

KROMTECH MAKİNA SAN. ve TİC. A.Ş



INNOVATIVE THINKING

## HEAT EXCHANGERS FOR HYGIENIC USE



## GOOD DESIGN AND BEST PRODUCTIVITY

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Heat Exchangers are one of the most important equipments in the hygienic process. Sterilized products can be stored for long periods of time at ambient temperatures. Many producers use this system for sterilized their products and distribute over long distances and have a chance to find new markets in the hygienic food industry. There are many advantages for both the producer, the retailer and the consumer.

It has been recognized as the most general, cost efficient in direct cooling and heating method. and The companies which are working with liquid in the food industry such as milk, juice, egg, honey processing try to overcome contamination problems in their way of process. For instance, heating and cooling are the most important operations in dairy processing. In the milk industry heat treatment must be applied as quickly as possible after the milk has arrived at the dairy.

At this point, TSS is a Turkey based company focused on delivering the best solution to its clients. We design heat exchangers for the food, biopharm and other demanding industries. Our heat exchangers design will carry you to your purpose. You can put your process performance and hygiene in the capable hand of our experts. We have the tools and experience to design a solution together with you from our Sakarya, Serdivan based location. We have good design and best productivity solutions for you.

For complete technical details and product specification, contact our sales department or visit us at

[www.kromtech.com.tr](http://www.kromtech.com.tr)

# GASKETED PLATE HEAT EXCHANGERS

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Gasketed plate heat exchangers are the most common and efficient heat transfer solution in the world. Many industries use this system in various applications.

TSS gasketed plate heat exchangers are designed for various processes. Our design presents efficient and productive heating and cooling duties in demanding hygienic processes.

TSS designs gasketed plate heat exchangers depending on thermal program in hygienic processes and offers best solution to industries.

Industrial design, latest developments in material, high technology production methods and workmanship quality makes the difference in this business. Thanks to our industrial experience and production methods to design and produce most efficient gasketed plate heat exchangers in the heat exchangers industry.





- Cream Plate Cooler
- Raw Milk Plate Cooler
- Brine Plate Cooler
- Icecream Plate Cooler
- Ayrar Plate Cooler

- Heat Exchanger Before Vacuum
- Heat Exchanger After Vacuum
- Brine Heat Exchanger
- Cheese Milk Heat Exchanger
- CIP Heat Exchanger



## Flexibility designed in...

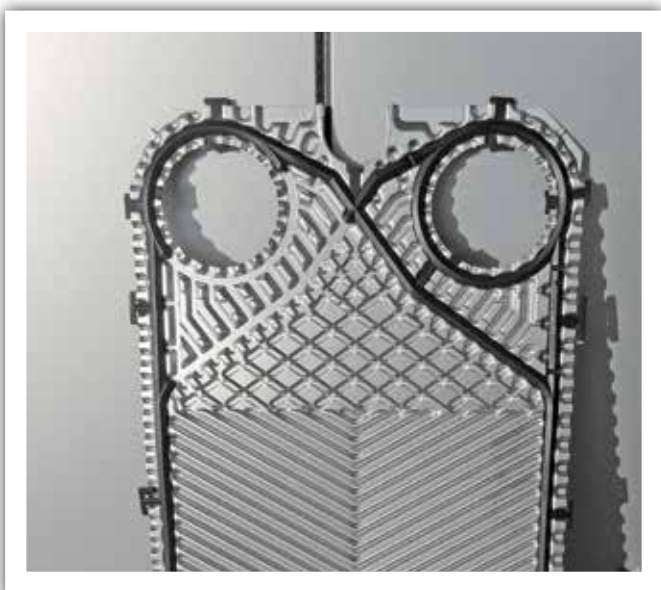
- High and low turbulence plates
- Many choices of material for both plates and gaskets
- Free-flow plate profiles available for high solids applications
- Titanium and AISI 316 plates for various applications
- Double wall design with predetermined leak paths to prevent cross-contamination
- Up to 60.000 lt/h capacity flexible design

## Standart Plates

TSS delivers standard plate heat exchangers as well as customized heat transfer solutions for any task. Plates pattern is designed to solve a variety of different heat exchanger applications.

## Freeflow and Titanium Plates

TSS "Free Flow" plates are used for liquids containing solids, particles, and high viscous products. The plates are commonly used in the pulp & paper industry, in waste water treatment plants, the sugar industry, juice production, grain based ethanol production and dairy applications heat recovery systems and for special tasks where standard plate heat exchangers usually will block. Titanium plates are durable in acidic settings and has a corrosion resistance.

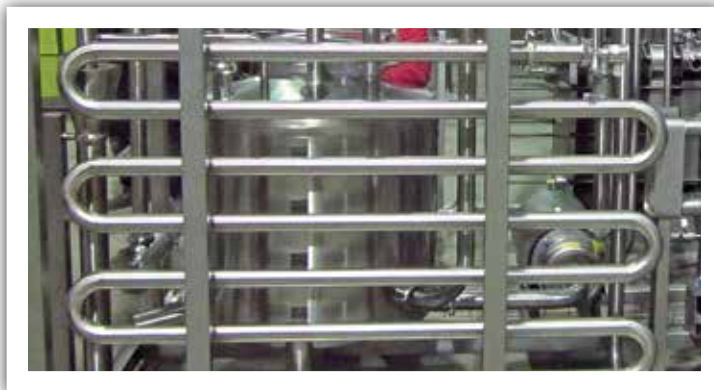


# SCRAPED SURFACE HEAT EXCHANGERS AND TUBULAR HEAT EXCHANGERS

## TSS/SSHE

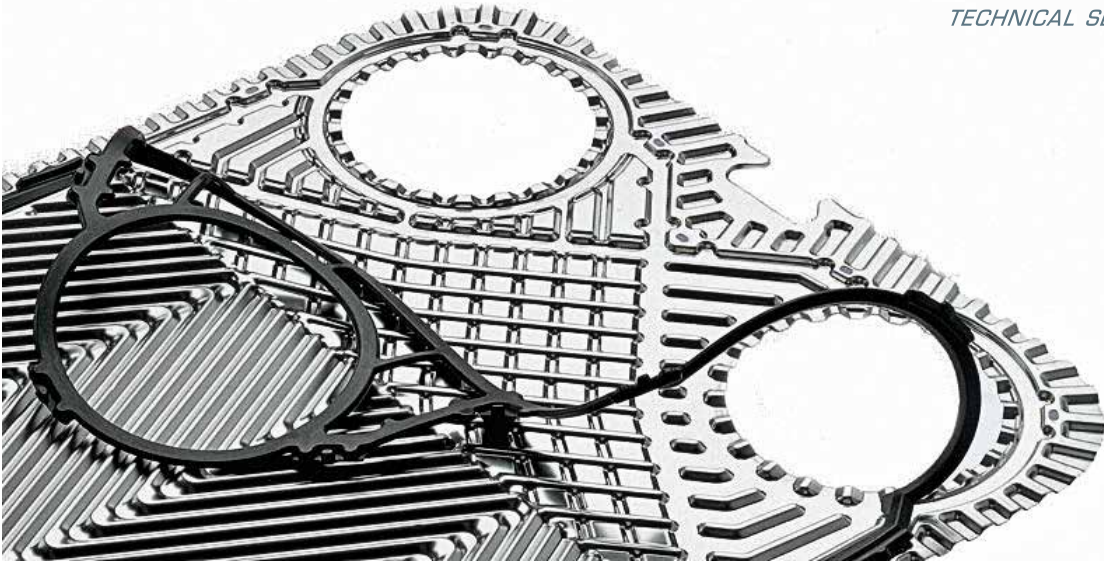
TSS Scraped Surface Heat Exchanger/Evaporator is designed to heat, cool or concentrate a wide variety of products particularly highly viscous, proteinaceous or heat sensitive liquids which tend to stick to or foul a heat transfer surface. TSS/SSHE achieves extremely high heat transfer rates by incorporating jackets on both the inner and outer walls of a narrow product annulus.

This dual jacketed design provides twice the heat transfer area of conventional scraped surface heat exchangers of the same size. During operation, the inner and outer wall of the product annulus are continuously scraped which prevents sticking or scorching of product feeds. The scraper blades provide for even heat transfer and homogeneity of product throughout processing.



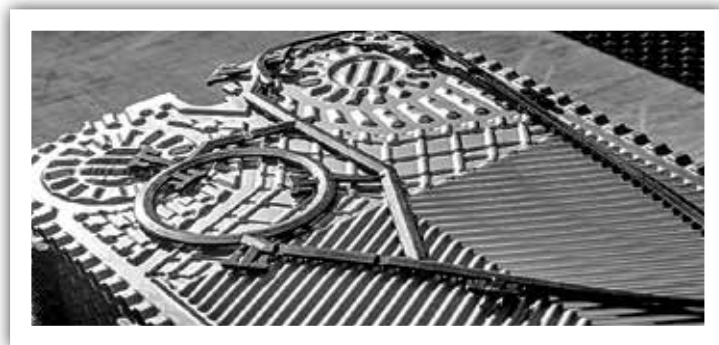
## TSS/S-TUBE

TSS range is a series of highly efficient tubular heat exchangers designed for gentle handling of low to medium viscosity products or products containing particulates. Widely used in the food and beverage industries, it is suitable for heating, cooling, pasteurization, UHT treatment, heat regeneration and other heat transfer duties.

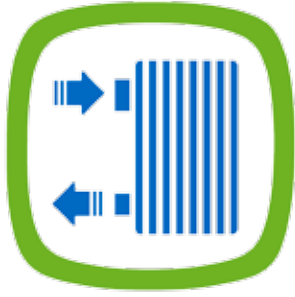


TSS has established as a dairy and food industry processing equipments producer in 2014, but it has a huge experience comes from both shareholder companies since 1980. TSS is a company which exports hygienic systems such as PHE, Pasteurization Systems, Membrane Filtration Systems, CIP Systems and turnkey cheese plants to Asia, Europe, North Africa and local markets. TSS is going to be a dominant company with R & D, innovation, product developing, planning, quality services in Turkey and abroad. Heat exchangers are one of the most important branch for us. This is because TSS offers you efficient, safety and hygienic heating and cooling solutions to your process. Each heat exchanger solution is computer designed and analyzed by technical specialists who generate a complete proposal providing optimum designs and alternatives.

Quotations are prepared on a timely basis with all technical information required for evaluation. Experienced, skilled workers manufacture components and assemble units using advanced technology and fabrication techniques. Here you will find an overview of TSS heat exchangers for hygienic applications. All design and manufacture is locally. Suitable for cooling-heating the food and industry applications. Each part and gasket is designed and manufactured accord with sanitary standard.



- GASKETED PLATE HEAT EXCHANGERS
- TUBULAR HEAT EXCHANGERS
- SCRAPED SURFACE HEAT EXCHANGERS



**INNOVATIVE THINKING**

Put our services to the test,  
contact us for a free consultation  
today.



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