applications.
- With the addition of a CP Proofer, Feed Table, Proofing Trays, and Proofing Cloths, Mark II and Mark V are suitable for making excellent yeast raised donuts.
- Mark II and Mark II GP are also available as gas heated models. See Donut Robot® Mark II Gas and Donut Robot Mark II GP Gas.
- Electronic temperature controller maintains a steady temperature.

MODEL SELECTION, STANDARD AND GP MODELS

- Standard size donuts: Donut Robot® Mark II or Mark V.
- Standard size donuts AND mini donuts: Donut Robot® Mark II or Mark V, with optional Mini Donut Hopper/Plunger Kit. (Part # MK-1502-1)
- Mini Donuts Only at increased throughput: Donut Robot® Mark II GP or Mark V GP
- Donut Holes, Loukoumades: Ball Plunger. RS Submerger accessory must be used. A standard hopper is necessary when used with GP models.



Donut Robot® Mark II - Mark II GP



Donut Robot® Mark V - Mark V GP

CAPACITY Estimated	Standard Rings @120 sec fry times	Mini Donuts @90 sec fry time	Donut Holes, Loukoumades @90 sec fry time
Mark II	30 dozen/hour (360 pcs)	79 dozen/hour (948 pcs)	79 dozen/hour (948 pcs)
Mark II GP		102 dozen/hour (1224 pcs)	102 dozen/hour (1224 pcs)
Mark V	44 dozen/hour (528 pcs)	118 dozen/hour (1416 pcs)	118 dozen/hour (1416 pcs)
Mark V GP		151 dozen/hour (1812 pcs)	151 dozen/hour (1812 pcs)

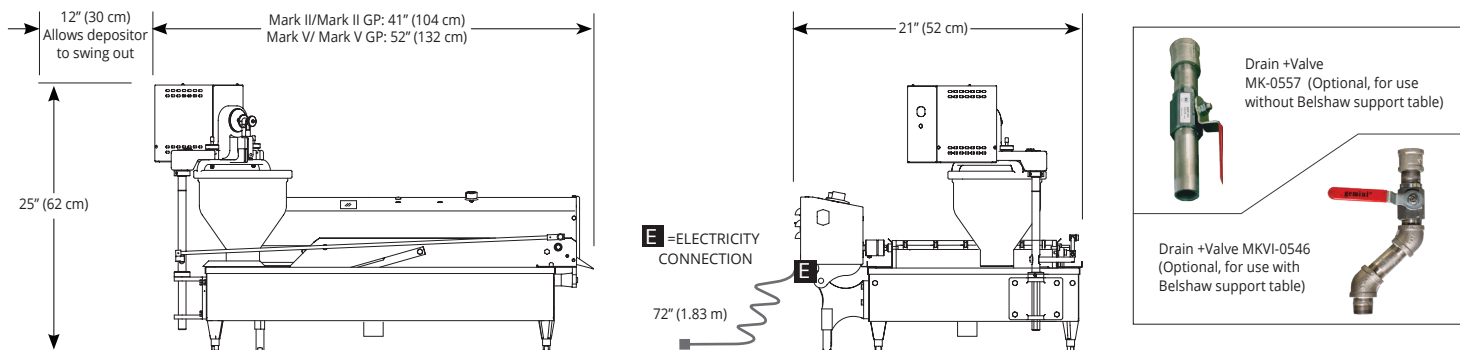
DONUT SIZE Estimated, maximum diameter	Standard Rings	Mini Donuts	Donut Holes
	1 ⁹ / ₁₆ " PLAIN OR STAR PLUNGER	1" DOUBLE MINI PLUNGER	1 ⁹ / ₁₆ " BALL PLUNGER
Mark II - Mark V	3 1/2" (89 mm)	2" (51 mm)	1 1/2" (38 mm)
Mark II GP - Mark V GP		2" (51 mm)	1 1/2" (38 mm)



Product Line

DONUT ROBOT® Automatic Fryers

Models

Mark II • Mark II GP • Mark V • Mark V GP (Electric)**STANDARD FEATURES**

- Electric heat with high durability, low watt-density heating element.
- High-accuracy electronic temperature controller.
- High temperature safety limit switch.
- Stainless steel conveyor with flight bar system for advancing donuts.
- Mark II and Mark V models:
 - Automatic depositor deposits two standard size cake donuts per conveyor row.
 - Conveyor flight bars are spaced 3 3/4" (95 mm) from center to center.
 - Customer can choose either 'Plain' or 'Star' plunger. (Star plunger makes standard ring donuts with a star shape around the center hole).
- Mark II GP and Mark V GP models:
 - Automatic depositor deposits 4 mini donuts per conveyor row.
 - Conveyor flight bars are spaced 3" (76mm) from center to center allowing for greater throughput of mini donuts.
- Aluminum hopper with 10 lbs (4.5kg) batter capacity (or 10 qt / 9.5 liter)
- Batter weight adjustment dial, allows variation from smaller to larger donuts (approx 20%).
- Ships with kettle drain and a cap. Drain and valve options are listed below.
- Frying time dial for adjusting frying time of donuts.
- Half-speed switch that reduces automatic cake donut deposits to 1 donut per conveyor row instead of 2. (For GP models, 2 mini donuts per row instead of 4) when demand slows.
- Compatible with Belshaw's 'Insider' ventless cabinet.

OPTIONS AND ACCESSORIES

- Drain and valve options. These require a hole in the fryer's supporting table.
 - Part # MK-0557, straight drain, extends 13" (33cm) below the fryer.
 - Part # MK-0557-11.5, straight drain, extends 19" (48 cm) below the fryer.
 - Part # MKVI-0546, offset drain for use with Belshaw support table MK6-1005.
- Customer can choose either 'Plain' or 'Star' plunger. (Star plunger makes standard ring donuts with a star shape around the center hole).
- Filter-Flo Siphon. Alternative to EZMelt for filtering shortening. No drain/valve required.
- Roto-Cooler (Item #22104). Rotating tray for collecting donuts after frying.
- EZMelt 18. Melter-filter for filtering and recycling oil, with fixed hose connection available for instant refill of fryer. Requires drain and valve.
- Mini donut conversion kit, Part #MK-1502-1. This kit includes hopper and double plunger used on 'GP' models, for depositing 4 mini donuts per conveyor row on Mark II or Mark V. Changeover from standard to mini donuts takes less than one minute.
- RS Roller Submerger Kit. Kit for Ball Donuts/Donut Holes/Loukoumades. Mark II: #MK-1080 (Submerger) & U-1019 (Ball Plunger). Mark V: #MK-1070 & U-1019
- Shortening Reserve Tank (Item #MKV-1012). Container for holding oil or shortening above the fryer, allowing instant refills to fryer.
- FT42 Feed Table with trays and cloths. Required for yeast-raised donut production.
- CP Cabinet Proofer for proofing yeast raised donuts.

VENTILATION AND FIRE SUPPRESSION

- Customer is responsible for ventilation hood and fire suppression required by local codes.

ELECTRICAL DATA

- Mark II and Mark II GP
 - 208-240 V, 50/60 Hz, 1 ph, 4.4-5.8 kW, 21-24 A
 - Plug: NEMA 14-30P
- Mark V and Mark V GP
 - 208-240 V, 50/60 Hz, 1 ph, 6.9-9.1 kW, 33-38 A
 - Plug: NEMA 14-50P
- Other voltages available (plug not supplied).

FRYING AREA AND SHORTENING CAPACITY(approx)**Mark II and Mark II GP**

- Frying area: 32"L x 12"W x 4.5"D (810 x 305 x 115 mm)
- Shortening volume: 7 gallons (27 liter)
- Shortening weight: 50 lbs (23 kg)

Mark V and Mark V GP

- Frying area: 43"L x 12"W x 4.5"D (1090 x 305 x 115mm)
- Shortening volume: 10 gallons (38 liter)
- Shortening weight: 72.6 lbs (33 kg)

CLEARANCE

- 2 inches (5 cm) between machine and all construction
- 2 feet (61 cm) at outfeed for Roto-Cooler or other receptacle
- 12 inches (30 cm) at infeed for depositor to swing out

SHIPPING DATA

Shipped in 2 cartons. North America Freight class: 125
Mark II / Mark II GP

- Fryer: 45"x24"x18", 130 lbs (112x61x46cm, 59 kg)
 - Depositor: 16"x16"x22", 24 lbs (41x41x56cm, 11 kg)
- Mark V / Mark V GP

- Fryer: 56"x24"x18", 146 lbs (142x61x46cm, 66 kg)
- Depositor: 16"x16"x22", 24 lbs (41x41x56cm, 11 kg)

CERTIFICATIONS

- Certified to NSF-169, UL-197, CSA C22.2
- CE models available

Donut Robot® Auto Fryers (Gas)

Belshaw Automatic's Donut Robot® Mark II Gas / Mark II GP Gas Fryers deposit, fry, turn, and dispense cake donuts and mini donuts automatically. These fryers use the same cake donut depositor and the same conveyor as Donut Robot® electric models and produce donuts of the same high quality. Training and labor requirements are low, while consistent donuts are produced by a single person.

- Donut size can be adjusted to make smaller or larger donuts. (approx 20%)
- Frying time and temperature can be adjusted through a wide range.
- Donut Robot® fryers can reduce oil absorption in comparison with most kettle fryers applications.
- Models are available in propane only.

MODEL SELECTION

- Standard size donuts: Donut Robot® Mark II Gas
- Standard size and mini donuts: Donut Robot Mark II Gas with Mini Donut Hopper/Plunger Kit, Item #MK-1502-1
- Only mini donuts at increased throughput: Donut Robot® Mark II GP Gas

ACCESSORIES

- Filter-Flo Siphon (Item #DR42-1048). Durable large siphon with heat resistant handle and cone filter, for filtering shortening.
- Roto-Cooler (Item #22104). Revolving white polyethylene tray for collecting donuts as they are dispensed from fryer.
- Shortening Reserve Tank (Item #MKV-1012) Small s/s container for holding shortening above the fryer, with valve for refilling fryer.
- FT42 Feed Table with trays/cloths for yeast raised donuts.

CAPACITY Estimated	Standard Rings @120 sec fry times	Mini Donuts @90 sec fry time
Mark II GP Gas		102 dozen/hour (1224 pcs)
Mark II Gas	30 dozen/hour (360 pcs)	
Mark II Gas (with Mini Donut Kit)	30 dozen/hour (360 pcs)	79 dozen/hour (948 pcs)



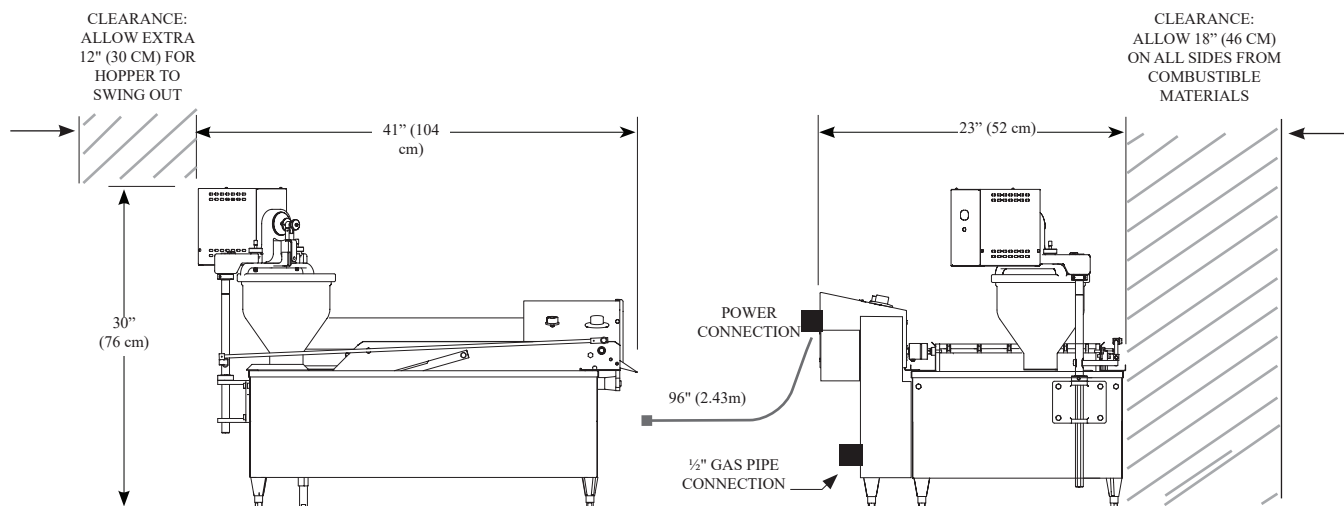
Donut Robot® Mark II Gas with Donuts



Donut Robot® Mark II Gas with Mini Donuts



Donut Robot® Mark ii GP Gas (mini donuts only)



STANDARD FEATURES

- Automatic cake donut depositor, synchronized with fryer conveyor.
- Mark II Gas: 'Plain' donut plunger, 1-9/16" (40mm) diameter. Deposits 2 standard size donuts per conveyor row.
- Mark II GP Gas: double 1" (25.4mm) diameter plunger. Deposits 4 mini donuts per conveyor row.
- Stainless steel conveyor with flight bar system for advancing donuts.
- Mark II Gas: the conveyor's flight bars are spaced 3¾" (95mm) from center to center.
- Mark II GP Gas: the conveyor's flight bars are spaced 3" (76mm) from center-to-center for mini donuts.
- Aluminum hopper with 10 lbs (4.5kg) batter capacity.
- Batter weight adjustment dial allows variation in donut size.
- Automatic turning of donuts mechanically synchronized with fryer.
- Automatic dispensing of fried donuts onto collection device such as Roto-Cooler.
- Frying time dial sets wide range of frying times.
- Temperature adjustment (thermostat).
- High temperature limit switch
- Half-speed switch that reduces automatic cake donut deposits to 1 donut per conveyor row instead of 2. For GP models, 2 per row instead of 4 for times of reduced demand.
- No drain is included; use optional accessory Filter-Flo Siphon.

OPTIONS

- For Mark II Gas: 1-9/16" Star Plunger. Makes ring donuts with a star shape around the center hole.
- Mini donut conversion kit (Item#MK-1502-1). This kit includes mini donut hopper and double plunger, for depositing 4 mini donuts per conveyor row (as used on GP model). Changeover from standard to mini donuts and back again takes less than one minute.

VENTILATION AND FIRE SUPPRESSION

- Customer is responsible for ventilation hood and fire suppression required by local codes.

ELECTRICAL DATA

- 120 V, 50/60 Hz, 1 ph, 0.36 kW, 3 A
 - 208/240 V, 50/60 Hz, 1 ph, 0.40 kW, 1.8 A
- (Electrical supply is necessary to power the conveyor and depositor)

GAS DATA

- Gas connection: 1/2" NPT (Female); Capacity: 35,000 BTU/hr
- Pressure requirement:
- Propane Gas @ 11-14 inches W.C.

CLEARANCE

- 18 inches (46 cm) to any combustible material
- 2 inches (5 cm) between machine and all construction
- 12 inches (30 cm) at infeed for depositor to swing out
- 24 inches (61 cm) at outfeed for Roto-Cooler or other receptacle

FRYING AREA AND SHORTENING CAPACITY

- Frying area: 32"L x 12"W x 4"D (81 x 30.5 x 10 cm)
- Shortening volume: 6.6 gallons (25.2 liter)
- Shortening weight: 49.4 lbs (22.5 kg)

SHIPPING DATA

- Fryer carton: 56"x40"x31", 226 lbs (142x102x79cm, 103 kg)
- Depositor carton: 16"x16"x22", 24 lbs (41x41x56cm, 11 kg)

CERTIFICATIONS

- Certified to: ANSI Z83.11-2016, CSA 1.8-2016, NSF-169.

ACCESSORIES

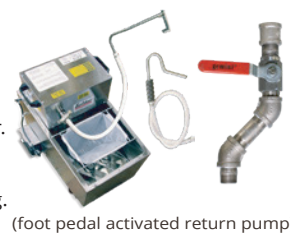
OPTION 1: Filter Flo Siphon (DR42-1048) + Shortening Reserve Tank (MKV-1012)

- Filter-Flo extracts and filters shortening from the fryer. A metal pan is needed to hold shortening after it passes through the Filter-Flo. The Shortening Reserve Tank keeps melted shortening above the fryer, making it easy to add more at any time.



OPTION 2: Melter-Filter (EZMelt 18) + Drain (MK-0546)

- Filters shortening from the fryer, and pumps it back for re-use. Solid shortening can be melted in the filter. The internal heating element keeps shortening liquid at approximately 250°F (120°C) for on demand refilling.



(foot pedal activated return pump)

Roto-Cooler (22104)

- Attractive, continuously rotating tray that collects donuts automatically after frying. Position it just off the end of the fryer.



Mini Donut Kit (MK-1502-1)

- Deposits 4 mini donuts per conveyor row.
- RS Submerger (MK-1080/Mark IIMK-1070 /MKV + U-1019/Ball Plunger)
- Produces Donut Holes/Loukoumades



Support Table for Fryer (MK6-1005)

- Houses the Mark II or Mark V fryer, EZMelt 18 filtration system, and RL18 Rack Loader.
- With storage space for shortening, glaze, screens, and assorted items



Glazing Screens (SL200-0004)

- Used with RL18 Rack Loader to sort and collect donuts. Can then be used for glazing, icing, or storing in a rack. Each screen holds 2 dozen donuts. Minimum of 20 screens are recommended



Rack Loader RL18 (#86100)

- Allows donuts to slide off the end of the fryer and fill up a stack of Glazing Screens with 24 donuts per screen. The screens can then be used for glazing icing, or storing in a rack.



Support for Feed Table (FT6-1004) For Yeast-Raised Donuts

- Stand for the FT42 Feed Table
- Storage space for Shortening, Glaze, Screens, Proofing Trays/Cloths, and other items.



Feed Table (FT42) For Yeast-Raised Donuts

- Accepts yeast-raised donuts on Proofing Trays/Cloths and drops them automatically into the fryer.



Proofing Trays (FT42-0052) & Proofing Cloths (FT100-0532) For Yeast-Raised Donuts

- Place donuts on a Proofing Cloth and Proofing Tray, allow to rise in proofer, then transfer onto the Feed Table. Between 20 and 60 trays/cloths are recommended.



SUPPORTING EQUIPMENT

Glazer: (HG18EZ)

- Glazes 2 dozen donuts at a time on a glazing screen. The glaze applicator is supported on rails.
- The drain tray allows excess glaze to drain, as you glaze the next screen of donuts



CP Cabinet Proofer

- CP1/CP2 Belshaw's 16-shelf Cabinet Proofer with 2 'Dutch' doors. Capacity approximately 51 dozen donuts per hour @ 40-minute proofing time. Requires 16 SL200-004 screens to support Proofing Trays and Cloths.



Icer (H&I-2 or H&I-4) or Donut Finishing Center

- H&I-2 / H&I-4 or 4-bowl icers for hand dipping donuts. 13" bowls are warmed directly by heated water tank at 120-130°F (50-55°C).
- DFC: 3 air-warmed 1/3-size pans for icing, 4 unwarmed 1/4-size pans for sprinkles or other finishes + plenty of work and storage space.

















Autofiller Donut Injector (#20600)

- Jelly, jam, custard and creme injector for donuts and pastries
- Includes 6-quart capacity hopper, with 7/16" nozzles
- 5/16" nozzles optional for donut "holes"
- Designed specially for donuts



Donut Robot® PLUNGERS AND ATTACHMENTS (Mark II & Mark V Donut Robot® Depositors)

Item Number	Plunger / Attachment	Plunger	Donut Type
U-1001	PLAIN PLUNGER 1-9/16" Diameter • For standard Ring donuts. Also makes "Old Fashion" donuts using Old Fashion donut mix. Size is adjustable using the weight adjuster on the Donut Robot, up to 3½" (89mm) diameter.		
U-1001S	STAR PLUNGER 1-9/16" Diameter • The Star plunger makes the same size ring donuts as the Plain plunger, but produces a star pattern around the hole. Size is adjustable using weight adjuster on Donut Robot up to 3½" (89mm) diameter.		
MK-1502-1	MINI DONUT CONVERSION KIT with Double Plunger for mini donuts • This is the standard hopper and plunger combination on Donut Robot GP models. You can use it with standard Donut Robot models to change back and forth between standard size donuts and mini donuts. It includes Mini Donut Hopper and Plunger as shown.		
MK-1080 (Mark II) MK-1070 (Mark V) U-1019 (1 9/16" Ball Plunger for both)	RS ROLLER-SUBMERGER Enables production of Donut Holes/ Balls/Loukoumades • Includes Roller Submerger and 1-9/16" ball plunger. • Roller Submerger is slightly longer for Mark V. • Fries all ball-shaped products evenly.		
DR42-1018x1.563	DUNKERETTE ATTACHMENT • Attaches to a 1-9/16" Plain or Star Plunger. Forms 2 half-donuts as shown. Size is adjustable using weight adjuster on Donut Robot		
DR42-1016x1.563	NUGGET ATTACHMENT • Attaches to a 1-9/16" Plain or Star Plunger. Produces 3 separate or joined balls, depending on the height of the hopper. Size is adjustable using weight adjuster on Donut Robot		
DR42-1017x1.563	BALL ATTACHMENT • Attaches to a 1-9/16" Plain or Star Plunger. Produces 4 separate balls, or joined balls, depending on the height of the hopper. Size is adjustable using weight adjuster on Donut Robot		

ATTACHMENTS

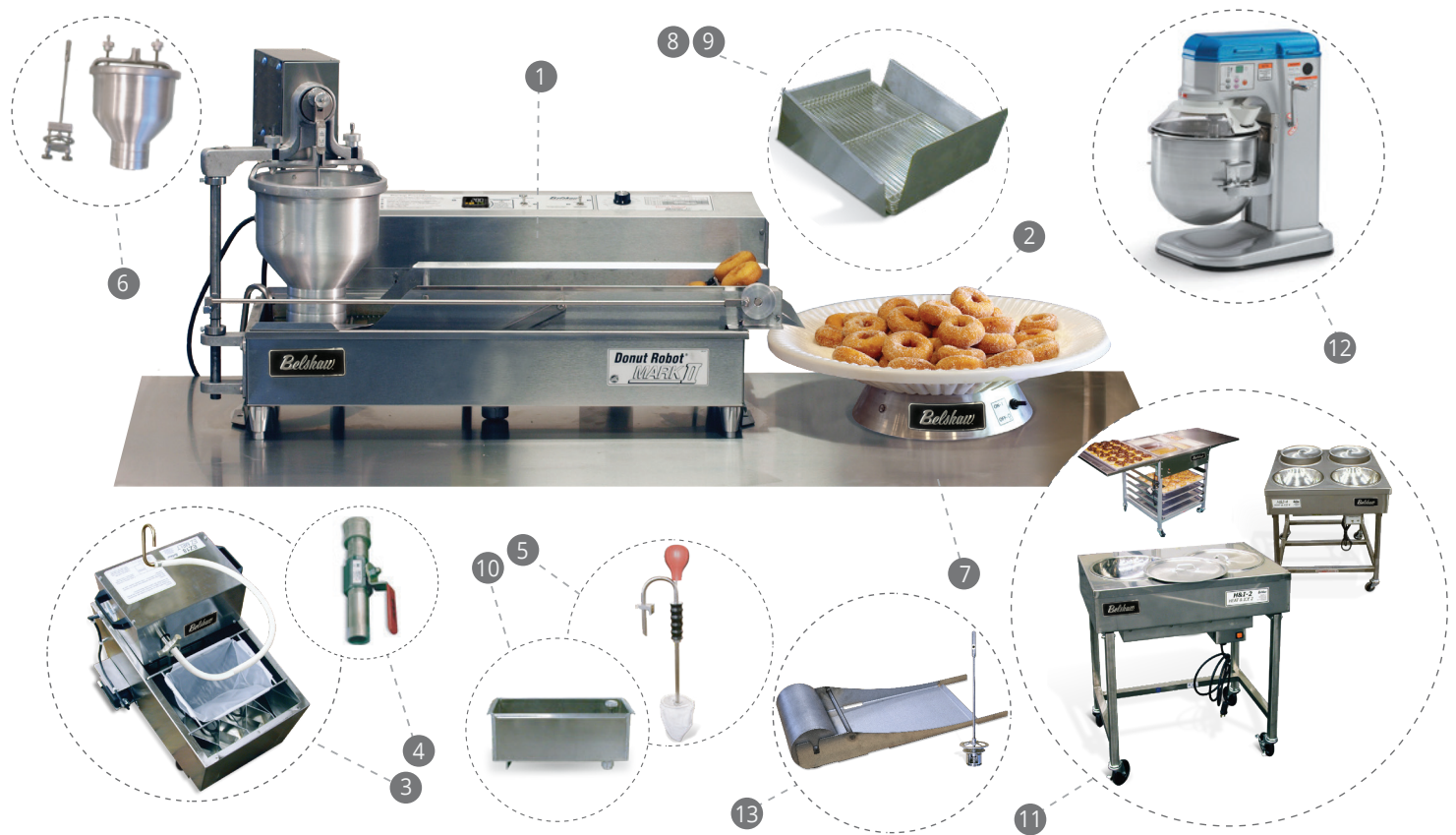
• Attachments are simple devices that divide the normal deposit into halves, thirds, or quarters. Attachments are inserted onto a Plain plunger or Star plunger.

PLUNGER SIZE AND PRODUCT WEIGHT

• You can adjust the amount of batter deposited to make a larger or smaller donut, between the MIN and MAX weights shown below. Product weights are estimates only.

Plunger Size		Product Size (estimated) (per dozen, after frying)	
in	mm	MIN	MAX
1"	25.4mm	5 oz. (142g)	6 oz. (170g)
1-9/16"	39.7mm	15 oz. (426g)	27 oz. (780g)

SAMPLE MARK II / MARK V BASIC SYSTEM for Cake Donuts and Mini Donuts



Equipment

Description

Item Numbers*

EITHER OR	1	Donut Robot® Fryer	Mark II, 208-240V single phase	22602 (Plain plunger), 22601 (Star plunger), 22635 (1 ¹³ / ₁₆ "Plain plunger)
			Mark II GP, 208-240V single phase, for mini donuts	22604
			Mark V, 208-240V single phase	22650 (Plain plunger), 22652 (Star plunger), 22667 (1 ¹³ / ₁₆ "Plain plunger)
			Mark V GP, 208-240V single phase, for mini donuts	22653
	2	Roto-Cooler	Collects and displays donuts after frying	22104
	3	Filtration System	EZMelt 18	20504 (120v) or 20505 (208-240v)
	4	Fryer Drain and Valve	Drains to EZMelt 18	MK-0557 or MK-0546 (with Belshaw Support Table)
	5	Filter-Flo Siphon	Filters shortening using siphon pump	DR42-1048
	6	Mini Donut Conversion Kit	Hopper and plunger set for mini donuts	MK-1502-1
	7	Support Table for Fryer	With pre-machined holes and storage	MK6-1005
	8	Rack Loader	Holds glazing screens (replaces Roto-Cooler)	86100 (not needed if Roto Cooler used)
	9	Glazing Screens	Collect donuts after frying, 24-48 recommended	SL200-0004 (not needed if Roto Cooler used)
	10	Shortening Reserve Tank	Warms shortening ready to insert into fryer	MKV-1012 (not needed if EZMelt filtration used)
11	Icing & Glazing options	H&I-2 (2-Bowl Icer) • H&I-4 (4-Bowl Icer)	84900112 • 84900114 (both 120v)	
		DFC (Donut Finishing Center)	21754 (120v)	
12	Mixer	BABG10, 10-Quart	21697	
13	RS Submerger	Enables donut holes/ball donuts/loukoumades	MK-1080/MK-1070 (MkII/MkV Submerger) + U-1019 (Ball Plunger)	

*North America item numbers shown. For international item numbers, contact Belshaw

SAMPLE MARK II / MARK V EXTENDED SYSTEM Yeast-Raised Donuts



Equipment

Description

Item Numbers*

1	Donut Robot® Fryer, with automatic Cake Donut Depositor (depositor not shown above)	Mark II, 208-240v single phase	22602 (Plain plunger), 22601 (Star plunger), 22635 (1 ¹³ / ₁₆ " Plain plunger)
		Mark V, 208-240v single phase	22650 (Plain plunger), 22652 (Star plunger), 22667 (1 ¹³ / ₁₆ " Plain plunger)
2	Filtration System	EZMelt 18	20504 (120v) or 20505 (208-240v)
3	Feed Table + Splash Guard	FT42 with safety guard	835203 + FT42-0516
4	Proofing Trays	For use with Feed Table, 20-45 recommended	FT42-0052
5	Proofing Cloths	For use with Feed Table, 20-45 recommended	FT100-0532
6	Support Table for Fryer	Holds Donut Robot, EZMelt, RotoCooler + Storage	MK6-1005
7	Proofer, 17-shelf	Cabinet Proofer with Dutch doors	CP1 (120v) CP2 (208-240v)
8	Rack Loader	Holds glazing screens	86100
9	Glazing Screens	Collect donuts after frying, 30-60 recommended	SL200-0004
10	Fryer Drain and Valve	Drains to EZMelt 18	MKVI-0546 (or MKVI-0547 if used with MK6-1007 Support Table)
11	Glazer	HG18EZ	22529
12	Icer (choose one)	H&I-2 (2-Bowl)	84900112 (120v)
		H&I-4 (4-Bowl)	84900114 (120v)
		DFC (Donut Finishing Center)	21754 (120v)
13	Jelly and Creme Injector	Autofiller	20600
14	RS Submerger	Enables donut holes/ball donuts/loukoumades	MK-1080/MK-1070 (MkII/MkV Submerger) + U-1019 (Ball Plunger)
15	Support Table for Feed Table	Holds Feed Table	FT6-1004

*North America item numbers shown. For international item numbers, contact Belshaw