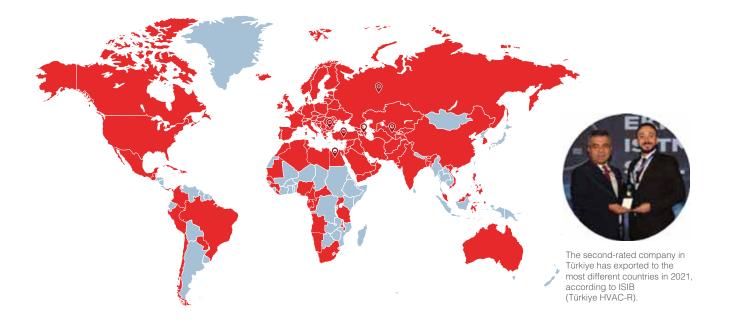
CHILLERS PRODUCT CATALOGUE





Your Satisfaction Is Our Priority; Globalization Is Our Goal!





The first condition of innovation is to question. Sustainable innovation is to never stop questioning.

For us, the journey of innovation started with a question: "Why not produce value-added technology in Türkiye?". The first turning point in this long journey was the birth of the MIT (Made In Türkiye) brand. The founding vision of MIT, which enabled us to become Türkiye's first domestic manufacturer in the field of "Plate Heat Exchanger", was not to be a domestic "alternative", but to create a quality brand that could compete in the global market.

By working for this goal, we have been entitled to receive many international quality certificates such as ISO, TSE, CE, GOST... for our products and processes over many years. For us, questioning the current situation was a natural result of our desire to exceed ourselves.

New Generation Engineering

With our engineering approach that focuses on the process, not the problem, we do not only specialise in one product, but also consider the entire ecosystem of that product. Therefore, we provide an endto-end application by producing all other components that will form a system as well as the plate heat exchanger. For this, we focus on the continuous development of the necessary engineer staff. With our business development, pre-sales, sales and after-sales services provided by our expert engineers, we produce not only products but also "solutions".

At the point we have reached; we offer complementary services with our internationally approved plate heat exchangers, components such as accumulation tanks, boilers, industrial pumps and installation materials that turn these heat exchangers into a system. With our team of more than 100 expert engineers, we continue to develop as a solution partner for projects requiring high technology in more than 60 countries.



HEAT TRANSFER PRODUCTS

- Gasketed Plate Heat Exchangers
- Brazed Heat Exchangers
- Shell & Tube Heat Exchangers
- Evaporators and Condensers
- DC Fan Driven Oil Coolers
- Heat Coils
- Serpentines / Radiators / Economizers

PRESSURE VESSELS

- Water Heater Tanks
- Water Storage Tanks
- Buffer Tanks
- Expansion Tanks / Automatic Pump Controlled Expansion System
- Stainless Steel Tanks
- Balance Tanks / Dirt Separators / Air Separators / Air Tubes
- Steam Separators
- Pressured Air Tanks
- Neutralization Units

INDUSTRIAL AND FOOD GRADE SYSTEMS

• Heat Stations

- Industrial Process Systems
- Dosing Systems
- Substations
- Thermoregulators
- Pasteurizers
- CIP and Hygienic Process Systems
- Hygienic Storage and Process Tanks / Reactors
- Homogenizers
- Turn-key Projects

FLUID TRANSFER PRODUCTS

- Lobe Pumps
- Hygienic Centrifugal Pumps
- Twin Screw Pumps
- Gear Pumps
- Magnetic Drive Pumps / Thermoplastic Pumps
- Dosing Pumps
- Air Operated Double Diaphragm Pumps (AODD)
- Drum Pumps
- Monopumps
- Peristaltic (Hose) Pumps
- Centrifugal Blowers
- Roots Blowers
- Turbo Blowers

FLOW CONTROL UNITS

- Butterfly Valves
- Ball Valves
- Globe Valves
- Knife Gate Valves
- Actuators
- Check Valves and Strainers
- Pneumatic Piston Valves

ENERGY SYSTEMS

- Domestic and Industrial Boilers
- Steam Generators
- Chillers
- Cooling Towers

PRODUCT RANGE

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services; we owe our sustainable success to our established corporate culture in every field from employee to customer satisfactions.

Our comprehensive corporate policies pave the way for our corporate culture. Thanks to these policies, we design all our activities to offer the same quality regardless of individuals and market dynamics.





The secret of being the leading company in the heating and cooling sector lies in the people. We know in order to make a difference; it is necessary to have the staff to implement these policies flawlessly as well as the corporate policies created by experts in their fields with nearly 20 years of experience. We demonstrate our customer-oriented approach by reflecting the needs and expectations of the industry to our MIT branded products in the best possible way. We are raising the standards of the heating-cooling and air conditioning industry by combining our modern production and marketing understanding with our innovative approach with the valuable experience of our expert engineers.



OUR VISION

To make the MIT brand a reputable and leading global brand in all sectors in which Ekin Endüstriyel operates.

OUR MISSON

To provide sustainable benefit to all our stakeholders by using our resources effectively and efficiently within the framework of human and moral values.



AN ENGINEERING APPROACH FROM SALES TO MAINTENANCE

We offer value added pre and after sale services with our customer satisfactionoriented approach and deep expertise we are more than happy to share. Thanks to our expert engineers that provide proactive solutions, we focus on making a difference throughout the process, from presales to maintenance. With our "quality product, quality service, quality solution" approach, we are more than a manufacturer and supplier, we are a highly motivated solution partner for all kinds of heating and cooling projects.





OUR QUALITY POLICY

It is our pleasure to share our knowledge; through value-added Before & After Sales Services. By generating proactive solutions, we are in close contact with our customer; from the pre-sale, up to the final production stages. By viewpoints of "High-Quality Products, Services & Solutions", we manage our operations based on Sustainability and efficiency. We recognize ourselves as a Solution Partner in all Local & International projects & proceed through this motivation.



CUSTOMER SATISFACTION POLICY

We aim for sustainable quality with a proactive approach that anticipates rather than meets the need. We bring together a corporate management approach based on strategy, not personal considerations, with effective decision-making mechanisms, including our employees and suppliers. We run an operation based on efficiency and sustainability.





ETHICAL VALUES

We conduct all our activities in accordance with the laws and then with ethical values. We believe in growing together and we look for mutual benefit in all our business relationships.

OCCUPATIONAL HEALTH AND SAFETY (OHS) POLICY

We prioritize a single rule in all our operations: "It is the right of every human being to work in a healthy and safe environment." We minimize risks with preventive OHS practices and analyzes. We increase the awareness of our own personnel, our suppliers and subcontractors with trainings and guidance. We work with the understanding of "zero concessions" in compliance with Occupational Health and Safety Regulations and related laws.

PRIVACY POLICY

All your personal information shared with our company is guaranteed by our ethical values and our processes in compliance with the Law No. 6698 on Protection of Personal Data.

ENVIRONMENTAL POLICY

We care about the prevention of waste in natural resource consumption. We keep the environmental pollutants and our wastes under constant control. We constantly inform our employees in this topic. We never compromise on compliance with the relevant legal legislation, and we wholeheartedly support all kinds of work that will benefit environmentally friendly technologies and social awareness.

INFORMATION SECURITY POLICY

All our information technology operations are protected by our information security processes, which are managed in accordance with ISO 27001 Information Security Management System requirements.





SPONSORSHIP — AND SOCIAL RESPONSIBILITY

As Ekin Endüstriyel, we have been supporting projects that will bring social benefit from day one with our desire to develop and grow together. We strive to create and promote a sensitivity towards the future of our country and our world.

With our understanding of "Sponsorship and Social Responsibility", we regularly support various social sharing projects on education, health, and environment with great interest. We work diligently to fulfill our responsibilities towards our employees and heir families, customers, dealers, universities, nongovernmental organizations, and other stakeholders.



tIn addition to the projects, we have implemented in a corporate sense, we support the projects created by students with all our strength in order to contribute to the raising of environmentally sensitive generations and to enlighten future generations. In addition, we prioritize the demands and needs of the projects in our region.

In the field of education, we are proud to provide support for many projects carried out domestically and nationwide. As the leading institution of the industry, we carry out projects focused on education and employment with vocational high schools and universities. In addition, innovation, we support the renewable energy, research, and R&D projects of student communities in Türkiye's elite universities.

We are also working with non-governmental organizations in the field of health. We regulary organize seminars to inform our employees in topics like blood donation, harms of smoking and similar health-related issues. We wholeheartedly support projects carried out in the field of health at every opportunity. While contributing to the national economy and employment with our investments, we strive to achieve a vision that tries to be a pioneer and an example to the society with our sponsorship and social responsibility projects

and the voluntary support of our employees. We prioritize projects that generate permanent benefits to create sustainable effects with our social responsibility efforts.

WE USE THE RESOURCES WE HAVE MORE EFFICIENTLY AND TAKE CARE TO PROIDE THE MOST EFFECTIVE RECYCLING WITHIN OUR COMPANY. WE ADOPT TO ACT WITH CARE AND SEE IT AS A REFLECTION OF OUR RESPECT FOR THE ENVIRONMENT, HUMANITY, FUTURE GENERATIONS, AND OURSELVES.











HIGH QUALITY, FAST SHIPMENT & AFTER SALES SUPPORT!























We continue to produce solutions with designs suitable for the process and specific to your demand.





MIT

PRODUCTION WITH INNOVATIVE MANUFACTURING APPROACH

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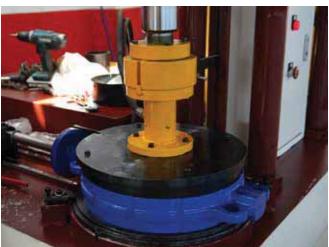




























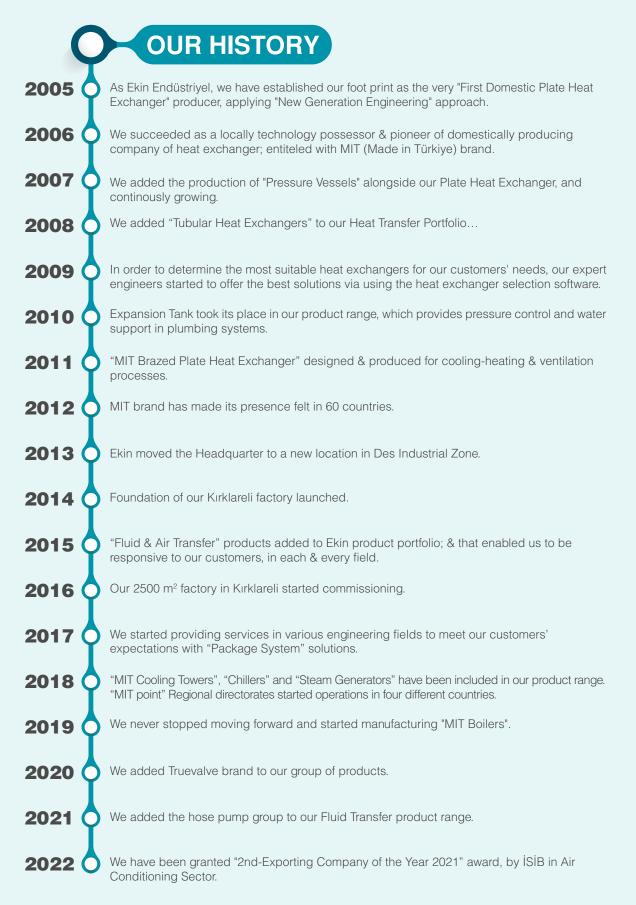












Today;

Alongside our various production facilities (Dudullu Organized Industrial Zone, Aksaray, Kırklareli, Maltepe), we have been trying to provide our business partners with best services, end-to-end equipment supply and unlimited supports. With our innovative manufacturing approach and team-work spirit...



General Descriptions

MIT-SG-T series R410a gas coolers are designed with a air cooled scroll compressor, internal tank and pump groups. MIT-SG-T series low energy consumption axial fans charged with environmentally friendly R410a gas, tropical type condensers with large heat transfer area and scroll compressors contribute to a more livable environment. It is used safely in every process designed with a closed circuit where cold water is required.

The MIT-SG-T series can also be used indoors with its particularly compact designs (when ventilation allows). In the plastic, rubber and metal industry mold cooling, hydraulic oils of hydraulic machines (plastic injection machines, hydraulic presses), extruder gearboxes, motors, etc., it provides cooling to processes such as pool cooling (with heat exchangers) with high stability and low energy consumption.

Model			MIT SG-131	MIT SG-191	MIT SG-221	MIT SG-261	MIT SG-281	MIT SG-331
Cooling	Cooling Capacity (1)	kW kcal/h	14,5 12,500	20,7 17,800	24,5 21,000	28,5 24,500	30,8 26,000	35,7 30,700
	Total Power Draw (1)	kW	2,5	3,2	3,9	4,5	5,0	5,8
	COP	-	5,80	6,40	6,20	6,30	6,10	6,10
Compressor	Cooling Circuit	n°	1	1	1	1	1	1
	Compressor Amount	n°	1	1	1	1	1	1
	Туре	-						
	Capacity Control	n°	1	1	1	1	1	1
Evaporator	Туре	-	Plate Type					
	Pressure Loss	kPa	40	42	28	38	51	13
	Water Flow	m³/h	3,0	4,0	5,0	6,0	6,0	7,0
	Mainline	V-phz-Hz	380 / 3 / 50					
Electrical Properties	Rated Amperage	А	5,1	6,2	7,1	8,4	9,5	10,8
	Max. Amperage	А	8,6	11,0	12,9	15,0	16,0	18,8
	Protection Grade	-	IPS4	IPS4	IPS4	IPS4	IPS4	IPS4
	Fan	n°	1	1	1	1	1	1
Fan	Air Flow	m³/h	9,750	9,750	9,750	12,600	12,600	25,260
	Sound Pressure Levels (2)	dB(A)	41	41	44	45	45	44
	Pump Rated Power	Нр	1,5	1,5	1,5	1,5	1,5	1,5
Hydraulic	Water Tank	lt	100	100	100	100	100	220
	Connector Dimensions	inç	1"	1"	1"	1"	1"	2"
Dimensions	Length	mm	1270	1270	1270	1270	1270	1820
	Width	mm	810	810	810	810	810	1000
	Height	mm	1775	1775	1775	1775	1775	1870
Weight	Loading Weight	kg	270	270	275	360	390	405

The cooling capacity is calculated for 15 °C water output and 35 °C outdoor temperature conditions.



Technical Specifications





- Dryer for gas circuit.
- There are separate cooling elements for each cooling circuit.
- Co-aging function for compressors.
- Remote on/off.
- Protective metal grid for the condenser.
- All alarm parameters can be monitored on a single screen.
- Ability to check alarm history.
- Refrigerant gas that does not harm ozone layer.
- Low-high pressure switch (controls the system according to the compressor pressure values).
- Solenoid valve (electromagnetically controls the refrigerant flow).
- Expansion valve (thermal expansion valve working with heat exchange).
- Drier Filter (Drier filter, filters the refrigerant).
- Sight glass (Sight glass with humidity indicator).







Model			MIT SG-T-442	MIT SG-T-522	MIT SG-T-572	MIT SG-T-652	MIT SG-T-822	
Cooling	Cooling Capacity (1)	kW kcal/h	49,2 42,300	57,6 49,500	62,1 53,400	72,1 62,00	90,8 78,000	
	Total Power Draw (1)	kW	7,8	9,0	10,0	11,6	14,8	
	COP	-	6,30	6,40	6,20	6,20	6,10	
Compressor	Cooling Circuit	n°	1	1	1	1	1	
	Compressor Amount	n°	2	2	2	2	2	
	Туре	-	Hermetic Scroll					
	Capacity Control	n°	2	2	2	2	2	
	Туре	-	Shell&Tube					
Evaporator	Pressure Loss	kPa	27	41	32	32	56	
	Water Flow	m³/h	10,0	13,0	13,0	15,0	18,0	
	Mainline	V-phz-Hz	380 / 3 / 50					
Electrical Properties	Rated Amperage	А	14,2	16,8	19,0	21,6	26,4	
	Max. Amperage	А	25,8	30,0	32,0	37,6	42,0	
	Protection Grade	-	IPS4	IPS4	IPS4	IPS4	IPS4	
	Fan	n°	2	3	3	3	3	
Fan	Air Flow	m³/h	26,260	37,800	37,800	37,800	37,800	
	Sound Pressure Levels (2)	dB(A)	47	47	55	55	56	
Hydraulic	Pump Rated Power	Нр	1,5	3	3	4	4	
	Water Tank	lt	220	245	256	256	321	
	Connector Dimensions	inç	2"	2"	2"	2"	2 1/2"	
Dimensions	Length	mm	1820	2610	2610	2610	2610	
	Width	mm	1000	1180	1180	1180	1180	
	Height	mm	1870	2210	2210	2210	2210	
Weight	Loading Weight	kg	460	830	840	845	870	



Cooling Circuit

Ekin Endüstriyel takes its power in cooling groups from its own domestically produced plate and tube heat exchangers. Since it is the leading domestic company in the heat exchanger sector, it can reach the highest efficiency solutions with the least energy in the cooling groups, with its years of experience and the special heat transfer methods it uses in its heat exchangers.



MIT brazed plate heat exchangers are designed for cooling, ventilation and heating processes and have been used safely in these systems for years.

Data

- Min. Temperature: -196 °C
- Max. Temperature: +200 °C
- Withstand Pressure of the Design: 30 70 bar
- Suitable for standard and high pressures
- Cooling Capacity
- Connection Method: Threaded, Brazed
- Copper, Nickel and Stainless Steel

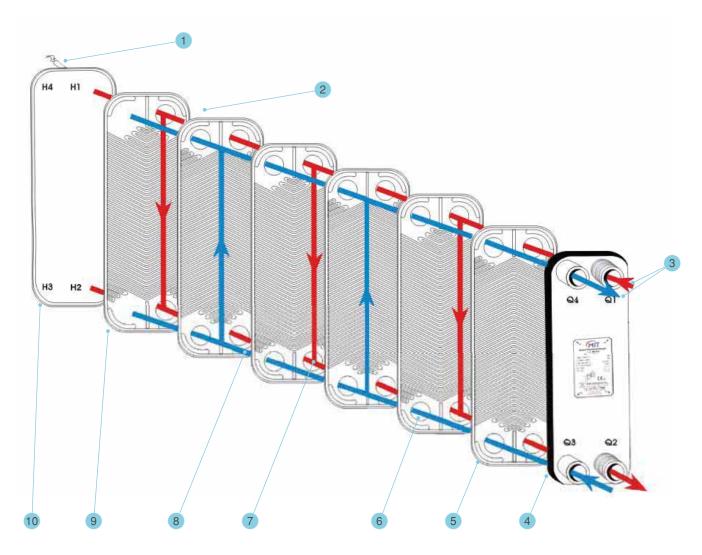
Documents

- CE Certificate (PED) 97/23/EC
- UL
- ISO 9001:2015





Structure of Plate Heat Exchangers



1	Extra Temperature Control Interface
2	Metal Plates: It is corrugated to increase heat transfer. Flow Channels: It is used between two consecutive plates of the same type or in combination.
3	Water Cooler
4	Front Shell Plate
5	Head Cover
6	Corner Holes
7	Fluid Channels
8	Cooling Channels
9	Back Plate
10	Back Shell Plate



Shell and Tube Evaporators

BE Tube Type Evaporators



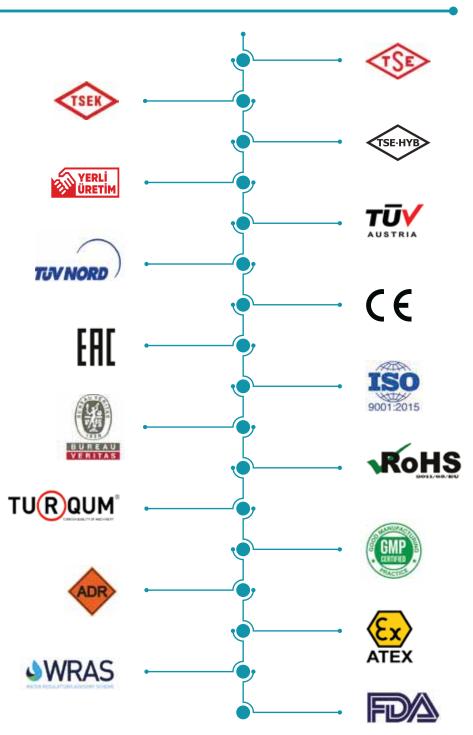
Ekin Endüstriyel BE type evaporators have basic capacity and geometry options up to 1500 kW. They can be manufactured with 4 cooling circuits.

Suitable refrigerants are all HFCs and HCFCs. Special counter flow and high heat transfer efficiency evaporators are manufactured for R124a gas.

The detachable pipe bundle provides maintenance and cleaning opportunities. For non-catalog special order products, please contact our company.



QUALITY MANAGEMENT SYSTEM



Ekin Heating and Cooling Endüstriyel Co. applies engineering approach; to focus on the process, not the problem; respectively, not only specializes in concerned products, but also take the entire aspects of the product, into consideration. Therefore, alongside the plate heat exchanger, Ekin has the capability to produce all other components to form a system. Advanced quality control structure are fully equipped, in order to present the products with a quality that goes beyond the acceptable regulations and standards.

With respect to "ISO 9001: 2015 Quality Management System" certification, which covers all processes from production, domestic/international sales and after-sales services, aiming at continuous improvement, respecting optimum results. With our expert engineers and solution-oriented approaches, the products have been certified with TSE, CE, Rosh and FDA quality certificates.

MIT ECO FRIENDLY HEAT EXCHANGER MIT CO2

- MIT CO2 heat exchangers are capable of withstanding operating pressures of up to 100 bar, offering energy – efficient cooling solutions.
- Thanks to compact design, it facilitates easy installation and maintenance.



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info@ekinendustriyel.com





Ekin Academy



A chain is only as strong as its weakest link.

Running and maintaining a quality production process that meets international standards requires focusing on quality all along the ecosystem. Maintaining this focus requires a unifying vision of constant improvement shared by all stakeholder, and a certain level of expertise for all parties involved. Ekin Academy was established with the principles of continuous development and growing together to share the knowledge and experience that will realize this vision.

We support the development of our employees with training programs that directly contribute to the results in their business processes and make a difference in their personal development. We offer technical trainings on heat transfer, pressure vessels, package systems, food systems and liquid transfer. We help them become individuals who will make a difference with our development programs that covers topics like leadership, strategy, sales and many more. In addition, we provide information regarding installation, operating, maintenance and repairs with our pre and after sales training modules prepared for our business partners and customers.

At Ekin Academy we do not solely focus on the development of our staff, partners and customers. Thanks to our university collaborations, we provide the means for future engineers to put their theoretical knowledge to use with practical applications.





We organize seminars, conferences and trainings for professional chambers, and institutions we collaborate on social responsibility projects. Because we know that only by investing in the society, the industry and the future of the industry, we can become a country known for its highquality engineering products.



Sales Team

An Engineering Approach from Sales to Maintenance

We offer value added pre and after sale services with our customer satisfaction-oriented approach and deep expertise we are more than happy to share. Thanks to our expert engineers that provide proactive solutions, we focus on making a difference throughout the process, from presales to maintenance.

With our "quality product, quality service, quality solution" approach, we are more than a manufacturer and supplier, we are a highly motivated solution partner for all kinds of heating and cooling projects.





Customer Satisfaction

Our priority is to ensure customer satisfaction and protect the rights of our customers with our pre-sales processes that analyze customer needs well, quality-registered product range, expert staff and meticulous working methods.



Ethical Values

We conduct all our activities in accordance with the laws and then with ethical values. We believe in growing together and we look for mutual benefit in all our business relationships.



Privacy Policy

All your personal information shared with our company is guaranteed by our ethical values and our processes in compliance with the Law No. 6698 on Protection of Personal Data.



Information Security

All our information technology operations are protected by our information security processes, which are managed in accordance with ISO 27001 Information Security Management System requirements.



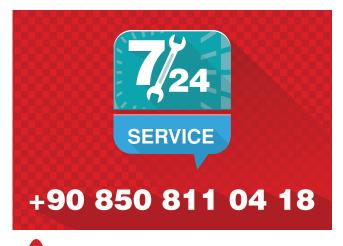
Professional System Solution Center

You can get answers to the problems you experience with your pumps, heat exchangers and system from our MIT professional system solution center. You can also benefit from our 7/24 uninterrupted service with our solution center consisting of our expert engineers.

- Domestic hot water installations.
- Central and district heating systems.
- Milk, yogurt, 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.

Producer; reserves the right to change the product features, technical dimensions and information and installation diagrams specified in this catalog without notice. No specified information can be copied and used without the permission of the manufacturer. In no way can the manufacturer be held responsible by giving examples of technical information and diagrams. In case of need, we request you to request a special technical drawing for your project for exact dimensions.

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EKIN ENDUSTRIYEL Isıtma - Soğutma San. Tic. A.Ş.

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