Pasteurizer
Our Main Focus

Heat Transfer Section
- Plate Heat Exchangers
- Brazed Heat Exchangers
- Flat Stations
- Shell and Tube Heat Exchanger

Pressure Vessel Section
- Water Heater Tanks
- Accumulation Tanks
- Stainless Process Tanks
- Expansion Tanks
- Balance Tanks

Separator Vessels Section
- Balance Tanks
- Dirt Separators
- Air Separators
- Package Dirt And Air Separators
- Package Balance Dirt And Air Separators

Liquid Transfer Section
- Rotary Lobe Pumps
- Barrel Pumps
- Mono Pumps
- Domestic Pumps
- Air Diaphragm Pumps
- Twin Screw Hygienic Pumps
- Magnetic Coupling Centrifugal Pumps
- Hygienic Centrifugal Pumps
- Peristaltic Hose Pumps
- Dosage Pumps
Sustainable Innovation, Quality Standardization and Dynamism

Ekin Industrial has entered Turkey’s sector of imported plate heat exchanger, with their customer focused vision and dynamic. Ekin has expanded into new and upcoming investments.

One of the main steps was gaining the identity of being a producer. Ekin Industrial has started the production of plate heat exchangers with the brand of ‘MIT’. We grew in the philosophy of quality, through initially adapting to ISO Quality Management System procedures, and completed the CE security and quality certification period, and has matched foreign standards like GOST.

MIT plate heat exchangers have now become a solution to engineering problems in the world market and has grown through an expansion of franchises.

Ekin Industrial, with investment in MIT plate heat exchangers, their identity of producer and engineer vision is aiming to solve problems in the sector. To meet these views, Ekin Industrial has expanded into the production of components, sales and after sales service by employing expert engineers.

The factors that guided Ekin Industrial to success are their exceptional customer service to the needs and wants of consumers, modern facilities, and becoming partners to projects that involve high-end technology.

Ekin Industrial is an expert company which has wide product range which includes plate heat exchangers, accumulation tanks, water heater tanks, installation materials and its service group and submit competitive advantages to mechanical installation sector in Turkey and all around the World.
What is pasteurizer?

Pasteurizer is a machine which pasteurizes. It is possible to pasteurize products like milk, cream, juice, rose water, ketchup, mayonnaise, bier, wort, fruit sauce, wine etc…

How does pasteurizer work?

Plate pasteurizer are formed many serial plates. Gaskets which resist high temperature, are placed between the plates. These gaskets prevent the mixing of the fluids which flow on the plates.

These plates have 95-125 mm thickness and made of stainless steel. Patterns on the plates create turbulence, increase the heat transfer area and stretch out the time of heat transfer.

Pasteurizer

1- Balance tank
2- Feed pump
3- Flow control
4- 1. and 2. Regeneration
5- Separator
6- Heater
7- Holding tube
8- Booster pump
9- Heat water system
10- Cooler
11- Cooler
12- Valve
At first, milk comes to balance tank, the purpose of coming here is continuation of milk feeding on the system. Milk is filled to balance tank and input is fixed to pipeline.

Milk is transferred to 1. pasteurization stage with the help of pumps. Here, milk comes across the high temperatured milk which is pasteurized before. There is no direct contact between 2 different kinds of milk during this process because of the plates.

Cold milk heats up to 55 °C after above stage then pumped to seperator. This temperature is the optimum one to seperate the cream of the milk, that is why milk is pumped to seperator.

The standartized milk is pumped to 2. regeneration stage.

In this stage, milk comes across milk which comes from holding tube. (holding tube will be explained later)

During this process, milk reaches 60-70 °C temperature.

Milk is transferred to heating area and heated with hot water.

With this way, milk is heated slowly till pasteurization temperature.

Pasteurization temperatured milk is transferred to holding tube which is mentioned before. Here, milk is waited for a while to put away harmful bacteries inside of it.

Holding tube consist long zig zag typed tubes system. The purpose of this operation is to keep milk at pasteurization temperature for a certain time.

This time is average 15 seconds.

There is a valve and thermometer exist at end of the holding tube. If the temperature of the milk is not suitable, valve works automatically and milk is transfered to beginning of system to pasteurized again.

If there is not any problem for the temperature, milk from the holding tube is transfered again to 2. and 1. regeneration stages.

Here, pasteurized milk is cooled with raw milk. At the same time raw milk is heated.

In this manner, energy is significantly recovered.

Finally, pasteurized milk is pumped to cooling stage and cooled with iced water.

The most important point of the pasteurization is using pasturized milk to heat raw milk till 65 °C temperature. After this point, we just need to provide extra heat to increase for the 65 °C temperatured milk till reach 90 °C temperature.

Because of using 90°C temperatured pasteurized milk to heat raw milk till 65 °C, we recover considerably energy.
Milk UHT Sterilizer

Sterilizer, milk and milk products, especially for the high temperatures (> 130 °C) is a unit specially designed to reset the microbial load.

Plate heat exchangers can be made with a tubular heat exchanger systems, as well as systems and long-lasting due to the high pace of work is preferred.

Made at temperatures above the boiling point, especially in these processes, product and service water flow and temperature controls adjust the pressure between the work requires careful and thoughtful. In addition, as an alternative to direct steam injection method, a process is also available.
Fruit Juice Pasteurizer

Fruit juice, nectar, a low acidic (pH <4.6), isotonic drinks and pulplu manufactured products, such as a system for pasteurization.

Pasteurizers, tubular or plate heat exchangers, aseptic filling or hot filling in the form of the product and packaging according to the need to have the option.

For the removal of dissolved oxygen in the product which can be added optionally as a deaerator. In addition, an option would be to improve product quality pulplu homogenizer used products. System is fully automatic, semi-automatic or manual can be designed as a system.
Fruit Juice - Syrup Preparation Unit

Pre-pasteurization of fruit juice, nectar, a unit that is designed for the preparation of such products.

According to the prescription, the required amounts of sugar syrup, fruit concentrate, water and acidity regulators working in the correct proportions for the fully automated system. Pasteurization tanks will be prepared for the final syrup product.

The system control panel, sugar thawing unit, concentrated dosage unit and the final product tanks with flat lines, connecting them to a field of valve groups.
CIP Systems

Production before / after-line cleaning / sanitation in the dairy industry is the only unit in the CIP does not allow making, soft drinks, carbonated drinks and ready-designed form suitable for use in the food industry.

The main feature of all models and washing chemical to the water circulation within the system. Working with a fully automatic device, these systems have a conductivity meter in order to ensure chemical savings.

The system is part of a chemical tank and of the chemical solution is recovered. CIP systems can be designed in accordance with requirements and specifications of different capacity. L/h- 7,000-50,000 l / h capacity can be supported by more than one type of chemical, thermal or chemical disinfection of sanitation options may be offered.
Turnkey Solutions

All process design, equipment selection and installation can be made according to customer requirements.

Turnkey, variable capacity and other product-specific options, the purchase of milk, raw milk storage, pasteurizer, pasteurized milk storage, sterilization (UHT) aseptic storage and from CIP unit consists of SCADA and their follow-up can be done.
Milk Pasteurizer

Needed for the pasteurisation of milk and milk line.

Pasteurizer system, as well as the basic heat treatment unit separation, standardization, deaeration, homogenization, filtration, and according to the type of operation also includes bakteriyofugasyon units.

Level of automation is shaped according to customer demands.
- Milk pasteurizer
- Cream pasteurizer
- Cheese / Yogurt Milk Heating Units
Liquid food production and filling process is essential to fulfill the function of the complex integration as a whole.

Reporting and data storage and software applications should be conducted in parallel with the production of food production should have a detailed background.

Are making in automation systems, advanced information technology represents the combination of vast experience. Our use of industry standard software and hardware packages, completely eliminates the problems of communication in food production plants.
Desing of Pasteurizer

Ekin Industrial MIT brand pasteurizers are designed regarding to our customers’ expectactions.

Equipments which are prepared according to demands and datas,are drawn by technical draftsman and presented to our customers.
Our Certificates

TÜRKSTDARI
TİRQUM
ZENTRAL VERITEN KOLLEGE

ÜRÜN UYGUNLUK SERTİFİKASI
ORTA ANADOLU İHRACATÇI BİRLİKLERİ GENEL SORUŞTURULMUŞ
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TÜRKSTDARI

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Certificate of Registration
This is to certify that Information Security Management System of EKİN ENDÜSTRİYEL İSTİHA SÜSTÜMA SAN. VE TİC. LTD. ŞTİ. complies with the requirements of ISO 27001:2005

This certificate is valid concerning all activities related to:

ISO 27001:2005

Certificate No. 13-110
Issue Date: 31.01.2014
Expiry Date: 30.01.2017
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