

# The ultimate one-two punch for processors of coated foods.

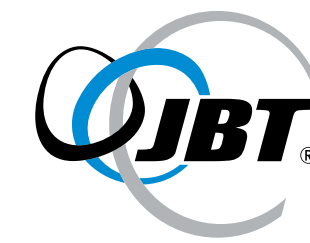
Since its introduction in 1993, high capacity THERMoFIN frying technology has made it possible for processors to consistently produce more high quality products while reducing their costs. The TFF-IV delivers higher levels of oil management,

heat transfer, flexibility and safety. Its patented CoolHEAT® Vertical Fin Heat Exchanger provides very gentle heat transfer and low heat flux with high BTU input resulting in longer oil life and superior product quality.

There is no fryer comparable to the TFF-IV. We took the best of our THERMoFIN frying technology and added features that will make your operation more efficient, more hygienic, safer, and more profitable. See for yourself what a remarkable frying system it is. Make your reservations now to test the TFF-IV at the JBT FoodTech and Training Center in Sandusky, OH. Bring your new products for simulated runs and discover the frying and filtration system that will meet your highest expectations.



TFF-IV THERMoFIN® Fryer. New features. More benefits.



## Stein TFF-IV THERMoFIN® Fryer

We are your single source for profitable processing solutions

JBT can provide you with portioners, freezers, and everything in between – including process control, food product development assistance, operator training and a full range of customer support alternatives.

Our Food Technology Centers have served leading processors in the development of many of the world's most popular food brands. Learn how to increase your processing potential by contacting your JBT Representative or by visiting our website.

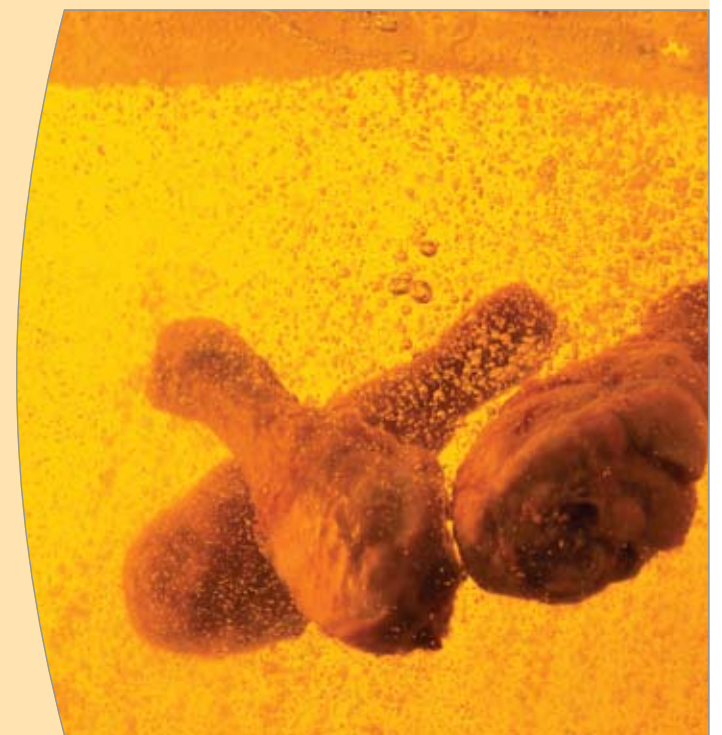
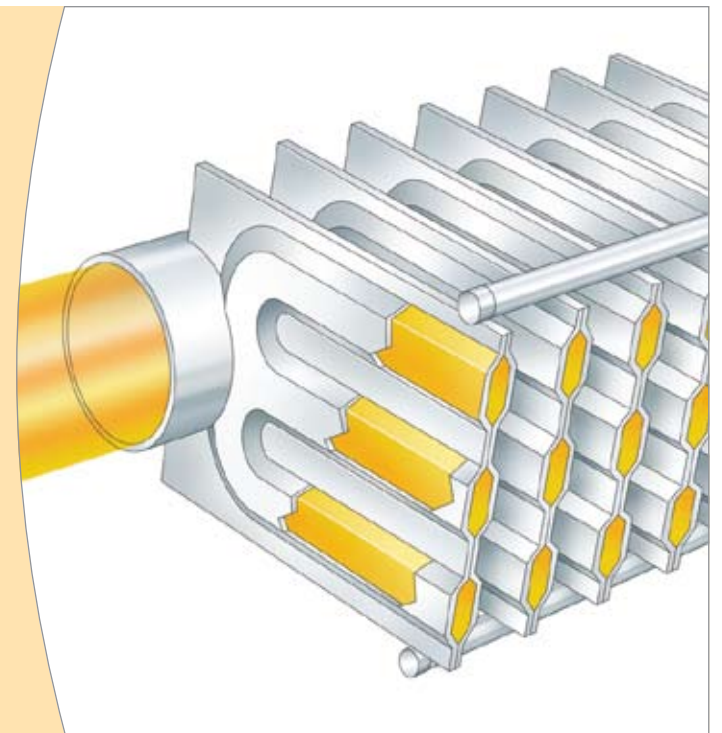
We're with you right down the line.™

[www.jbtfoodtech.com](http://www.jbtfoodtech.com)



## Stein TFF-IV THERMoFIN® Fryer

- The thermal fluid heating system inside of the fryer tank helps minimize cooking oil volume and greatly reduces cooking oil turbulence for enhanced sediment control and improved product quality and consistency
- The single pass radiator design has a minimal amount of thermal fluid in the system for the fastest response to changing heat requirements
- Two zone oil temperature control provides uniform direct heat from side-to-side and end-to-end
- Less cooking oil in the fryer improves oil turnover and maintains oil quality at a high level
- Dual exhaust steam vent fans reduce oxidation of the cooking oil, provide better containment of cooking vapors, and reduce oil discharge from the fan exhaust
- Recommended thermal fluid is Paratherm NF heat transfer fluid, a non-toxic, noncarcinogenic, colorless, tasteless, and odorless mineral oil that will not cause hard carbon formations on heated surfaces
- The system features a unique thermal fluid heating system for precise temperature control, safety, and operating efficiency



## Stein MicroMAX™ Hot Oil Filter

The Stein MicroMax centrifugal hot oil filtration system provides the ultimate in fines filtration for high volume frying systems. Employing a continuous centrifugal design, the MX-20 and the MX-30 filters offer flows of 20 and 30 gallons (75 and 114 liters) per minute, respectively. MX is designed for battered and breaded applications, particularly flour, where oil breakdown is a significant problem.

- Centrifugal force removes particulates at the single-digit micron level
- Extends the usable life of the oil and reduces free fatty acid buildup
- Significantly reduces labor and sanitation costs
- Special infeed pump that can handle hot oil with large particles
- Eliminates product contamination from suspended sediment
- Significantly improves fines filtration
- Saves oil, resulting in drier sediment
- MX-20 for medium-to-high volume frying
- MX-30 for high volume and multiple fryer applications



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## Heat Transfer

- Large surface area of the CoolHEAT Vertical Fin Heat Exchanger delivers the most efficient transfer of heat to the cooking oil. Heat transfer is gentle, resulting in less damage to the cooking oil
- High flow rates supply heated thermal fluid to the heat exchanger
- With a minimal amount of thermal fluid in the heat exchanger, heat is transferred to the cooking oil faster
- Rugged 16 gauge 304 stainless steel construction of heat exchanger virtually eliminates thermal fluid leaks in the fryer

## Oil Management

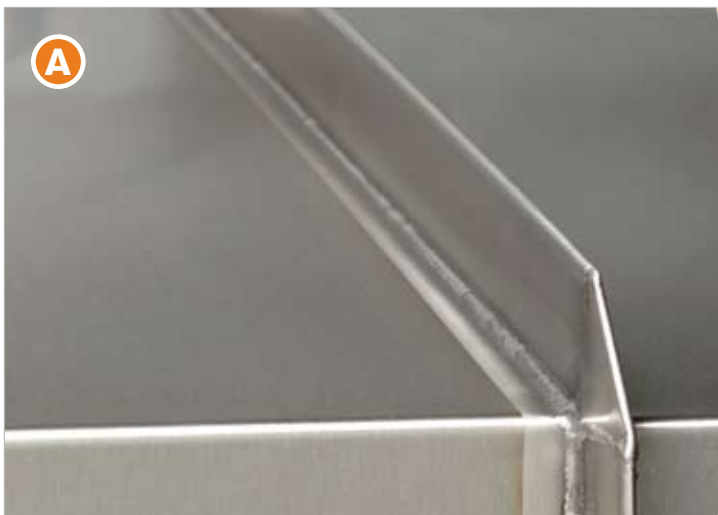
- Two-zone temperature control for more consistent frying temperatures across the length of the fryer
- Burned and charred sediment is collected and removed at fryer infeed, minimizing the negative impact on the cooking oil
- Less cooking oil in the fryer improves oil turnover and maintains oil quality at a high level
- Extremely fast response to changing heating requirements. No hot spots or scorched oil flavor dramatically extends oil life

## Efficiency & Safety

- Dual exhaust vents at the infeed and discharge sectors create a uniform steam blanket on top of the cooking oil, reducing oxidation
- Dual exhaust vents reduce exhaust fan size, minimizing the amount of oil discharged from the fryer
- Precise temperature control from side-to-side
- No open flame in the process area
- Automatic oil level control maintains preset oil level in fryer, maintaining consistent frying for more consistent product quality and improved food safety

## Frying Flexibility

- Available with 2-in-1 main product conveyor system for tempura or breaded products
- Patented convertible infeed for breaded and battered products improves quality and lowers operating costs
- Top submerger ensures that products are completely immersed in the cooking oil for more even cooking
- Variable speed conveyor makes frying times easily adjustable



### Hygiene and Sanitation

Improvements in the design of expansion joints on the fryer hood have eliminated the need for beauty covers, stitch welds, and fillers like RTV. An automatic hood lift system raises hood and conveyors for easy access for inspection and sanitation.



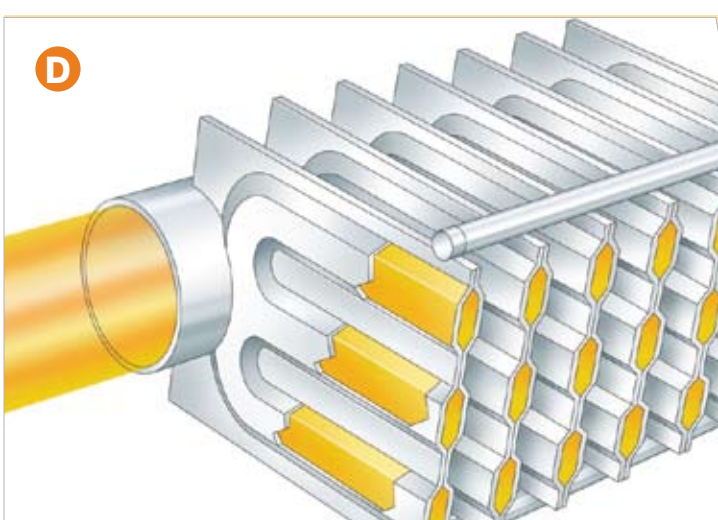
### Improved Teflon Slat Design

The improved design of Teflon slats not only increases reliability, but also allows easier operation with new externally adjustable slats.



### Externally Adjustable Top Submerger

The TFF-IV has an externally adjustable top submerger. A conveniently located wheel assures easy adjustment without raising the hood. Set-up is quick and operation is easy.



### New Heat Exchanger Height

The heat exchanger height of the TFF-IV Fryer has been lowered from 4 1/2" (115 mm) to 4 1/16" (103 mm). The heat capacity remains the same as previous models, but this fryer requires less oil.



### CoolHEAT<sup>®</sup> Vertical Fin Heat Exchanger

The TFF-IV Fryer's vertical fin heat exchanger eliminates hot spots, while crumbs fall through into the sediment conveyor. This enhances product quality.



## Test it!

Bring your new product development team and your new product concepts to the JBT FoodTech Food Processing Technology and Training Center for simulated runs and equipment training.



### Reduced Steam Vents

New round steam vents eliminate the need for installing transition vents. Smaller steam vents decrease the volume of exhaust and reduce the amount of oil pulled into the air.



### Dual Steam Exhaust Vents

Dual exhaust vents in the infeed and discharge areas create a uniform steam blanket on top of the cooking oil, reducing oxidation of the cooking oil and allowing better containment of cooking vapors. As a result, less oil is discharged from the fryer and the frying process is more efficient.



### Improved Hood Seal

The fryer tank has been indented one inch, resulting in improved hood seal and tank strength.



### LINK<sup>®</sup> Line Control

LINK<sup>®</sup> is a comprehensive process automation and control suite to simplify production, provide recipe management, and improve product and process uniformity.



### Sediment Removal

Automatic sediment removal system continuously traps and removes frying debris at the infeed end of the fryer. This improves product and cooking oil quality, extends oil life and lowers operating costs.



### Stainless Steel Motors

The TFF-IV features stainless steel construction for all exposed motors.



### Insulated Hood

An insulated hood increases operating efficiency and safety.