

HI-COOK

Continuous
Fryer




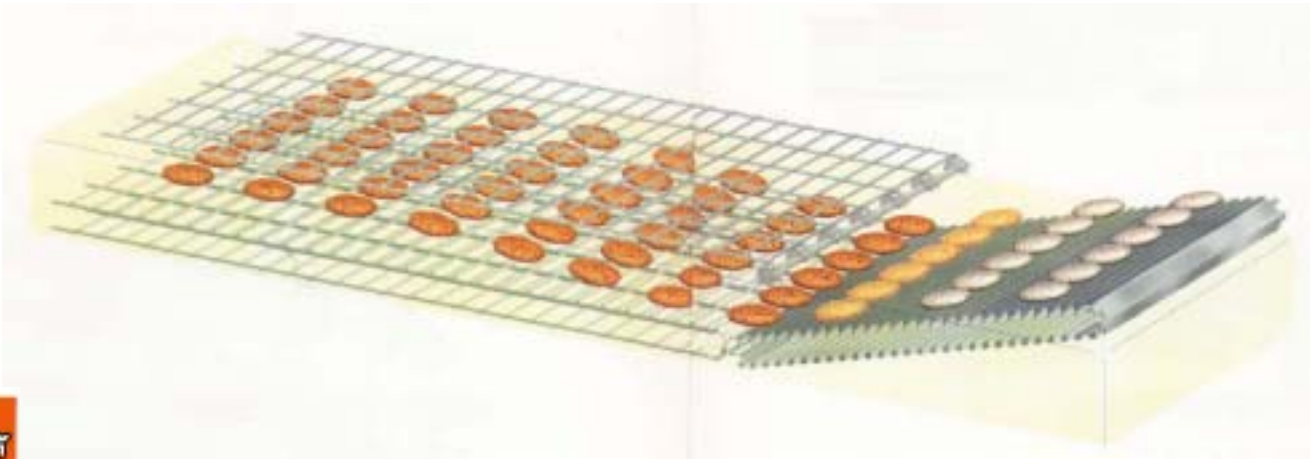
Reinforced with brand-new scientific achievement
Less oil use, precise filtration, powerful heating utility



Enhancing flexibility for various product kinds

 **ASAHI SOSETSU CO.,LTD.**

Taste, uniformity, food-safety, without compromising efficiency



Frying process has evolved itself in various places of the world along such a long human history as one of the major cooking methods. Today lots of people agree that they have seen, among many countries, one of the most brilliant prosperities in Japan. Frying as an indispensable part of Japanese food culture, either in home or food factories has been developing and upgrading more and higher for the last couple of centuries. Pursuing taste at higher level called for pursuing higher level technology in processing equipment in industrial sector. HICOOK fryer has been originated in this environment more than 50 years ago.

It has introduced itself as the first ever made continuous fryer in 1965. Over the past half century, thousands of HICOOK fryers have been installed in and outside Japan.

Based upon the typical Japanese customer-oriented service system, it offers trustful and professional service 24/7 all the time you are in need.

Relentless pursuing customer's benefit is our motto.



Heating sources on demand

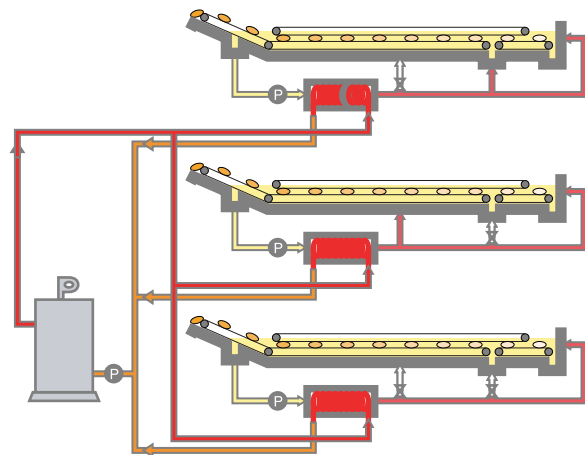
Preferable energy sources could differ depending on each region. HICOOK fryers can be equipped with various heating sources upon request.



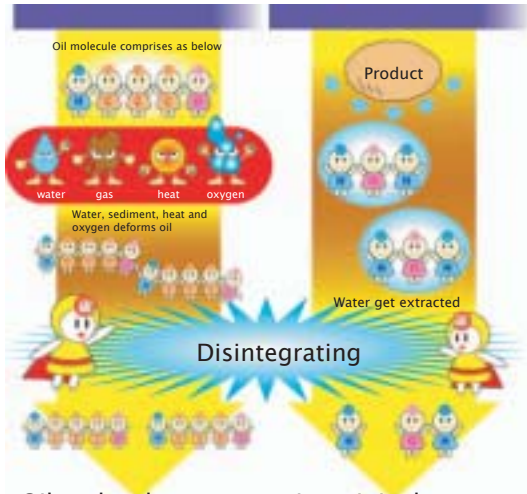
Thermal oil fryer DLNC (heatexchanger)

1. Thermal oil

Thermal oil has shown up as a convincing alternative heating source in food industry for the last two decades. It offers easy control and efficient management of multiple lines. Heated thermal oil come through heat exchanger, where it indirectly contacts edible oil coming through a different piping. Thermal oil returns to the boiler for reheating, and edible oil gets back to wherever in the fryer users point very flexibly. If you want, you can send all the heated oil back to inlet section to eliminate temperature drop up there that is very likely in other systems. High pressure steam can be applied optionally to the same system.



Basic flow for multi-lines



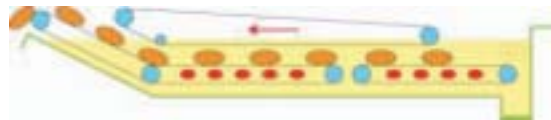
Oil molecule returns to its original status

2. Electrical

The patented Alpha electric heaters, processed with Torium plasma welding, radiate Alpha ray to disintegrate deformed oil molecule to cure it back to the original pure status.

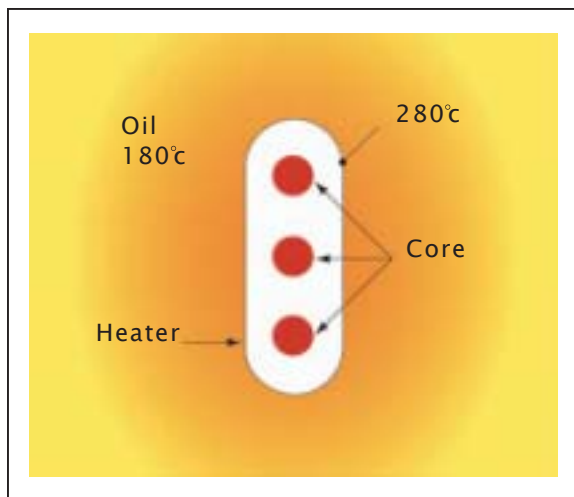


Torium

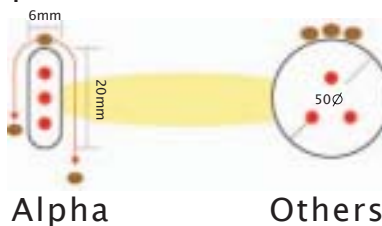


Heaters are mounted inside the conveyor net so that the depth of oil vessel is minimized.

See the front page for the image of electrically heated fryer



The border temperature of heaters does not exceed than 280 degree C, not to damage oil seriously. Oil gets damaged irreversibly at higher temperature. Alpha heaters have a significant shape to which impure particles are hard to stick.



Alpha

Others



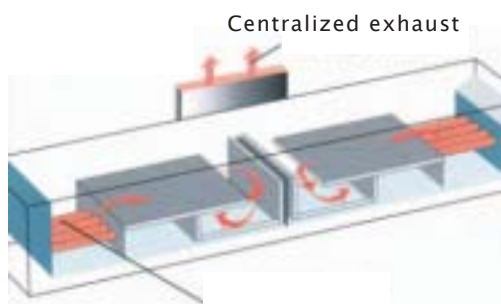
Why do they think HICOOK is the frying expert? Very simple to answer. We have been dealing with frying process over the last half century since 1953. It tells everything.

3. Gas

Gas in many countries prevails as the most economy heating source. In addition, depending on product kind, gas can carry out the given job better than other heating sources.



Gas burner fryer DNC

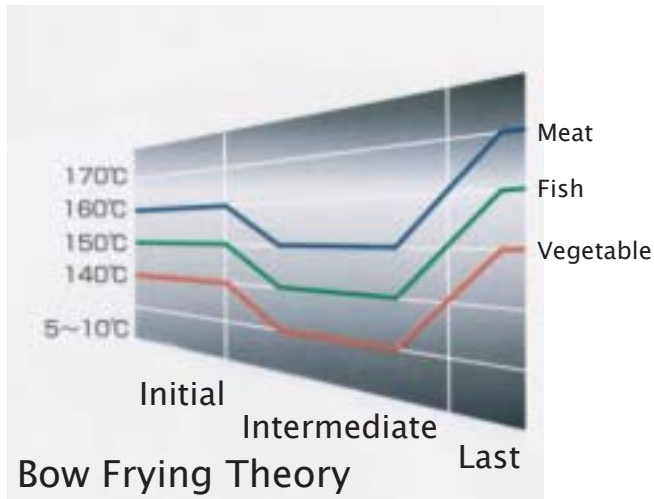


Residual burning from main burners

HICOOK fryer has the energy effective residual burning system that reuses heats coming from main burners where there are no burners.

Temperature Control

Precise and independent

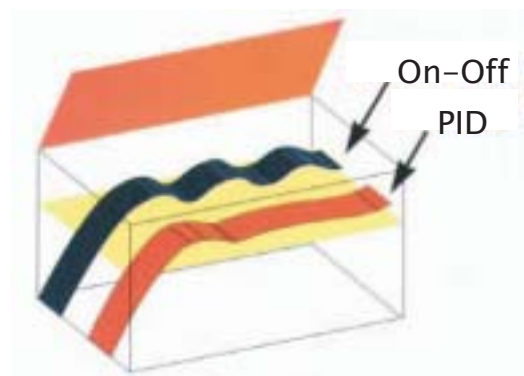


Evolving over the past several centuries, frying theory comes with modern scientific benefits. The following bow-shaped graphs are showing referable temperature control.

- The prime aspect in the initial process is to harden the surface not to lose its original flavor and taste and not to absorb too much oil.
- The prime aspect in the intermediate process is to cook core at a relatively lower temperature.
- The prime aspect in the last process is to evaporate surface moisture to get crispy effect.

The above Bow theory has embodied HICOOK fryers that control oil temperature in three different places such as inlet, mid-section, outlet (2 points control in small models). HICOOK has been open to import any scientific and theoretical achievement of the contemporary world to industrial sector.

HICOOK fryers carry out independent temperature control at each point in digital hardware.



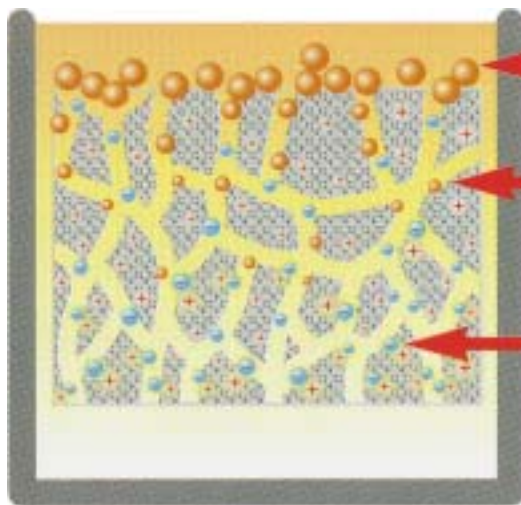
Standardized PID control

Oil maintenance, the solution to quality



Paper roller filter

Oil transfer heat to products and furthermore oil itself is a part of final product. In this sense, keeping oil clean determines final quality of product. On one hand less oil volume with frequent supply of new oil (shorter oil turnover rate) represents HICOOK's unique design concept, on the other hand filtering oil as precisely as down to 5 micron delay the oil deterioration very significantly.



Sieving (for visible sediment)

Entrapment (for smaller particle)

Adsorption (for invisible impurity)

See how you can filtrate
5 micron sediments

High performance
continuous oil filter
KF type dealing with all kind of
sediments.



Full lift up, Flat vessel, Easy cleaning



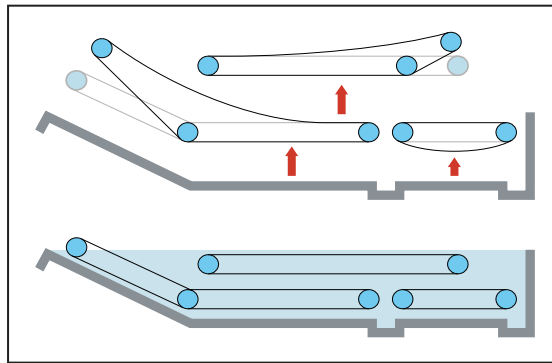
Cleaning is getting more important in today's food factories. It can lift up conveyors and hood, and other devices such as sediment removers, paper filter, covers are easily accessible and fully tool-free detachable.



Nothing remains under conveyor net. No residue, no impurity.



Conveyor nets can be folded and lifted up manually making cleaning job even easier. Conveyor nets can immerse cleaning water completely.



Other features

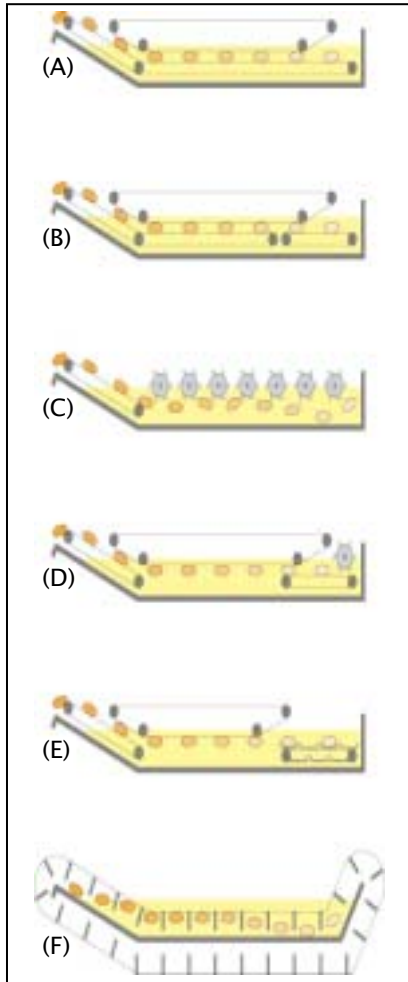
HICOOK fryer has various standard specifications and optional items. All they are well combined together according to customer's particular process concept.

		
<p>Mounted-in heaters</p>	<p>Sediment remover</p>	<p>Height adjuster</p>
		
<p>Touch panel control</p>	<p>Anti-overheat sensor</p>	<p>Oil-less detector</p>
		
<p>Oil Drainage</p>	<p>Heavy duty pump</p>	<p>Teflon conveyor</p>

Other minor options available as well.

Conveyor configuration

Depending upon coating recipes and what the final coating material is, conveyor configuration might vary.



Normal net transport(A)

A normal transport conveyor for such products as croquette and French fries.

Caterpillar transport(B)

Such batter-coated products as Tempura shall be treated gently not to get damage over its surface.

Paddle transport(C)

Floating products as potato chips shall be treated in the paddle transport.

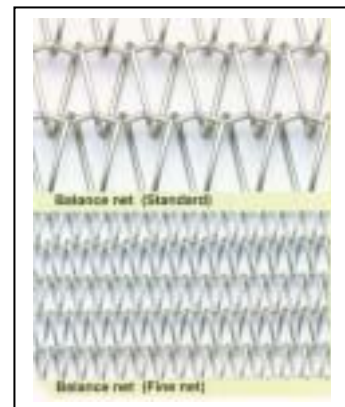
Hybrid (D and E)

Each conveyor transport mechanism could be combined according to product features.

Apron (F)

Apron plates linked with chain conveyor transport products.

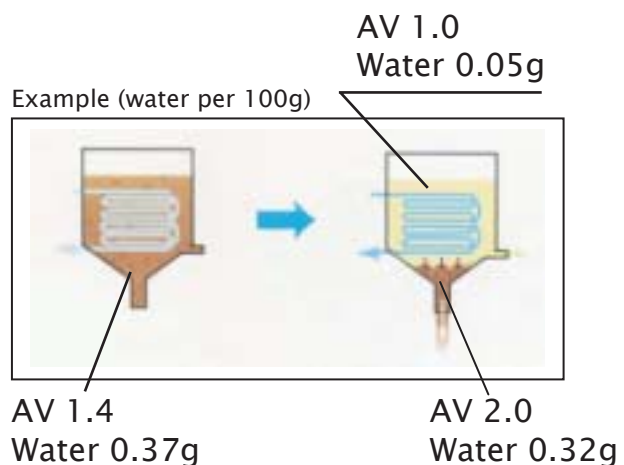
Choices on conveyor nets



Filtering storage tank STC



Oil after once heated may contain a lot of water, which may accelerate oil deterioration at next heating. This water can not be removed by normal oil filter. HICOOK's STC oil tank helps with this. Over the night, it takes water and small impurities out of oil, and you can have cleaner oil next morning.



Oil Mist Catcher

Exhaust gas from fryers accompanies a lot of environment problems. Oil mist catcher to be installed over the hood takes oil mist out of exhaust gas, and only send cleaned air to outside.





1863-1, Miyanaga, Hakusan, Ishikawa, Japan
TEL : +81-76-275-8159 , FAX : +81-76-276-9533

hicook.com