EKİN ENDÜSTRİYEL

PLATE HEAT EXCHANGERS PRODUCT CATALOGUE

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EKİN ENDÜSTRİYEL
Isıtma-Soğutma San. Tic. Ltd. Şti.

Sustainable Innovation, Quality Standardization and Dynamism

Ekin Endustriyel, which has entered Turkish heating sector by exporting of plated heat exchangers, is known with customer focused vision and dynamism. Ekin has expanded into new and upcoming investments. One of the main steps was gaining the identity of being a producer. Ekin has started the production of plate heat exchangers with the brand of "MIT". We have grown in the philosophy of quality, through initially adapting to ISO Quality Management.

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

Engineering Approaches, Integrated Solutions

Ekin has expanded into the production of components, sales, and after-sales service by employing expert engineers. The factors that guided Ekin 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 is an expert company which has a wide product range which includes plate heat exchangers, accumulation tanks, water heater tanks, installation, and its service group and submit competitive advantages to mechanical installation sector in Turkey and all around the world.

ISO CE GOST CERTIFICATE 799 33 13 TSE-HYB TURQUM® TURKISH QUALITY OF MACHINERY

APPLICATION FIELDS

HEAT TRANSFER PRODUCTS

• Gasketed Plate Heat Exchangers • Brazed Heat Exchangers • Shell&Tube Heat Exchangers • Air Fan Oil Cooler • Economizers • Coils and Radiators

PRESSURE VESSELS

• Water Heater Tanks • Water Storage Tanks • Buffer Tanks • Expansion Tanks • Stainless Steel Process Tanks • Balance Tanks / Dirt Separators / Air Separators • Pressured Air Tanks • Neutralization Tanks • Air Tubes • Steel IBC Tanks with ADR

COMPLETE SYSTEMS UNITS

• Heat Stations • Steam Package Systems • Special Designed Systems • Dosing Systems • Substations • Thermoregulators

FOOD GRADE SYSTEMS

• Pasteurizers with plate heat exchangers • Hygienic Pasteurizers with Shell & Tube Heat Exchangers • Cheese and whey Systems • UHT – Sterilization Systems • CIP Systems • Hygienic Storage and Process Tanks • Homogenizers • Standartization Systems • Evaporators • Turn-key Projects

FLUID TRANSFER PRODUCTS

• Lobe Pumps • Hygienic Centrifuge Pumps • Turbo / Roots / Centrifuge Blowers • Drum Pumps • Acid Pumps • Dosing Pumps • Monopumps • Air operated Double Diaphragm Pumps (AODD)

VALVES

• Thermoplastic Valves
• Plastomatic Valves

ENERGY SYSTEMS

• Solar Collectors
• Water Heater Tanks for Solar

Contents

MIT PLATE HEAT EXHANGERS

MIT, one of the most known and preferred brands of Turkey, has been continuing creating new ideas and developments to improve plate heat exchanger sector.

Ekin aims to develop its product range and the most concrete proof of this determination is MIT plate heat exchangers.

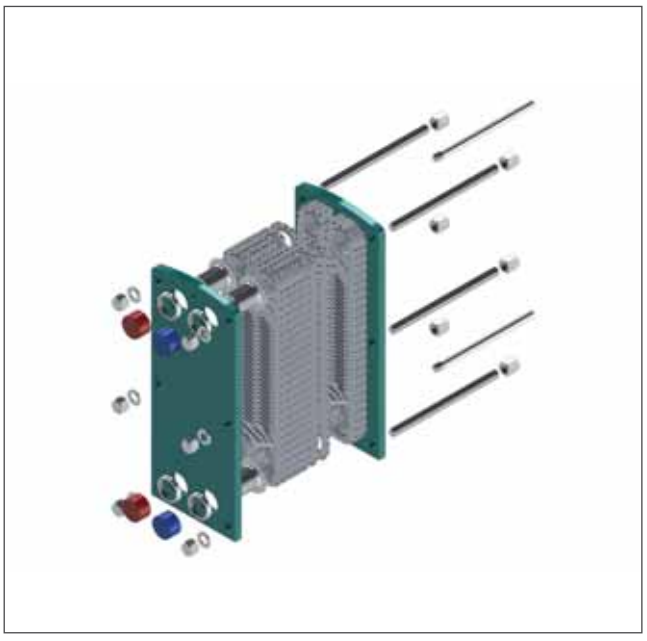
Working Principle of MIT Plate Heat Exchangers

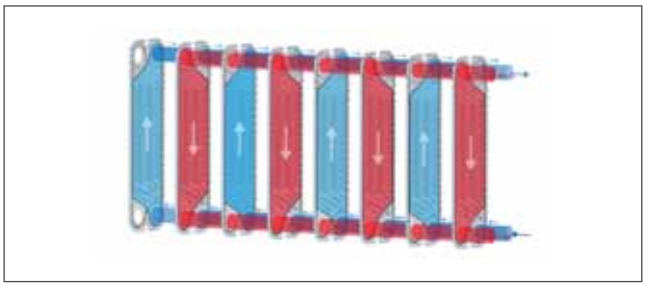
Plate heat exchangers are devices that operate according to the principle of heat transfer between two different fluids with temperature difference. Heating fluid and the fluid to be heated are completely separated by plates.

The standard plate heat exchangers have a total of four inlet-outlet ports, two of which are the inlet and outlet of the heating fluid and the other two of the fluid to be heated. It is also possible to produce heat exchangers with more than one heater or heating fluid with customized production.

Components

- Front body with input-output connections and information,
- Upper and lower carrying bar used to secure the plates,
- The first plate that prevents the liquid from contacting with the body,
- Flow plates that allow the passage of fluids and heat transfer,
- Completely closed end plate, which prevents fluid from coming into contact with the rear body,
- Rear body that can move on the bar,
- It consists of studs and knots, which ensure that the plates are kept at a certain size.

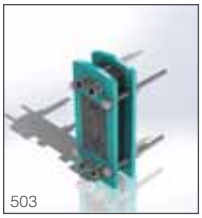




The label on the front body specifies the information of;

- Model information,
- Production number,
- Capacity information
- Maximum and minimum working temperature,
- Test and operation pressure,
- Minimum tightening size,
- Ekin contact information is available.

MIT PLATE HEAT EXCHANGERS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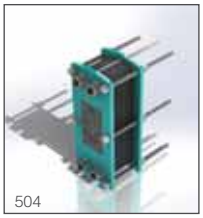
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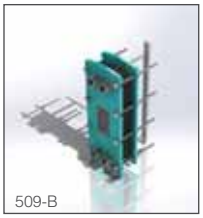
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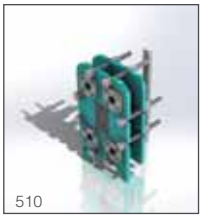
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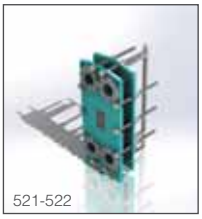
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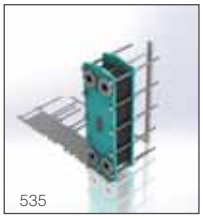
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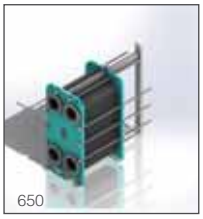
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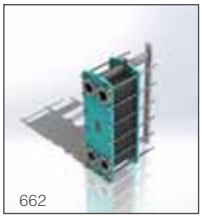

662

Model	503	504	505	508	509	510	513	514	517	520
Width (mm)	167,5	200	200	292	292	425	350	350	340	436,5
Height (mm)	397	490	490	782	782	704	942	942	1070	980
Distance Between Connections (Horizantal mm)	50	72	59,5	100	100	203	140	140	150	190
Distance Between Connections (Vertical mm)	298	383	356	546	546	380	640	640	800	608
Max. Operating Pressure (bar)	25	25	25	25	25	25	25	25	25	25
Test Operating Pressure (bar)	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5
Connection Diameter	1" Threaded	1 1/4" Threaded	1 1/4" Threaded	2" Threaded/ Flanged	2" Threaded/ Flanged	2 1/2" Threaded/ Flanged	2" Threaded/ Flanged	2" Threaded/ Flanged	2 1/2" Threaded/ Flanged	3" Flanged

Model	521	522	523	535	547	650	662	685	6125	6180
Width (mm)	470	470	327	465	491	765	608	780	920	1190
Height (mm)	1090	1090	1292	1445	1775	1485	1830	2100	2895	2920
Distance Between Connections (Horizantal mm)	223,5	223,5	140	238	222,5	366	297	353	439	596
Distance Between Connections (Vertical mm)	718	718	1036	1070	1338	935	1292	1478	1939	1842
Max. Operating Pressure (bar)	25	25	25	25	25	25	25	25	25	25
Test Operating Pressure (bar)	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5	37,5
Connection Diameter	4" Flanged	4" Flanged	2" Threaded/ Flanged	3" Flanged	4" Flanged	8" Flanged	6" Flanged	8" Flanged	10" Flanged	12" Flanged

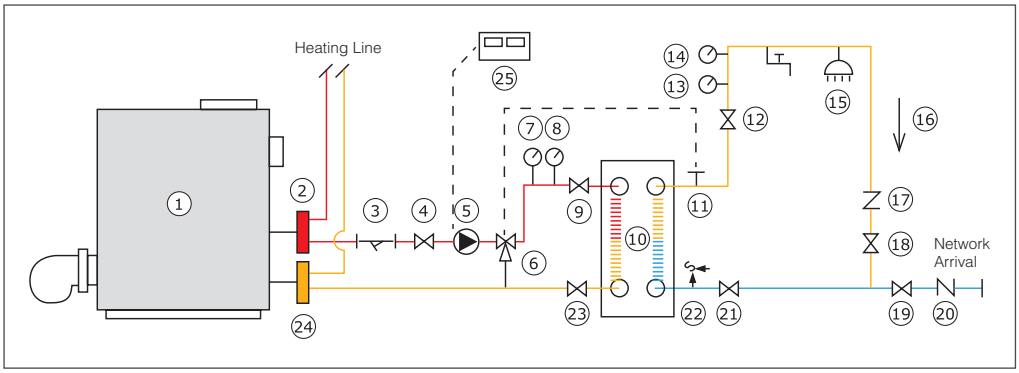
Materials	
Plate Material	AISI 316, Titanium, Hastelloy
Connection Material	Carbon Steel, Stainless Steel, Plastic
Body Material	Carbon Steel, Stainless Steel
Gasket Material	EPDM, EPDM-HT, NBR, H-NBR, VITON, VITON-G

HVAC - HEATING, COOLING AND VENTILATION

Usage Areas

Domestic Hot Water

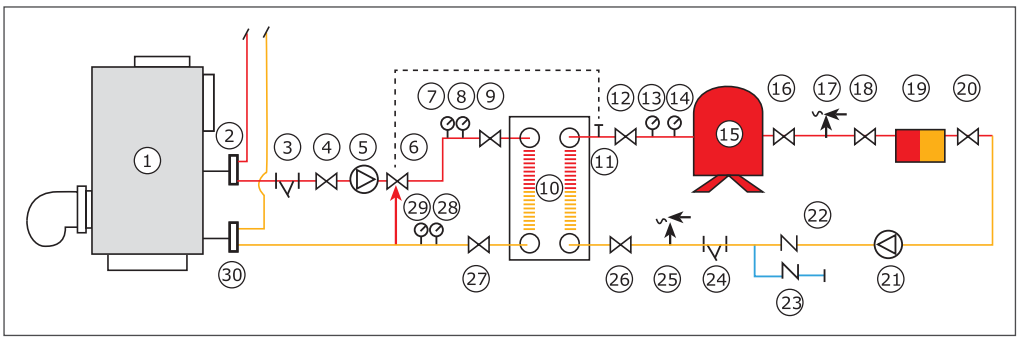
Domestic hot water in industry and housing is a must for comfort. With MIT plate heat exchangers, your domestic water can be produced centrally or individually. Compared to old systems, it is more hygienic, more efficient, longer lasting, more economical and more compact. With this system, your system can achieve its old performance with minor revisions, instead of replacing the system in case of problems such as residual calcification and excess chlorine-induced deformation.



1	Boiler	6	Threeway rational valve	11	Temperature Sensor	16	Recirculation	21	Valve
2	Line Collector	7	Thermometer	12	Valve	17	Check Valve	22	Safety Valve
3	Dirt Holder	8	Manometer	13	Thermometer	18	Valve	23	Valve
4	Valve	9	Valve	14	Manometer	19	Valve	24	Returning Collector
5	Pump	10	Heat Exchanger	15	Usage Area	20	Check Valve	25	Control Panel

Radiator Heating

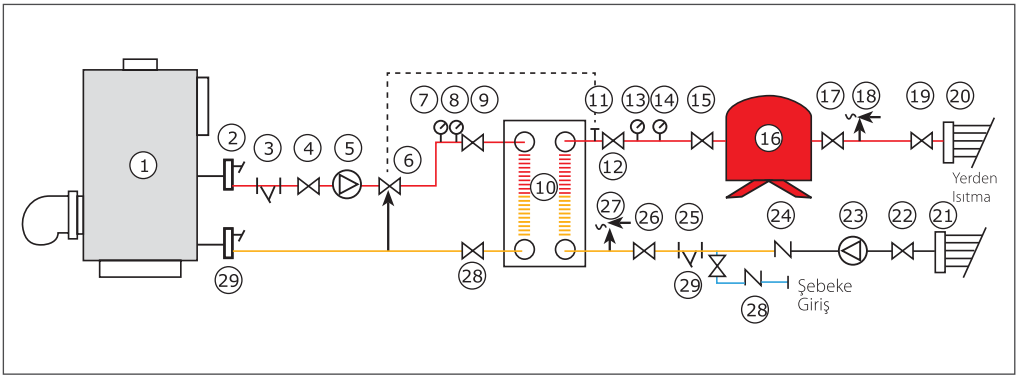
By using hot water from sources such as regional heat centers, geothermal resources and electricity generation facilities; a region, a district, even a complete province can be heated. With the MIT plate heat exchangers specially designed according to the type of the source, the zone can be separated into zones and placed under each building and hot water can be produced according to the needs of the buildings.



1	Boiler	7	Thermometer	13	Thermometer	19	Radiator	25	Safety Valve
2	Line Collectors	8	Manometer	14	Manometer	20	Radiator Valve	26	Valve
3	Dirt Holder	9	Valve	15	Expansion Tank	21	Circulation Pump	27	Valve
4	Valve	10	Heat Exchanger	16	Valve	22	Check Valve	28	Thermometer
5	Circulation Pump	11	Temperature Sensor	17	Safety Valve	23	Check Valve	29	Manometre
6	Threeway Valve	12	Valve	18	Radiator Valve	24	Dirt Holder	30	Returning Collector

Floor Heating Systems

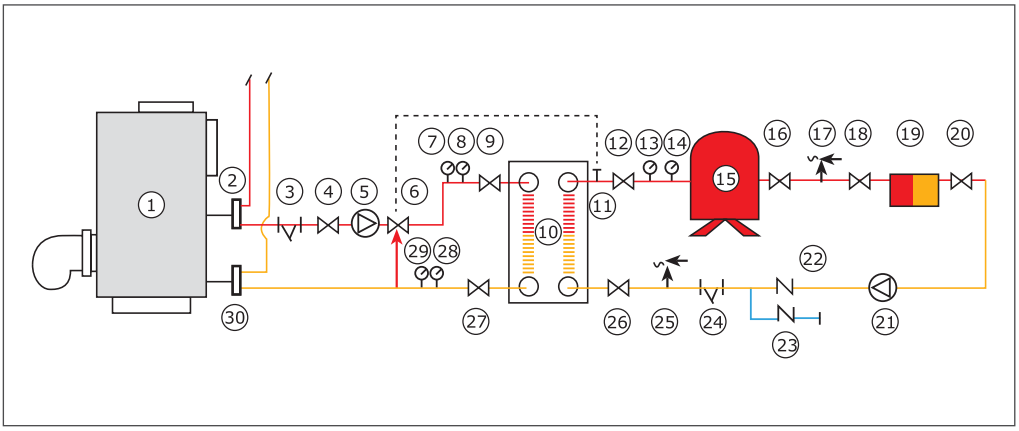
The MIT plate heat exchangers, which are used to prevent the heating source from being affected by corrosion in underfloor heating systems, which are frequently used in areas where more heating comfort is desired recently, serves as a protective wall between the heated area and the heating source. Thanks to its high corrosion resistance, carbon steel body, stainless steel plate and special designs, MIT plate heat exchangers guarantee years of trouble-free operation.



1	Boiler	7	Thermometer	13	Thermometer	19	Valve	25	Dirt Holder
2	Line Collectors	8	Manometer	14	Monometer	20	Floor Heating Going Collector	26	Valve
3	Dirt Holder	9	Valve	15	Valve	21	Floor Heating Returning Collector	27	Safety Valve
4	Valve	10	Heat Exchanger	16	Expansion Tank	22	Valve	28	Valve
5	Circulation Pump	11	Temperature Sensor	17	Valve	23	Circulation Pump	29	Returning Collector
6	Threeway Valve	12	Valve	18	Safety Valve	24	Check Valve		

Pressure Breaker

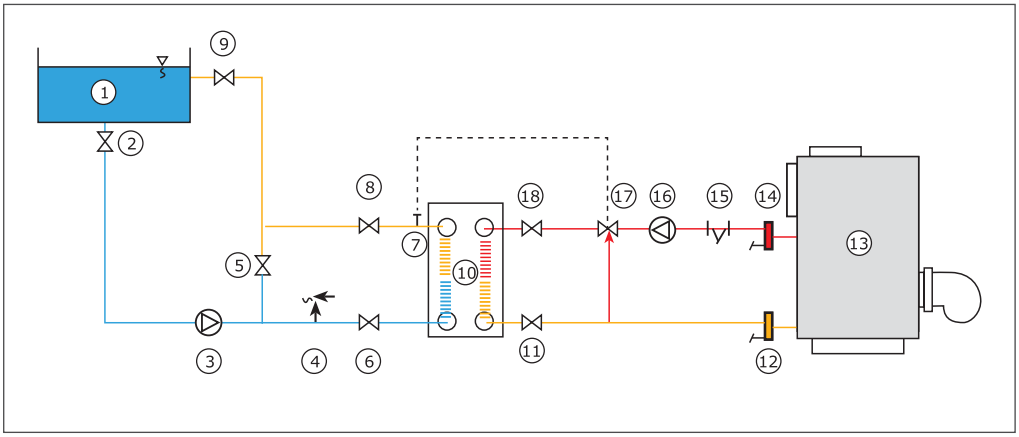
In high-rise buildings, severe pressures arise from the height of the system. Sending this pressure from the system to the bottom of the heating-cooling system causes the system to overload and fatigue. In addition, the initial investment cost is very high since the installation is to be installed with high pressure armatures. In these systems, MIT plate heat exchangers which are resistant to high pressure to be placed between the boiler room or the cooler group and the installation meet the pressure coming from the system and ensure the boiler-cooling system in the primary circuit to operate at low pressures.



1	Boiler	7	Thermometer	13	Thermometer	19	Radiator	25	Safety Valve
2	Line Collectors	8	Manometer	14	Monometer	20	Radiator Valve	26	Valve
3	Dirt Holder	9	Valve	15	Expansion Tank	21	Circulation Pump	27	Valve
4	Valve	10	Heat Exchanger	16	Valve	22	Check Valve	28	Thermometer
5	Circulation Pump	11	Temperature Sensor	17	Safety Valve	23	Check Valve	29	Manometre
6	Threeway Valve	12	Valve	18	Radiator Valve	24	Dirt Holder	30	Returning Collector

Swimming Pool Heating

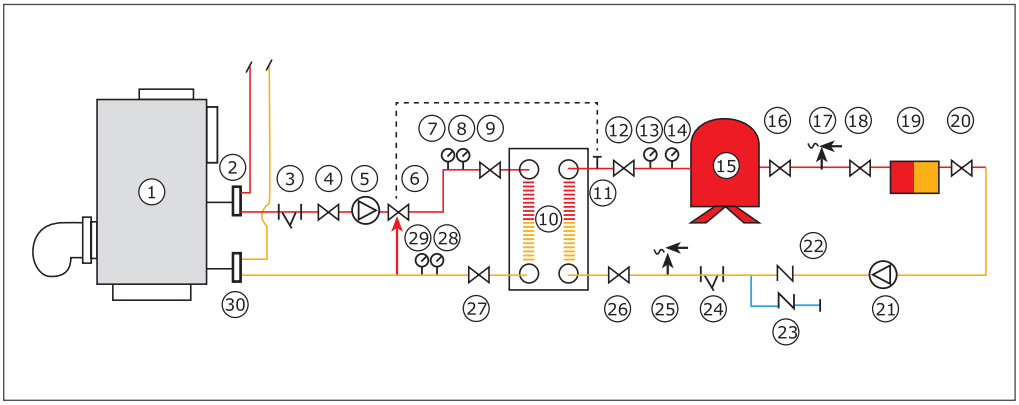
All the pools must be between certain temperatures, whether for swimming pool or health. MIT plate heat exchangers are used with the help of simple automation to keep the pools between the desired temperatures. Due to their compact design, the MIT plate heat exchangers cover very little space in the engine room of your pool, allowing you to keep the pool at the desired temperature.



1	Pool	5	Valve	9	Valve	13	Boiler	17	Threeway Valve
2	Valve	6	Valve	10	Heat Exchanger	14	Line Collector	18	Valve
3	Pool Circulation Pump	7	Temperature Sensor	11	Valve	15	Dirt Holder		
4	Safety Valve	8	Valve	12	Returning Collector	16	Boiler Circulation Pump		

Central Heating Systems

As a part of new laws in our country, central systems are encouraged and it has been becoming mandatory in some situations. The main cause oft his is that central system is more efficent compared to individual use and consumes less energy. MIT Plate Heat Exchangers are able to produce hot water for heating of residental areas and for utility purposes.

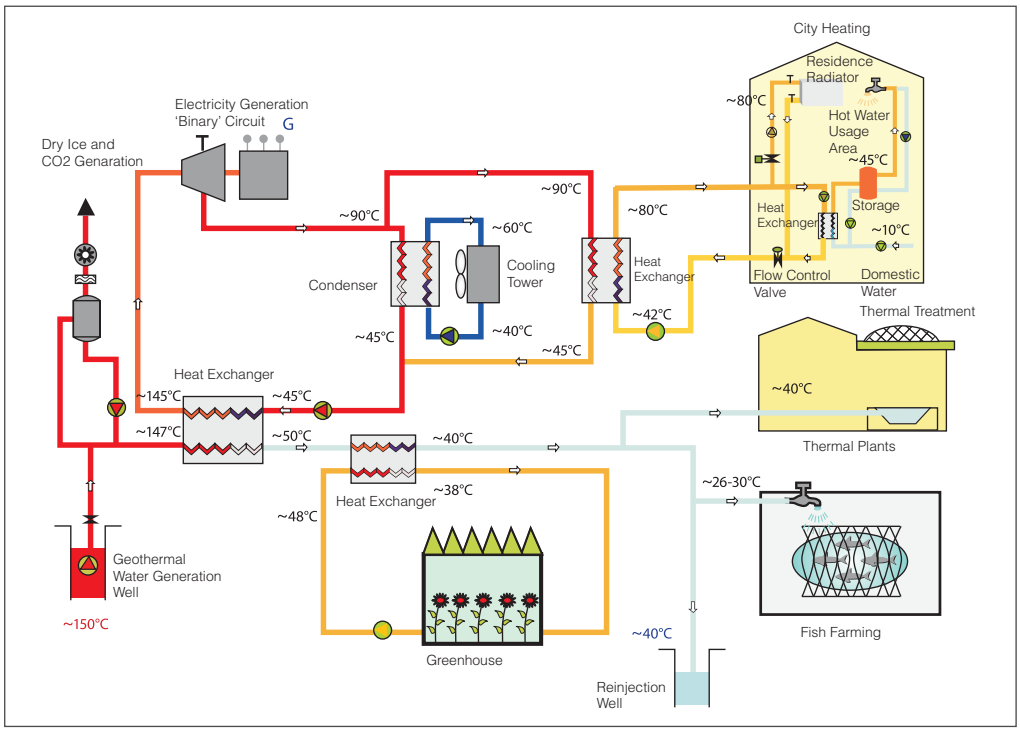


1	Boiler	7	Thermometer	13	Thermometer	19	Radiator	25	Safety Valve
2	Line Collectors	8	Manometer	14	Manometer	20	Radiator Valve	26	Valve
3	Dirt Holder	9	Valve	15	Expansion Tank	21	Circulation Pump	27	Valve
4	Valve	10	Heat Exchanger	16	Valve	22	Check Valve	28	Thermometer
5	Circulation Pump	11	Temperature Sensor	17	Safety Valve	23	Check Valve	29	Manometre
6	Threeway Valve	12	Valve	18	Radiator Valve	24	Dirt Holder	30	Returning Collector

ENERGY

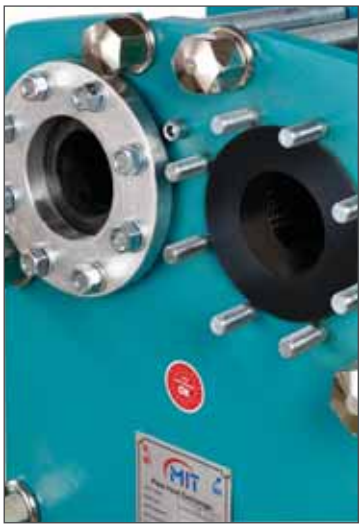
Geothermal Heating Systems

Turkey is rich in geothermal resources and after the recent energy crisis, Turkey has accelerated its investments in this field. MIT plate heat exchangers, which are used in both domestic heating and domestic water production, proved their success in the sector and became one of the most preferred brands in this regard.



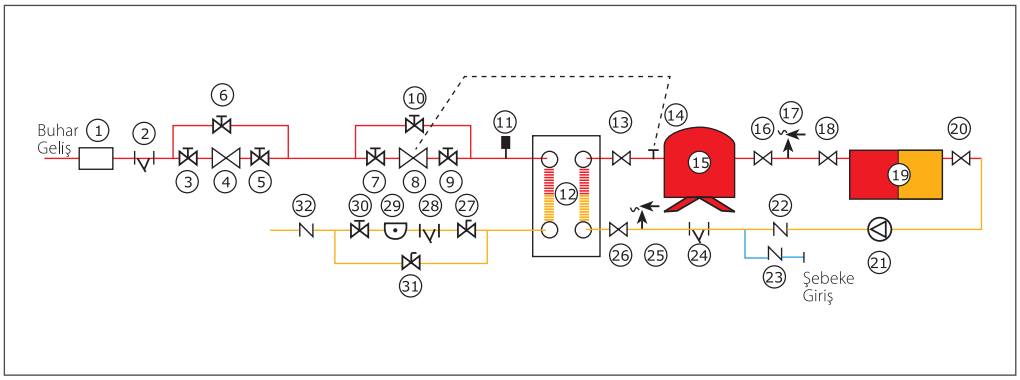
Heat Recovery Systems

In today's conditions, where energy is getting more expensive day by day, there is no need to waste energy in industry or individual use. The budgets allocated to energy in industrial establishments have increased by 20% -40% in recent years and they are at the top of the expenses section. Taking all these points into account, the recovery of energy has become very important. MIT plate heat exchangers prevent the waste of your thermal energy with wide variety of plate and gaskets suitable for each system.



Power Generation Plants

Thermal power plants are places where electricity is produced, as well as very large sources of hot water. Extra systems for cooling the hot water that is generated in these systems are installed and a lot of money is spent. At this point, MIT plate heat exchangers are activated and they provide free cooling of water in these systems as well as providing a complete heating of the area with the heat energy taken from it.



1	Seperator	7	Valve	13	Valve	19	Radiator	25	Safety Valve
2	Dirt Holder	8	Thermostatic Valve	14	Temperature Sensor	20	Valve	26	Valve
3	Valve	9	Valve	15	Expansion Tank	21	Circulation Pump	27	Valve
4	Pressure Reducer	10	Valve	16	Valve	22	Check Valve	28	Dirt Holder
5	Valve	11	Vacuum Breaker	17	Safety Valve	23	Check Valve	29	Steam Trap
6	Valve	12	Heat Exchange	18	Valve	24	Dirt Holder	30	Valve

Solar Energy Systems

When it comes to alternative energy, the first thing that comes to mind is solar energy systems. In these systems, which provide free energy for domestic hot water supply and residential heating, MIT plate heat exchangers, which are used as instant water heater, provide more efficient and safer operation of the system and thus prolong the life of the system.

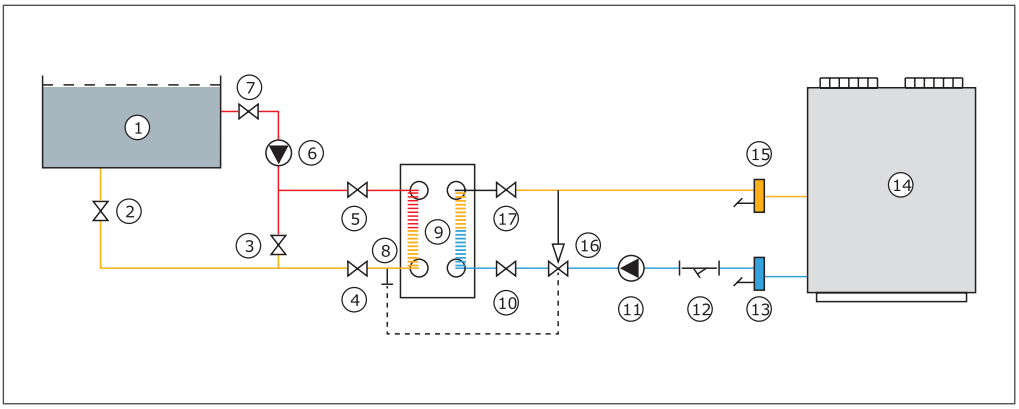
INDUSTRY

Cooling of Rolling Oil

The oil used in the rolling mills becomes hot as a result of the process and the lubricating properties are reduced; as a result, operating performance isreduced. MIT plate heat exchangers are used to keep the rolling oil at optimum temperature. With the cooling tower and the chiller circuit connected to the secondary circuit of the heat exchanger, and a simple automation, your rolling oil remains constant at the desired temperatures and your plant operates at maximum performance.

Boron Oil Cooling

Boron oil, one of the cornerstones of industry, is the lifeblood especially for metal cutting. The quality and temperature of the boron oil are very important for maximum efficiency and maximum life from the cutting edge. In order to keep the boron oil at optimum temperature, the cooling tower or chiller used with MIT plate heat exchangers provides maximum efficiency.



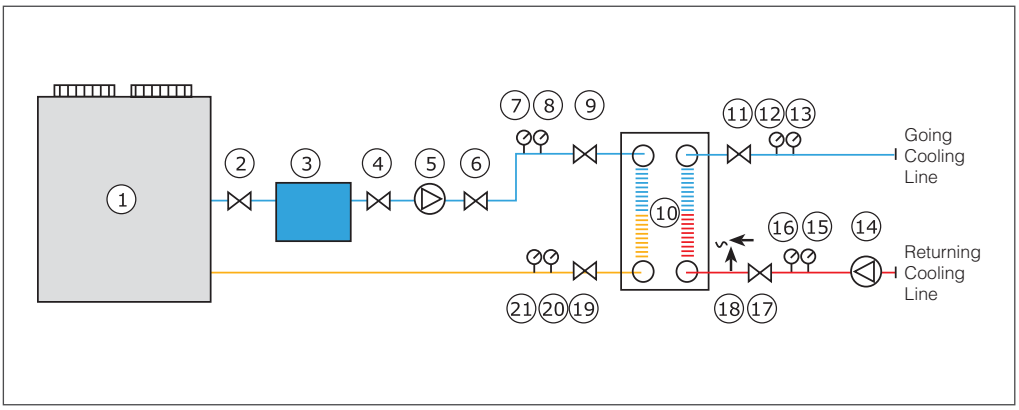
1	Oil Tank	5	Valve	9	Heat Exchanger	13	Going Collector	17	Valve
2	Valve	6	Oil Circulation Pump	10	Valve	14	Cooling Tower		
3	Valve	7	Valve	11	Circulation Pump	15	Returning Collector		
4	Valve	8	Oil Tank	12	Dirt Holder	16	Threeway Rational Valve		

Chiller Group Circuit

The cooling tower is generally insufficient for applications where low temperature water is desired. Therefore, chillers are preferred in these applications. Chiller groups are generally very sensitive, expensive and difficult to repair. Therefore, in case of any negative situation that may arise from the installation, large damages can occur. The MIT plate heat exchangers separate the system from the chiller circuit, allowing the two systems to operate independently of each other, as well as the heat transfer between them.

Cooling Group Circuit

Nowadays, cooling towers are the most commonly used cooling source to meet the cooling needs of industrial plants. MIT plate heat exchangers are used in both types of these open and closed towers. Since some solid particles from the medium are mixed into the water in the open towers, the water where these particles are located cannot be sent. Directly to the system to be cooled. Using the MIT plate heat exchanger between the system to be cooled and the open tower, the two systems are separated as two separate circuits and the MIT plate heat exchangers collect all the risks on themselves. In case of contamination over time, only the heat exchanger can be cleaned and the system will perform the same performance again.



1	Cooling Group	6	Valve	11	Valve	16	Manometer	21	Manometer
2	Valve	7	Thermometer	12	Thermometer	17	Valve		
3	Tank	8	Manometer	13	Manometer	18	Safety Valve		
4	Valve	9	Valve	14	Circulation Pump	19	Valve		
5	Circulation Pump	10	Heat Exchanger	15	Thermometer	20	Thermometer		

Waste Heat Recovery

Industrial facilities have many wasted heat sources such as rotten steam and hot water returning from fabric washing. At the same time, there are applications that require heat, such as domestic hot water production and office heating. With the MIT plate heat exchanger you will use to transfer heat from existing heat sources to the part that needs heat, you do not waste your heat and you need to save extra heat for the heat requirement. Nowadays, the most important factor that will relax businesses is to reduce costs. Energy expenses, one of the biggest factor in expenses, are now worth the gold for everyone and cannot be ignored. A heat exchanger to be used for heat recovery with a rough calculation now pays off in 3-6 months and starts to add value to the operation in a short time.

STAINLESS STEEL HEAT EXCHANGERS

The difference of food plate heat exchangers from other heat exchangers is their hygienic nature in terms of their bodies and all surfaces in contact with food are produced as stainless. In addition, the gaskets have FDA (food conformity) certificate.

Usage Areas

- Milk Heating and Cooling
- Pasteurisers
- Juice Pasteurisers
- Cream Cooling
- Brine Heating and Cooling
- Whey Processing

MARINE

Cooling Systems in Ships

Engine cooling systems are divided into two. Direct and two-circuit (indirect) and indirect, two-circuit (indirect) cooling. Direct cooling is smooth and suitable for engines designed as marine engines. Cylinder blocks and other water-circulating equipment are protected by seawater-resistant alloys and anchors. Most outboard marine engines and small powered internal engines are built in this way. A motor driven marine seawater pump absorbs water and circulates it in the engine and provides cooling. In normal use, the engine does not reach the ideal operating temperature required and runs cold, since this pump is sized to provide adequate cooling even when the motor is most stressed. For this reason, a by-pass line and thermostat have been developed to regulate the flow of water sent to the engine and to provide sufficient heating of the engine.

In two-circuit cooling systems, the fresh water circulates inside the engine (just like in motor vehicles or stationary industrial engines).

Thus, the internal parts of the engine are protected from the effects of sea water.

The seawater pump (which can also feed the exhaust system and sleeve bearings to the water at the same time.) Sends sea water to a MIT plate heat exchanger. The warmed fresh water from the engine is circulated in the plates inside the MIT plate heat exchanger.

Central Heating Systems

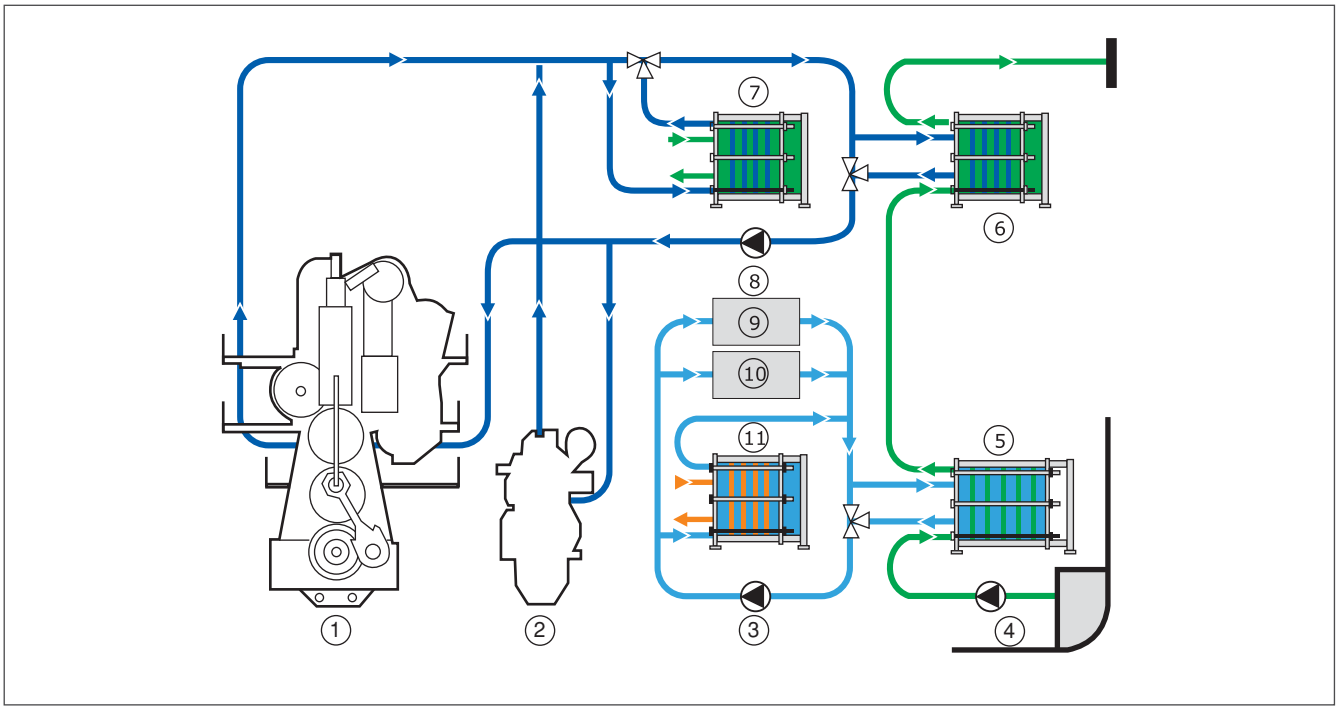
In the central cooling systems, the fresh water circulation line on the secondary side is cooled using sea water. The cold water in this cooled fresh water circulation line acts as a refrigerant for the heat exchangers in cooling systems such as engine cooling, jacket water cooling. The use of fresh water in the secondary circuit reduces the corrosion and wear of the circuit elements in the machine lines and minimizes the backup and maintenance costs. MIT plate heat exchangers make your system safer and last longer.

With the MIT plate heat exchangers offering the most suitable solutions for all capacities, your initial investment costs are kept to a minimum. In our heat exchangers, which are fully compatible with all systems with different plate angles and types, stainless steel and titanium plates are offered as standard and they can use different plate materials to suit your needs. In maritime sector, standard bodies can be used as well as complete aluminum and aluminum alloy light bodies which are specially designed for the sector can be used when weight is important.

The most important problem of the maritime sector is the highly corrosive effect of seawater. MIT plate heat exchangers are always on your side to solve this problem with complete titanium and titanium alloy 316 plates. MIT plate heat exchangers are the only solution point of the sector with plate, gasket and body types suitable for every process that may be needed on a ship.

Other cooling applications on board;

- Main Motor Cooling
- Lubricating Lubricating Oil
- Camshaft Cooling
- Fuel Oil Heating
- Water Distillation Cooler



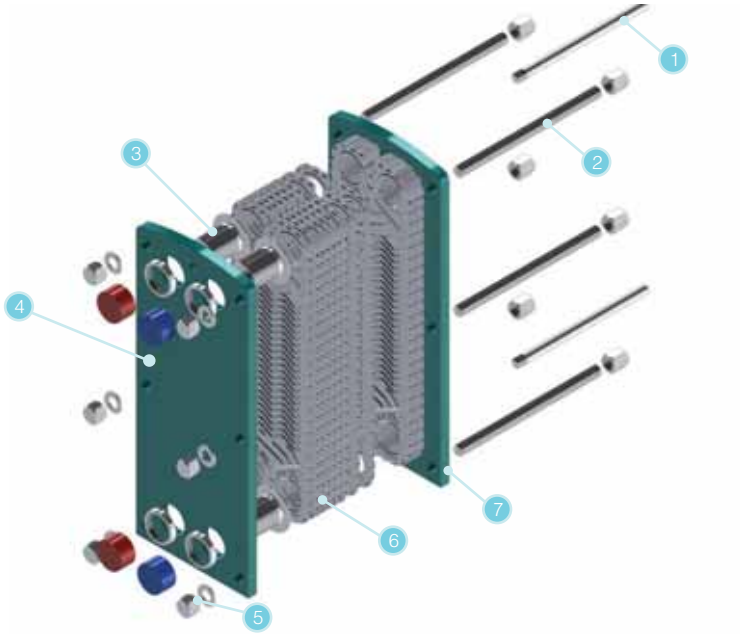
1	Main Engine	4	Sea Water Pumps	7	Preheater For Sea Water Desalination	10	Charge Air Cooler M.E.
2	Aux. Engine	5	LT - Central Coolers	8	HT - Fresh Water Pumps	11	Lube oil cooler M.E.
3	LT - Fresh Water Pumps	6	HT - Central Coolers	9	Auxiliaries		

MIT PLATE HEAT EXCHANGER TECHNOLOGY

The MIT plate heat exchangers, which are the rising value of the plate heat exchanger market, always receive their real power from the design team that supports them. Ekin, which proves that there are still innovations to be made in the plate heat exchanger market where all the technologies become commonplace, will continue to be on the way with new works with its design team day by day.

Components

1. Carrying bar
2. Rods
3. Connection ports
4. Front body
5. Bolts, Nuts and Washers
6. Plates
7. Rear body



Easy Repair & Maintenance

- Safety Stamp
- Counter Flanges
- Stud Channels
- Fixing Feet

Compliance and Quality

- Test Tag on Body
- CE Label on Body
- Capacity

Hygienic Applications

- Complete Stainless Body
- Rubber Mouth That Wraps The Body
- Seals

Longer Service Life

- EPDM, EPDM-HT, NBR, H-NBR, VITON, VITON-G Gaskets
- AISI 304, AISI 316, Titanium, Hastelloy Plates

TYPES OF PLATES MIT PLATE HEAT EXCHANGERS

Standard Plates

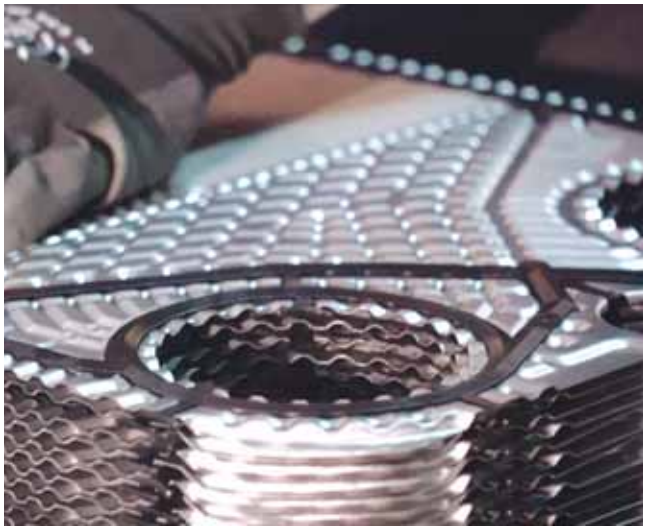
Standart MIT plates are used in applications such as hot water supply, low pressure steam applications and space heating.

Special distribution channels, can be designed according to the needs of wide and narrow angle types, minimum pressure losses with the maximum efficiency of the special plate depth provides the right solution in such applications.

Wide Range Plates

In some embodiments, solid particles may be present in the fluid passing through the heat exchanger. For these applications, the wide range of plates are specially designed by the MIT team and the particles contained in the fluid can continue without sticking to the channels inside the heat exchanger and the contamination within the exchanger can be kept at minimum levels.

These plates, which are designed with wide gap, are also thicker than standard plates. In this way, the resistance to corrosive agents that are likely to be present in the flow is increasing. It is especially used in the textile industry to ensure optimum efficiency in waste water recovery.



Semi-Welded Plates

In some applications where aggressive fluids and high temperatures are present, seal life can be very short. Therefore, in these applications, it is recommended to use MIT semi-welded plates where two plates are welded to each other by laser welding instead of using seals on the side of the aggressive fluid. In the heat exchanger, the fluid on the other side passes through the sealing surface as in standard applications. In this way, your system is safe, but the heat exchanger can be easily maintained.

Double-Protection

MIT double-protection plates ensure that the system is completely safe when the two fluids used in the process should not be mixed. In these exchangers, the two plates are connected without welding and the fluid can flow freely between these two plates

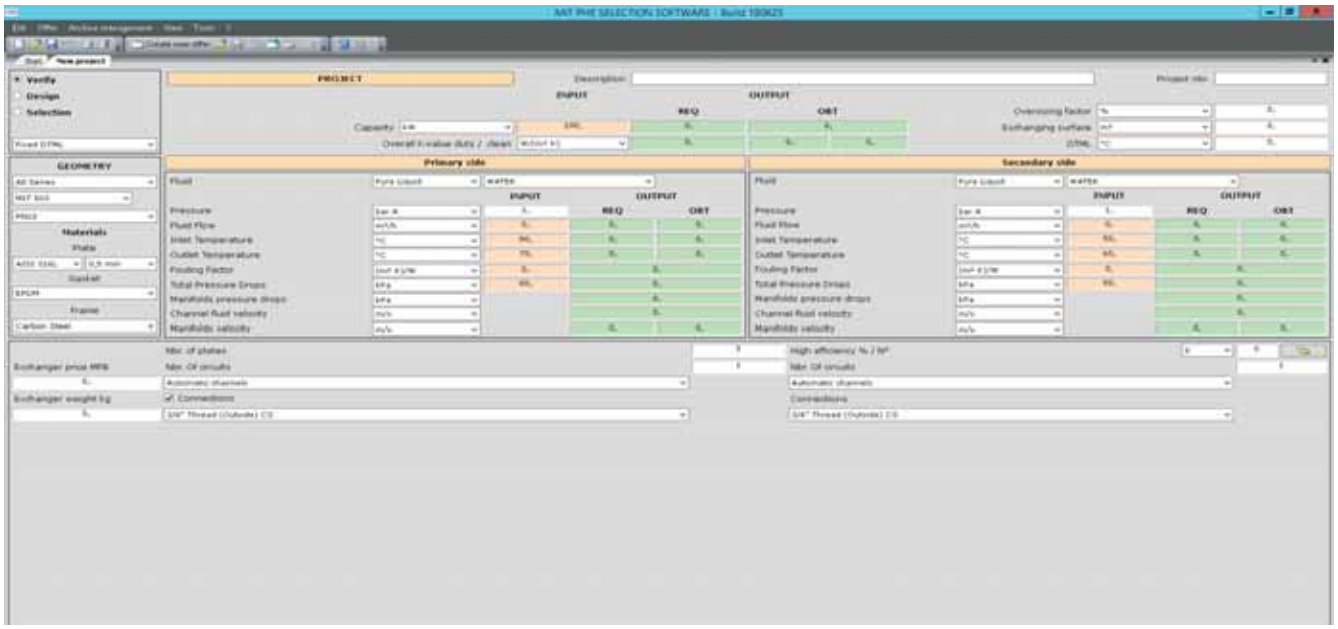
In case of any leakage, the fluid leaks through the two plates without interfering with the other fluid and can be intervened in advance. Due to its similarity to the standard heat exchangers, it can be easily removed and cleaned.

Why Should Be Used MIT Plate Heat Exchangers?

- It transfers heat with very high efficiency.
- Due to its compact structure, it occupies very little space.
- It can be completely disassembled and cleaned.
- Wide plate and gasket variety.
- Entirely manufactured in Turkey.
- Extensive service and dealership network.
- Launched by the main manufacturer.
- Always the most economical solution.
- It is designed by its experienced and solution-oriented engineers and offered to its customers.
- Quality certificates such as CE, ISO, EAC, TSE-HYB, BV.
- It is under Ekin guarantee for 2 years.
- It is delivered to you with the shortest delivery time.

MIT HEAT EXCHANGER SELECTION SOFTWARE

In the design of MIT plate heat exchangers, the MIT heat exchanger selection program developed as a result of long-term work of Ekin software team is used. With its user-friendly interface,automatic correction system, warnings for wrong selections, smart control system which prevents wrong selections; It carries the title of being the first and only software on this field in Turkey.



General Conditions

1. Our company reassures its customers of providing 2 years warranty against manufacturing defects and 10 years of spare part supply.
2. Our plate heat exchangers have sealing gasket technology. Thus, the gaskets of our heat exchangers can be easily removed and cleaned during maintenance.
3. Our company reassures its customers of providing the documentations including the user manual and other specifications with their ordered plate heat exchanger.

After the design of the heat exchanger with MIT heat exchanger selection program, technical detail document can be obtained in desired format (PDF, EXCEL, TIFF, TEXT). In this way many conditions, such as the conditions under which it should work, the efficiency to be taken from the heat exchanger, the pressure losses in the heat exchanger and the dimensions of the heat exchanger, are provided in advance so that the installation can be prepared in advance.

Company: - PHE Type: 522		Date: - Engineer: -	
Heat Exchanger Features			
Capacity	1000,00	kW	
Model	MIT 522		
Total Number of Plates	19		
Plate Arrangement	4H + 15L		
Heat Transfer Area	3,74	m^2	
Heat Exchanger Margin	0,35	%	
Actual k Value / Task k Value	6178 / 6199	W/(m^2K)	
LMTD	43,28	°C	

	Primary Circuit		Secondary Circuit
Fluid Type	Water		Water
Number of Transitions	1		1
Fluid Flow	44,1 m^3/h		17,3 m^3/h
Fluid Inlet Temperature	90,00 °C		10,00 °C
Fluid Outlet Temperature	70,00 °C		60,00 °C
Total Pressure Loss	41,52 kPa		10,73 kPa
Pressure Loss on Plates	39,98 kPa		10,48 kPa
Pressure Loss on Connections	1,55 kPa		0,25 kPa
Channel Fluid Speed	0,83 m/s		0,36 m/s
Connection Fluid Speed	1,561 m/s		0,613 m/s
Contamination Coefficient	0,0000003 (m^2K)/W		0,0000003 (m^2K)/W

Fluid Features	Primary Circuit		Secondary Circuit
Density	971,79 kg/m^3		994,03 kg/m^3
Specific Heat	4197 J/(kg K)		4179 J/(kg K)
Thermal Conductivity	0,670 W/(m K)		0,623 W/(m K)
Viscosity	0,3543 cP		0,7193 cP

Material			
Plate Material		0,5 mm - AISI 316L	
Gasket Material		EPDM	
Body Material		Carbon Steel	

Connections			
Primary Circuit		M1 => M2 NW100 Flange (STUDDED) CS	
Secondary Circuit		M3 => M4 NW100 Flange (STUDDED) CS	
Weight Empty / Full		239,42/257,11 kg	
Internal Volume Primary / Secondary		9/9 l	
Maximum Differential Pressure Difference		5 bar	
Design / Test Pressure		10/15 bar	
Min. / Max. Operating Temperature		-25/150 °C	
Price		-	

PROFESSIONAL SERVICE NETWORKS

Ekin provides service for all brand and model heat exchangers as well as manufacturing MIT plate heat exchangers. The content of the professional service is determined and applied according to the need and it is ensured that your system complies with the performance of the first day.

Problems in Plate Heat Exchangers

- Performance degradation due to calcification.
- Obstruction due to sediment and dirt from the facility.
- Excessive pressure losses due to occlusion.
- Decrease in heat transfer due to occlusion.
- Wear of gaskets over time.
- Seals have lost their sealing properties.
- Corrosion and deformation of the plates.
- The body is deformed by internal and external factors.

When you encounter any of these problems mentioned in heat exchanger systems, all you have to do is to reach the professional service department of and enjoy the service you will receive.

Professional Service Package Contents

- Plate supply for each brand and model.
- Supply of seals for all brands and models.
- Revision and cleaning of heat exchanger bodies.
- Quick and detailed cleaning of the heat exchanger plates.
- Descaling of heat exchanger plates with special chemicals.
- Supply and manufacture of all types of nuts and bolts in heat exchangers.
- Delivery of the heat exchanger as it was on the first day.
- 24/7 continuous service.

EKİN ENDÜSTRİYEL

EKIN ACADEMY

Ekin is aware that the progress in its sector is possible through continuous development and learning.

Ekin Academy, established with this awareness, aims to provide high-quality and sustainable development with its modern education methods, to provide successful employees and to provide value to the society through social responsibility projects.

Training and development programs that will make a direct contribution to the results of our employees' work processes and which will make a difference in their personal development are prepared by Ekin Academy.

For our business partners and customers, our training modules prepared by our expert staff provide training support for pre-sales and post-sales issues such as commissioning, operation, maintenance and repair of our products.

In cooperation with universities within the scope of corporate social responsibility projects, we are experiencing the happiness of adding value to the society by allowing the engineer candidate, who aims to take place in the fields where Ekin is active, to meet with the sector and to experience the theoretical knowledge acquired in the fields of application.

In-Company Trainings

Ekin Academy conducts technical, leadership, strategy development, sales and training and development programs for different tasks in the fields of heat transfer, pressure vessels, package systems, food systems and liquid transfer.

Out-of-Company Trainings

We are realizing conferences and training activities to our business partners, professional groups and institutions where we carry out social responsibility projects in various locations of Turkey.

SALES TEAM

At Ekin, we produce a proactive solution by our engineering staff who are specialized in their field. Our team, which works with the aim of unconditional customer satisfaction, works selflessly in order to gain customer loyalty by raising the bar of success in products, services and processes.

We are happy to share our accumulated knowledge with our valued customers. Ekin will continue to be the best solution partner for you in all applications with all kinds of heating and cooling applications.

Customer Satisfaction

Customer rights are protected in all circumstances.

Privacy Policy

Aware of the importance of protecting personal information, personal information is not shared with third parties.

Information Security

The requirements of ISO 27001 information security management system are fulfilled at Ekin.

Ethical Values

In all our business relations, our principle of mutual benefit by adhering to laws and ethics is our principle.

CERTIFICATES


ISQ
CERTIFICATE
EKİN ENDÜSTRİYEL ISITMA SOĞUTMA SAN. VE TİC. LTD. ŞTİ.
ISO 50001:2018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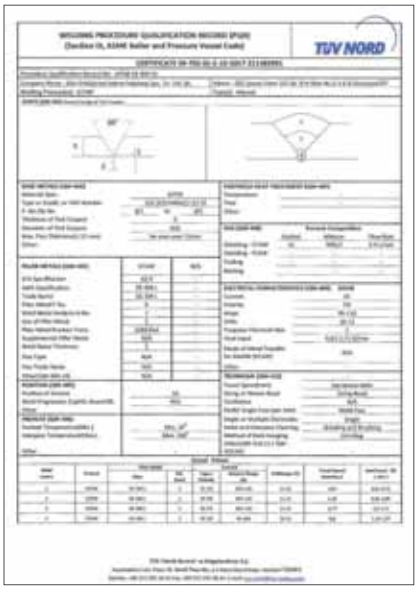
ISO 45001:2018


TÜV NORD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OHSAS 18001:2007


HİZMET YETERLİLİK BELGESİ

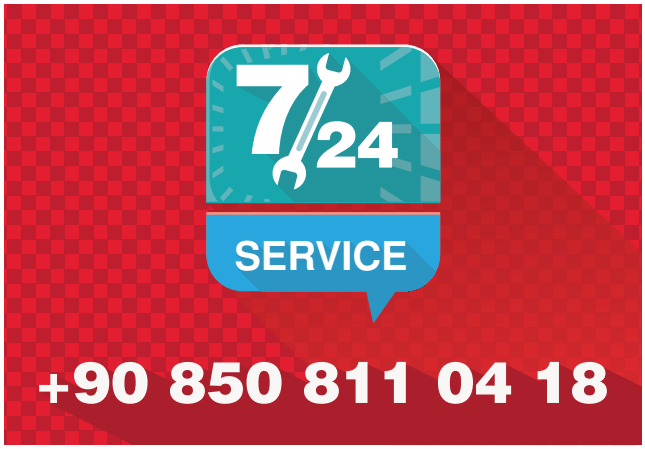

Certificate of Registration
CERTIFICATE OF CONFORMITY
CE
EKİN ENDÜSTRİYEL ISITMA SOĞUTMA SAN. VE TİC.LTD.ŞTİ.

PROFESSIONAL SYSTEM SOLUTION CENTER

From our MIT professional system solution center, you can get help with problems with your pumps, heat exchangers and your system. Our solution center consisting of our expert engineers will be happy to help you.

- Domestic hot water installations.
- Central and district heating systems.
- Milk, yogurt, buttermilk heating, cooling and pasteurization systems.
- Industrial cooling and heating systems.
- Oil cooling systems.
- Energy recovery systems.
- Pool heating systems.
- Steam installations.

It is vital for your system to be designed and implemented correctly in the first installation in order to be able to operate at the desired capacity, smoothness and long life. For this reason, you can get first-hand the technical support you need during the installation phase of your system and the problems that may arise in the business; You can reach us **24 hours +90 (216) 232 24 12 in 7 days**.



We would like to reiterate that we will be happy to share our knowledge accumulated over many years with our valued customers in order for your system to work correctly and performance.

Ekin will continue to be the best solution partner for you in all applications with all kinds of heating and cooling applications.

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Follow us on **social media...**

Our products are produced with Turkish engineering technology in **135 countries** in the world today...

444 EKİN 3546

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Isıtma-Soğutma San. Tic. Ltd. Şti.

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