

The Topos engineering team used their years of fryer rebuilding expertise to design a new fryer that includes all of the best features of the various brands and proven designs of the past while incorporating some new and innovative features for today. An eye towards a rugged and proven design along with reliability, cleanability and efficiency was the focus of our engineering team. The fryers are built for continuous production runs and can produce from 600 to 4,000 dozen per hour as needed.

We design and fabricate these fryers in an assortment of widths, lengths and product flight pitches to suit the customer's current and future product needs. The integral hood and flight elevator system makes the installation and the operation of the fryer much more streamlined and simplified. The natural gas fired immersion tubes in the shallow designed kettle allow for quick and accurate temperature control of the frying oil at the product surface.

Effort was taken to keep the underside of the kettle as clean, open and uncluttered as possible for efficient cleaning after each production run. The all S/S sanitary designed fabrications and the all NEMA 4X execution on the electrical system allows for full wash down of the fryer. The surface conveyor system incorporates the best features that have been proven over time into one new system. The surface conveyor can be built to drive a final proofer coupled to it or to run independently as needed. The gas and electrical control system includes advanced PLC controllers and operator touch screen panels for the precise control and the complete data collection that the operator needs.

## **Standard Features**

Standard dropping plate



The surface conveyor has a movable slat-type dropping plate for cake doughnut deposition into the kettle.

The entire fryer fabrication is made from high quality S/S using the highest of sanitary design methodology, for durability and ease of cleaning.

➤ Kettle lengths from 12' long to 36' long to suit production needs.

A fully modulating pre-mix type natural gas system is utilized for maximum efficiency.

➤ Gas fired immersion tubes in the frying kettle with the flared end design, allow for quick and efficient transfer of heat into the frying oil and are configured in a two-zone system (front and back).

Surface conveyor flight pitch options from 2 1/2", 3 1/8", 3 3/4" 4 3/8" and 5" wide between flight bars are possible.

An integral and gentle rotary type product turner is positioned at about the mid-point of the fryer.

A shallow kettle design to maximize frying efficiency and the proper oil turnover while limiting oil break-down.

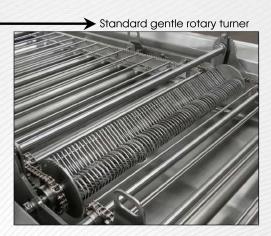
The fryer's surface conveyor can be synchronized with the proofer trays via electrical communications or via a positive 1:1 shaft drive system.

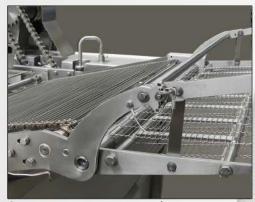
The integral fryer mounted S/S hood has a built-in filter rack to place washable filters for exhausting the frying fumes above the frying surface.

An integral surface conveyor elevating system that can raise and lower the conveyor into and out of the kettle for cleaning and servicing.

The surface conveyor has a variable speed drive with a mechanical torque limiting clutch for added safety, in addition to the VFD's overload capability.

The S/S burner flue stack sections include the draft inducers and the barometric damper in each, and are interlocked with the gas safety controls.





Optional discharge conveyor >

The recirculating oil pumping system [pump and tank] keeps the oil circulating and will maintain the desired level in the kettle via the adjustable overflow gate.

The control stations can be either remote mounted or unit mounted on the hood system.

The controls are all advanced PLC and operator touch screen driven.

Factory installation supervision, start-up and training on all systems.

## **Optional Features**

➤ LED lighting in the fryer hood system

Continuous or end of day oil filtration systems

➤ Mobile and remote frying oil tanks for supply or storage

An adjustable flip-over discharge conveyor at discharge end.

Product submergers for doughnut "hole" production

➤ Air alignment systems to manage the product position within the kettle.

> Sediment removal conveyor "dragging" system on the bottom of the kettle.



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