

Heat transfer for sound performance

Tetra Pak® Heat Exchangers



Efficient and reliable heat exchangers for optimal results

We deliver efficient and reliable heat transfer solutions which enable you to meet your consumers' demands on safe and attractive food products.

Our range of flexible heat exchangers combines high performance with cost efficiency and low environmental impact.

We call this sound performance, because sound performance, in every part of your operation, is the basis for a sound and successful business.



Low energy and water consumption are typical features of all Tetra Pak® heat transfer solutions. Outstanding over all economy and reduced environmental impact are among the benefits.



Flexibility, reliability and simple operation are among the characteristics of our heat exchangers.



Heat exchangers from Tetra Pak build on thorough knowledge of the characteristics of thousands of liquid food products.

Here at Tetra Pak we have the knowledge and the equipment that will give you the optimal heat transfer solution. You will get an energy efficient and cost-effective process with minimal consumption of water and other resources. You will get flexible equipment that requires little maintenance. And within our wide range of heat exchangers there is always a suitable solution, no matter what products and raw materials you are processing.

Tetra Pak is also a partner you can depend on, with regard both to technical development and to detailed knowledge of different kinds of foods. Let us give you some examples:

WE WORK ONLY WITH FOOD. This means that our products are optimized to provide heating and cooling that is both gentle and effective, and makes the best of the food's characteristics.

WE HAVE THE EXPERIENCE. Many years of global work with solutions for food production have given us unique knowledge of how thousands of different food products should be processed to achieve the best possible result. You will have great use of this knowledge when you choose Tetra Pak as your solution provider.

WE KEEP UP with developments, and we have our ears to the ground when it comes to the market's and the consumers' demands on food and food production. And this applies not least to stricter environmental demands. We will help you optimize the heat treatment throughout your entire process, thus saving both money and the environment.

WE MAKE SURE that our heat exchangers measure up to stringent demands on operational reliability, hygiene and safety. They are built to withstand rough real-life demands with a minimum of maintenance.

Our organization and our products are characterized by solid quality awareness. As the world's leading supplier of heat transfer solutions to the food industry, we know how important it is that you and your customers can depend on your equipment functioning without problems. Day after day, year in and year out. That is why we have built up a global and seamless organisation for service and support. In a nutshell: we are there to provide sound performance.

Welcome to the Tetra Pak world of heat transfer solutions.



Knowledge and competence are effectively passed along and made available with ongoing training.



We understand the importance of taking good care of a trademark. Yours and our own.



Tetra Pak has an unsurpassed global organization for service and support.

Let your needs dictate your choice!

When you choose Tetra Pak as your supplier, you gain access to a broad product portfolio with a heat exchanger for every need. Together, we work out the technical solution that exactly suits your applications and that gives you the optimal final result.

Regardless of what you choose, you will have a heat transfer solution that meets very high demands on hygiene, flexibility and reliable operation, as well as being environmentally sound.

Tetra Pak® Plate Heat Exchangers

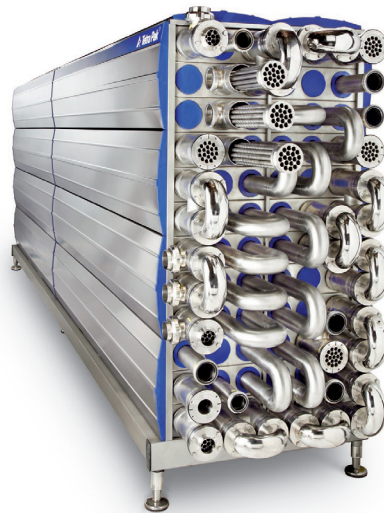
with plate excellence



- **Plate geometry**
Shape and porthole size designed for food processing results in gentle product treatment and easy cleaning.
- **Pressing pattern**
Robust design with effective product distribution, uniform flow and high heat transfer efficiency.
- **Clip-On gaskets**
Effective and durable sealing performance with service friendly design and safety features.
- **Easy to adapt**
A wide range of plates and gaskets, as well as a modular and strong frame, gives flexibility to meet future demands.

Tetra Pak® Tubular Heat Exchangers

with Floating Protection System



- **Floating Protection System**
A superior thermal stress absorbing design with quality, efficiency and flexibility benefits.
- **Inspectable**
All tubes can easily be opened for visual inspection of all parts.
- **Energy-efficient**
Six-metre tubes, protective panels and well-proven high product to product heat recovery in a compact frame with integrated holding cell.
- **Modular frame**
Easy to modify, rebuild and expand the unit through vast flexibility to combine tube designs and sizes.

Tetra Pak® Coiled Heat Exchangers

with excellence in design



- **High pressure rating**
Pressure rating up to 300 bar enables a reliable and stable production of low to very viscous products at high production capacities.
- **Efficient heat transfer**
Coiled tubular design enables good heat transfer efficiency for viscous products resulting in small system volumes, short retention time and less product losses.
- **Coiled tubular design**
Gentle product treatment with no sharp bends or moving parts allow for highest particle integrity and product safety.
- **Minimized media volumes**
Minimized media volume is achieved by designing the inner core as a pressure vessel open to atmosphere enables energy efficient operation.

Contherm®

scraped-surface heat exchangers
with complete and flexible design

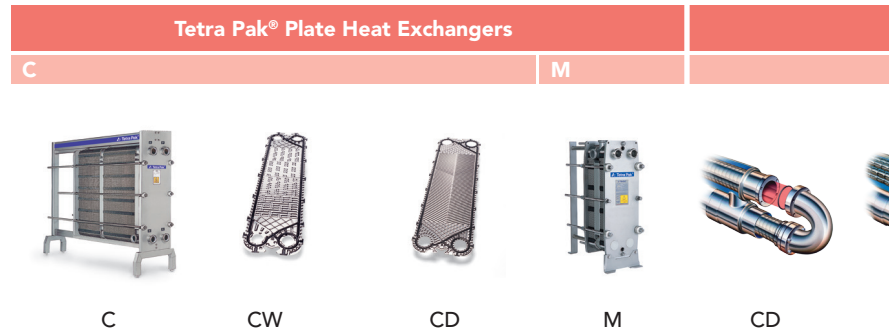


- **Adaptable configuration**
Complete portfolio of design options enables each unit to be optimally configured for any specific application need.
- **Gentle-flow design**
Tangential product inlet and outlet design, tapered rotor top and optimized rotor configuration secures gentle product treatment.
- **Scraping perfection**
Hinged-type blade mount and centrifugal force impact results in efficient scraping of the heat transfer surface, securing a fouling-free process and longer production times.
- **Integrated rotor lift**
Service-friendly design provides safe, quick and easy inspection and maintenance for efficient and flexible production.

One for every application

This spread will give you an overview of which heat exchangers are best suited for your specific applications.

● Recommended ● Suitable



SEGMENTS AND APPLICATIONS

	C	CW	CD	M	CD
DAIRY					
Milk cooling/heating	●		●	●	
Milk pasteurization	●		●	●	
Cream pasteurization/cooling	●			●	
Milk/Cream UHT	●				
Cultured milk cooling	●				
Concentrated milk heating	●				
Whey pasteurization	●		●	●	
Ice cream mix pasteurization	●				
BEVERAGE					
Clear juice/still drink/ water pasteurization	●	●	●	●	
Juice/nectar fibre < 5 mm pasteurization		●			
Juice/nectar <15 mm pasteurization					
Juice/nectar >15 mm pasteurization					
Clear juice concentrates	●		●	●	
Juice concentrates with pulp & fibre		●			
Isotonic sport drinks	●	●		●	
Tomato/vegetable juice		●			
Smoothies		●			
Soy milk/drinks UHT	●				
Tea/coffee UHT					
OTHER LIQUID FOOD					
Tomato products	●				
Fruit preparations			●		●
Fruit purees	●				
Fruit mash					●
Soups & Sauces	●				
Desserts	●				
Liquid egg products	●				●
Products with big particles >15 mm					●
Sticky products					
UTILITIES					
Heating of CIP	●			●	
Water and media heating/cooling	●			●	
MAXIMUM CAPACITY					
Pasteurization, l/h (low-viscous products)	100 000	30 000	65 000	80 000	30 000
Heating/cooling, l/h (low-viscous products)	150 000	30 000	65 000	100 000	80 000
Heating/cooling, l/h (viscous products)					
Water, l/h	200 000	75 000	130 000	200 000	
Max working pressure, bar(g)	16 (21)	7	10	10 (19)	80

Sound processing performance

Our job is to help you develop and improve your products and production.

The component solutions we deliver are specifically designed to:

- treat your products gently
- be as economical with resources as possible
- meet high demands on flexibility – in your present production and via future upgrading possibilities

That's what we call sound performance.