



Plate Heat Exchangers Food & Beverages

# WE ARE ARSOPI THERMAL

A Thermal Solution Expert for Food & Beverage Industry "Creative and friendly. Always."

ARSOPI THERMAL has become a pioneering thermal solution expert of Plate Heat Exchangers (PHE) since 1992 for its vast experience, top manufacturing quality and outstanding performance. As a member of the world class equipment provider ARSOPI Group, and a technical licensee of HISAKA, one of the world-leading Japanese PHE manufacturers, drive innovation by absorbing extensive knowledge and blending it with our cutting-edge technology and range of specialized experience.



Accessibility to our customers and ensuring their satisfaction at every stage is our priority. Our high-performance standards and flexibility allow us to provide the thermal solutions that are energy-efficient, cost-effective and fully customized to the precise needs of our customers.

We adapt existing equipment to new requirements, without ever compromising quality, cost and safety.

#### Why ARSOPI THERMAL PHE?

- High thermal performance excellent quality, high efficiency
- Cost savings and quick return on investment
- Lower Cost and High Performance
- Low level encrustation and efficient self-cleaning
- Compact & Lightweight
- Easy maintenance
- Flexibility of different thermal programs





# Food & Beverage





















Food and Beverage products are mainly selected for their freshness and quality. Maintaining their natural features, colours, flavors and nutritional values by storing items in controlled conditions upholds these high standards. Also, cost-effective and sustainable processing is vital for a successful production.

Arsopi Thermal offers equipment with technologies suitable for different production stages, such as pasteurization, applications where heating or cooling are involved.













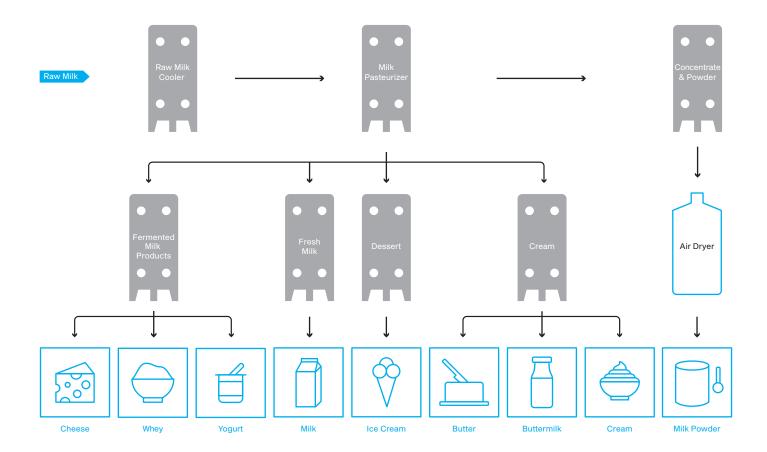






## **Dairy & Milk Products**

Milk and its derivatives are an integral part of everyday life. Arsopi Thermal PHEs have a very high hygiene level reliability and the advantage of higher recoveries (investment cost vs. energy consumption savings). It can be designed for all kinds of milk, plant-based beverages and dairy products. Pasteurization, heating and cooling are designed to preserve food quality, food safety and our outstanding efficiency.

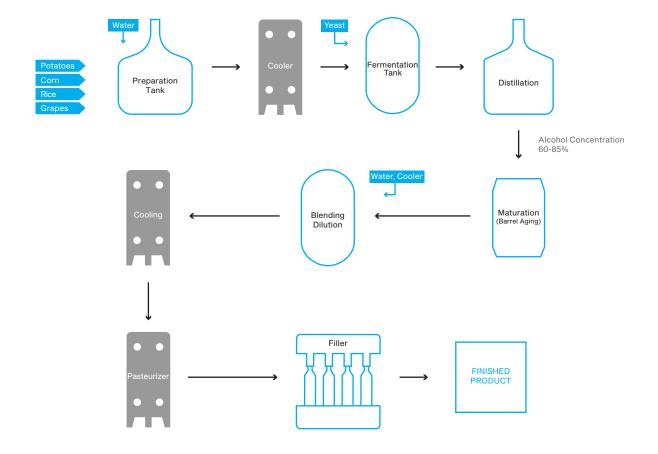






# White and Brown Spirit Drinks and Wine

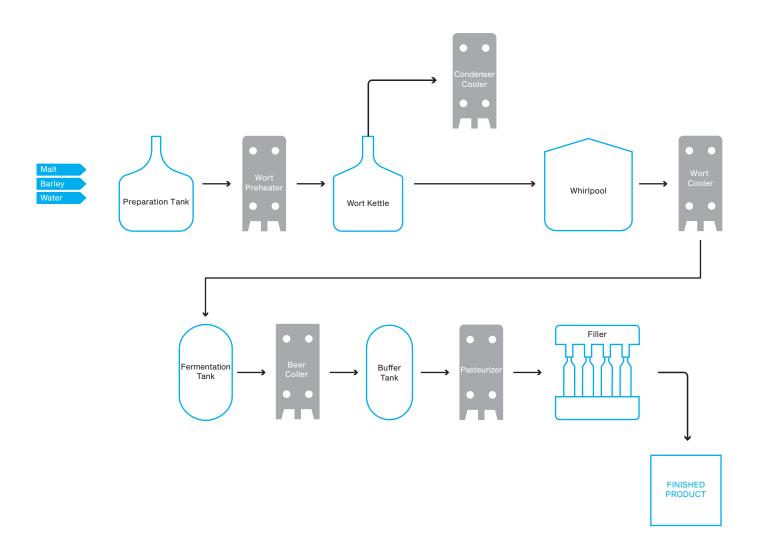
Arsopi Thermal Plate Heat Exchanger plays an important role in improving the energy efficiency of the distillation of whiskey and spirits by optimizing the heat efficiency. Our extensive technology, experience, knowledge, and equipment provide a safe, cost-effective, and attractive solution tailored to your requirements and applications, without compromising the characteristic aroma and flavor of the product.





### **Brewery**

Arsopi Thermal can help you achieve the highest productivity and reliability whether artisanal productions or large industrial units. Our PHEs play a significant role in the production flow, and can ensure profitability and cost-effectiveness through heat recovery.





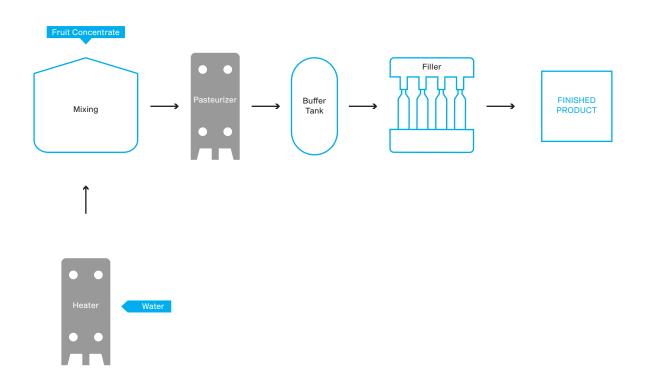




# Juice, Soft Drinks, Bottled Water

Juice, soft drinks, bottled water are embedded into daily life. Arsopi Thermal high quality plate heat exchangers enable the processing and maintenance of natural flavor, texture, appearance and nutritional value by carefully selecting the most suitable solution.



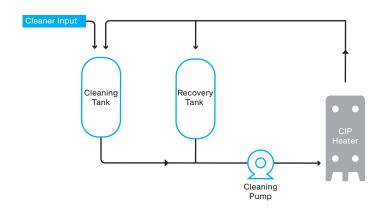




## **CIP - Effective Cleaning**

Cleanliness is a critical aspect of food and beverage production to guarantee premium quality and safety for customers. We strive to simplify cleaning and maintenance procedure.

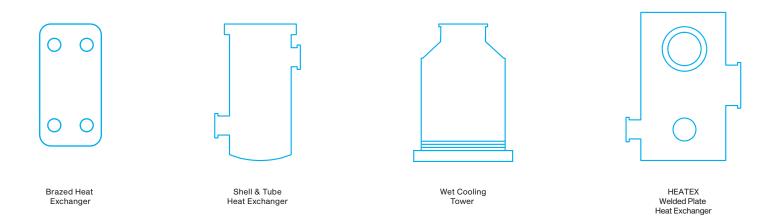
Our long-lasting construction and flow optimized design secures effective Cleaning in Place (CIP).



**CIP Flow Chart** 

#### **Additional Products**

"Adaptability" and "Flexibility" are Arsopi Thermal's strengths. We supply Heat Exchangers for a diverse range of products across various sectors, to provide cost-effective, energy saving and high-performing heat transfer solutions. Regardless of application.

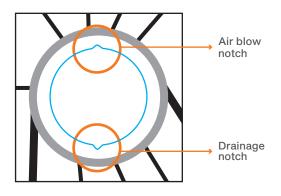


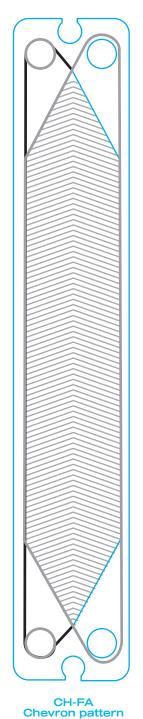
# Special plate for Food Application (CH-FX/CH-FA)

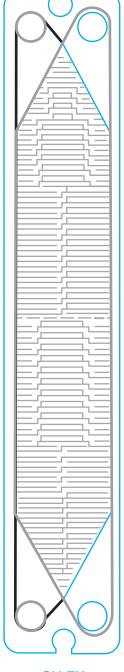
The plate pattern and pressing depth is designed for the gentle, uniform heat treatment of sensitive dairy, food, and beverage products.

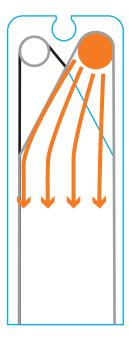
- Specifically designed for Food & Beverage industry
- Prevention of Flow Stagnation
- Complete draining and venting plate design
- Flexibility by the two patterns
  - Washboard pattern
  - Chevron pattern
- High Self-cleaning (CIP) effect, Long-Term Operation
- Gentle heat treatment
- Compatible with PTFE coated gasket (TCG)
- Reduced CIP chemical usage

#### **U-SHAPE**









Shoulder shape and uniform distribution pattern

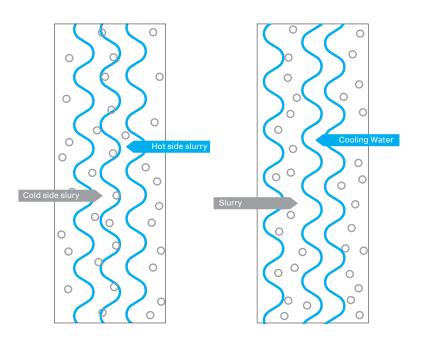
CH-FX Washboard pattern

## Multi Gap Plate (CH-GX)

# Specially made for liquids (sludge) or high viscosity fluids containing fibers and solids

- By combination of one plate arrangement gives 3 multiple-channel configurations
- Corrosion resistant materials such as titanium can be used
- Widest channel spacing (20 mm)
- Economic design
- Shorter maintenance time due to the glueless system gasket (Slit-In)





### **Applications**

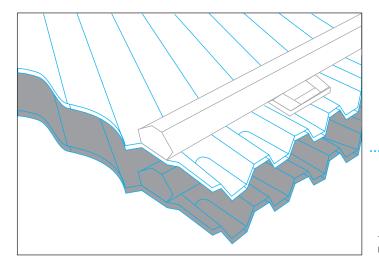
- Food
  - Solid-containing fluid: Juice with fiber, factory waste water
  - High viscosity fluids: Mayonnaise, various sauces, starch saccharification liquid, syrup
- Sugar
  - Solid-containing fluid: Raw juice, sugar making process such as the Steffen process, processed fluids, factory wastewater

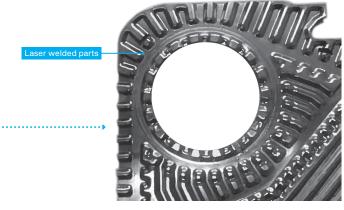
### **Dual Wall Plate (CH-CW)**

# The Dual Wall series for maximum safety against fluid mixing

The Dual Wall structure and Double seal gasket prevent a mix of the two fluids. In case one of the plates were to fail, the leak can be detected from outside because of leaking through the gap of the plates.

- Wide applications where possibility of mixing fluids is extremely dangerous or not permitted to avoid cross contamination between fluids
- Easily cleanable and accessible
- Size and cost reduction



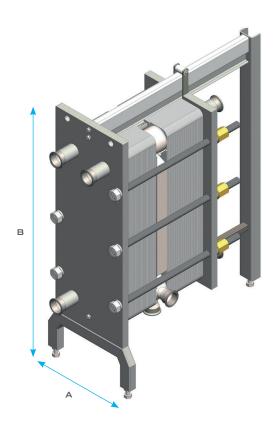


Two identical plates are stacked and laser-welded around the portholes

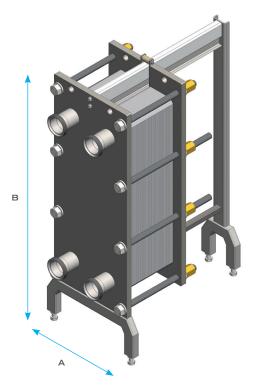
# Dimension of CH Plate Heat Exchangers

### **CH - Sanitary Application**

Model	Connection Diameter	Dimensions		
		А	В	
CH-UX00	25	210	450	
CH-UX01	50	350	973	
CH-UX10	65	490	1310	
CH-UX20	80	710	1845	
CH-UX30	80	770	2112	
CH-UX40	100	900	2370	
CH-LX00	50	355	885	
CH-LX10	100	460	1040	
CH-LX30	150	680	1897	



Model	Connection Diameter	Dimensions		
		Α	В	
CH-RX00	40	270	562	
CH-RX10	100	560	1390	
CH-RX30	150	830	2224	
CH-RX50	250	900	2370	
CH-FA10	40	260	1322	
CH-FX10	40	360	1322	
CH-FX03	50	410	1720	
CH-FX05	80	620	2357	



## **REQUEST A QUOTATION**

For a quotation for a Plate Heat Exchanger, please inform us the followings:

1. Heat Duty	kW		
	Hot stream	Cold stream	Product
2. Fluid name			
3. Inlet Temperature (°C)			
4. Pasteurization Temperature (°C)			
5. Outlet Temperature (°C)			
6. Flow rate (m3/h)			
7. Pressure loss (MPaG)			
8. Max working pressure (MPaG)			
Special notes: Plate/Gasket materials, thickness, etc.			
10. Batch (if batch process) Volume/Time			



# arsopi-thermal.pt

#### **Portugal**

#### **Head Office**

Rua Senhora da Graça 1212 +351 256 410 410 thermal@arsopi-thermal.pt

Food & Beverage Business Unit food@arsopi-thermal.pt

**Technical Assistance &** After-Sales Services +351 256 410 413 aftersales@arsopi-thermal.pt

#### **Spain**

#### **Delegation Basque Country**

basque-country@arsopi-thermal.pt

#### **Delegation Catalonia**

catalonia@arsopi-thermal.pt

#### France

#### **Delegation Auvergne-Rhône-Alpes**

auvergne-rhone-alpes@arsopi-thermal.pt

