



**EKIN ENDÜSTRİYEL**

**Mini Tube Pool Heat Exchanger**



# 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.

## Engineering Approachments, Integrated Solutions

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.



## Mini Shell/Tube Heat Exchangers

Mini Shell/tube heat exchangers can be used in all processes. There are many types in its own range

Heat transfer areas of mini pool heat exchangers are the surfaces of tubes. While a fluid flows inside the tubes, other one flows in shell side parallel or cross through tubes. Heat transfer takes place on surface of tubes accordingly.

### Parts Which Generates Mini Pool Heat Exchangers

- Straight and U type tubes which transfer heat
- Outside body which is made from tubes or convolute sheet metal
- Mirror and mirrors that locates tubes
- Baffle
- Frame nozzles
- Head and head nozzles
- Flanges that locate mirrors and heads
- Carrying legs
- Isolation that protects the heat loss, from outside of the heat exchanger

### Advantages of Mini Pool Shell/Tubes Heat Exchangers

- Exchangers have steady and flexible design
- Exchangers can be designed and produced to work under high pressure
- They have resistance against thermal shock
- There is not any size limits
- They can be used for all applications
- Pressure losses are really low and can be kept this way regarding to process
- They can be displaced and placed again for maintenance, repairing and cleaning applications.
- Maintenance and repairing are really easy.
- Radius, numbers, pitch, length of the tubes are changeable. That is why, their designs are really flexible





## Mini Tube Pool Heat Exchanger

MIT mini shell/tube heat exchangers can be used in different systems like pool heating systems with solar energy or pool heating systems with boiler.

MIT mini shell/tube heat exchangers provide extra life for all equipments of whole system. Chlorine and salt prevents direct contact with the solar system or boiler, plays an important role for the viability of the system.

### Specifications

- High heat transfer efficiency
- Soft and smooth tubes which provide fast flow
- Compact and developed design
- Wide application area
- Different and wide capacity options

MIT mini shell/tube pool heat exchangers are manufactured from pressured external shell and spiral inner tubes. Thus, heat exchanger becomes more resistant efficient and cheaper.

MIT mini shell/tube pool heat exchangers are designed with creative vision, by engineers of EKIN INDUSTRIAL. Spiral and helix design of heat exchanger take the heat transfer efficiency higher levels. This also increases the thermal efficiency in the system.

MIT mini shell/tube heat exchangers are designed to offer you suitable solution with their wide capacity range. These products are irreplaceable heat exchangers for pool, spa and similar applications.

Mini shell / tube heat exchangers of EKIN INDUSTRIAL have enough wide capacity to work from small Spas to Olympic pools. MIT mini shell/tube heat exchangers, from capacity 15kw to 1750kw, provide most suitable and economic solution .

### Advantages of MIT Mini Shell/Tube Heat Exchangers

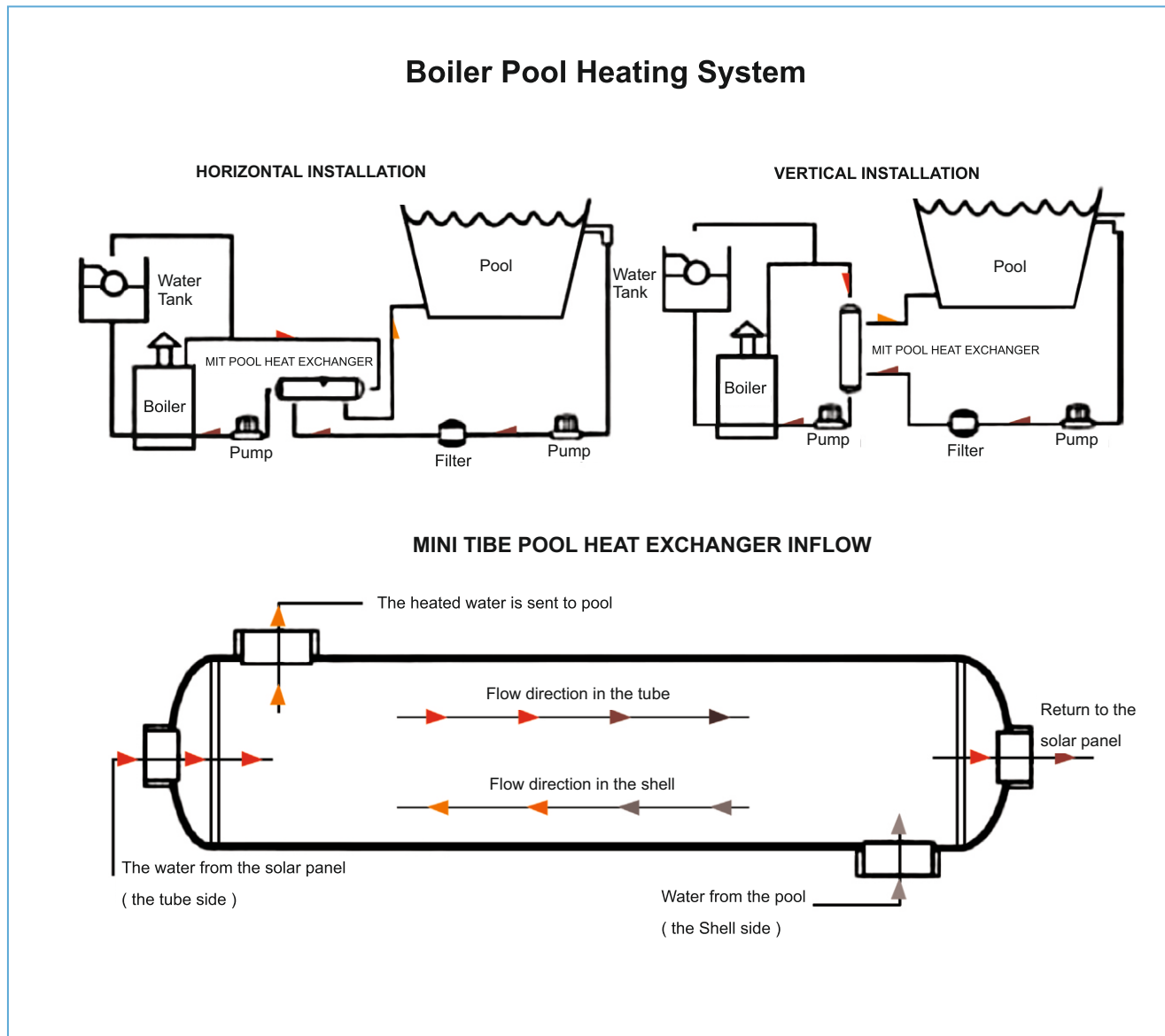
- High efficiency coefficient 10000 w/m 2° C (5-6 times more efficient than traditional exchangers)
- According to traditional products , ratio of heat exchanger compact desing is 1/10
- Stainless stel and/or titanium materials provide resistance for corrosionand pressure factors.
- Desing of heat exchanger connection removes the pressure on it.
- Suitable for ASME VII-1
- Easy installation

MIT mini shell/tube pool heat exchangers are designed by engineers of EKIN INDUSTRIAL with creative vision. Their spiral and bracterate design increase heat transfer efficiency to higher levels.



## Mini Tube Pool Heat Exchangers Working Principle

MIT Shell/Tube heat exchangers applies the heating/cooling operation which comes from boiler /chiller,by transferring the heat with pool water.



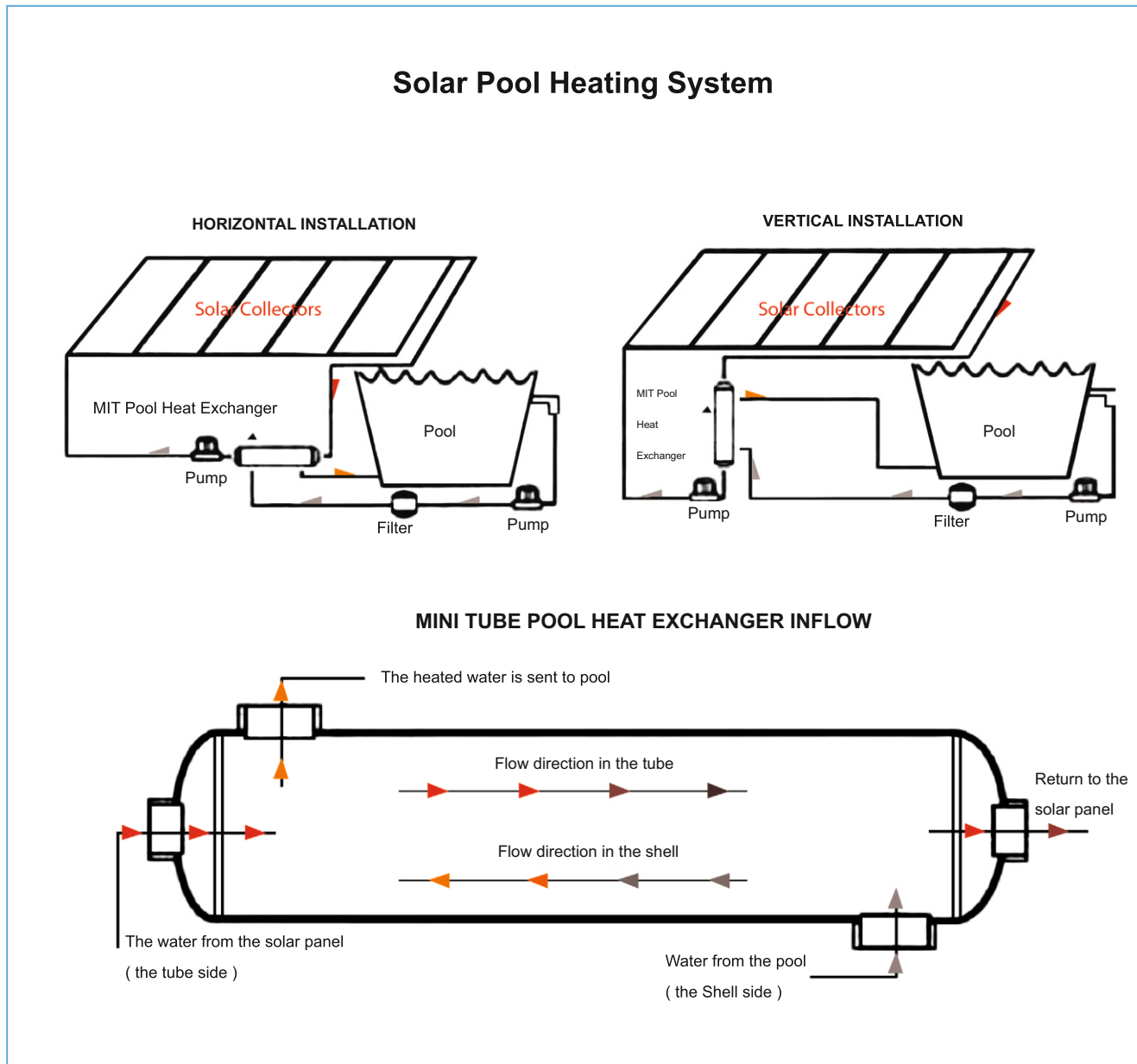
MIT mini-tube heat exchangers, keeping it separate pool and systems to pass from the pool to the system, It prevents the passage of chlorine or any chemical.

MIT mini-tube pool heat exchangers received hot water from the heat source with cold water in the pool again transfers the heat source to provide heat transfer.

MIT mini-tube exchangers substances that damage the system keeping it away from the system , It provides a healthy and long life of the pool. MIT mini-tube pool heat exchanger according to boiler sizes or it is designed for longitudinal and system for use of the pool.



## Mini Tube Pool Heat Exchangers Working Principle



Low degrees which has the pool water heat from a central boiler taking evenly warms the pool.

MIT mini-tube pool heat exchangers as with boiler system that It is used in the solar system.

Residential applications; Underfloor heating, pools, spas, water of usage, solar collector heating.

Industrial applications; oil cooling, steam obtain, central heating, engine cooling





## Heat Exchanger Maintenance And Revision

MIT tube-pool heat exchangers are long lasting and trouble free devices but caused by external factor some are exposed to deformation and contamination.

According to the system which is used in certain periods of time the cleaning and maintenance are required. If the cleaning is not made with the right methods and chemicals, clog pipes and heat exchangers may require larger revisions.

For this reason, cleaning and maintenance by teams of experts in business to be done is very important.

MIT's expert staff provides maintenance, cleaning and repair services for each type tube heat exchanger. maintenance and cleaning operations are completed as soon as possible and it is delivered on the first day of performance to the businesses.

Besides cleaning, corrosion over time, which is deformed by the inner tubes, tubular heat exchanger as a bunch or individually depending on the structure can be changed.

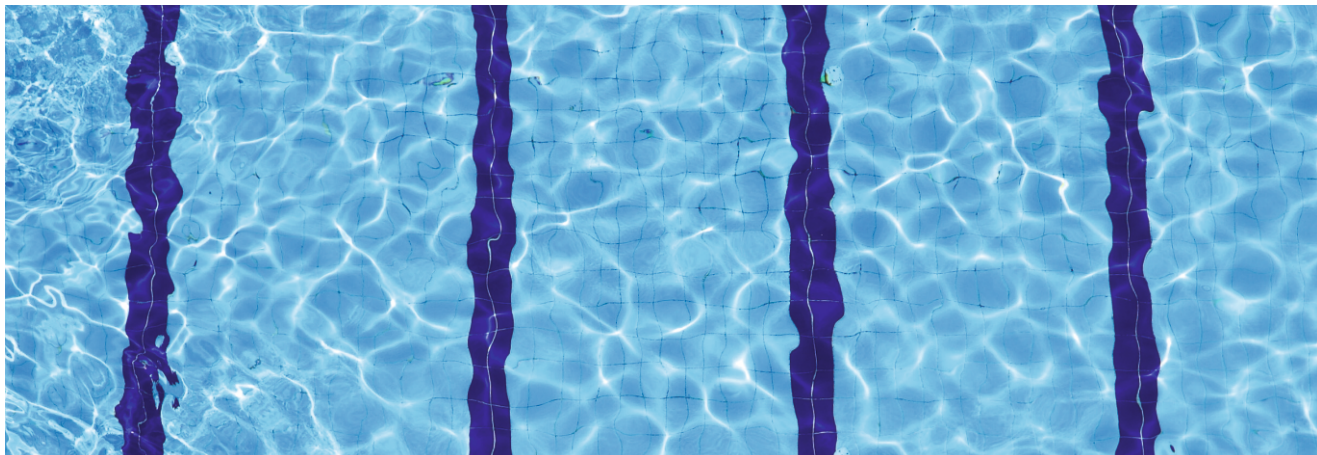
During this process, the pipe materials can be selected as desired.





## Dimensions

MIT CODE	Heat Transfer Area (m <sup>2</sup> )	Capacity (kw)	A (mm)	B (mm)	C (inch)	D (inch)
MIT MS-16	0.15	16	60	360	¾"	1"
MIT MS-25	0.25	25	60	520	¾"	1"
MIT MS-45	0.33	45	76	450	1"	1½"
MIT MS-61	0.44	61	76	570	1½"	1½"
MIT MS-88	0.64	88	76	780	1½"	2"
MIT MS-105	0.85	105	89	830	1½"	2"
MIT MS-175	1.55	175	114	900	2"	2½"
MIT MS-352	2.01	352	133	900	2"	2½"
MIT MS-704	4.47	704	168	950	2"	4"
MIT MS-880	5.3	880	168	1100	2½"	4"
MIT MS-1056	6.42	1056	168	1300	2½"	4"
MIT MS-1320	8.46	1320	219	1070	2½"	4"
MIT MS-1467	8.87	1467	219	1120	2½"	4"
MIT MS-1760	10.64	1760	219	1220	2½"	4"
MIT MS-16-T	0.15	16	60	360	¾"	1"
MIT MS-25-T	0.25	25	60	520	¾"	1"
MIT MS-45-T	0.33	45	76	450	1"	1½"
MIT MS-61-T	0.44	61	76	570	1½"	1½"
MIT MS-88-T	0.64	88	76	780	1½"	2"
MIT MS-105-T	0.85	105	89	830	1½"	2"
MIT MS-175-T	1.55	175	114	900	2"	2½"
MIT MS-352-T	2.01	352	133	900	2"	2½"
MIT MS-704-T	4.47	704	168	950	2"	4"
MIT MS-880-T	5.3	880	168	1100	2½"	4"
MIT MS-1056-T	6.42	1056	168	1300	2½"	4"
MIT MS-1320-T	8.46	1320	219	1070	2½"	4"
MIT MS-1467-T	8.87	1467	219	1120	2½"	4"
MIT MS-1760-T	10,64	1760	219	1220	2½"	4"



## Professional System Solution Center

You can take assistance about problems have from MIT Plate Heat Exchanger Solution Center, Our solution center have qualified mechanical engineers who will be happy to support you. These are some of the subjects we can happily support you with;

### Applications

- Utility hot water installations
- Central and local heating systems
- Milk, yogurt, airan heating cooling and pasteurization
- Industrial heating and cooling systems
- Oil cooling installations
- Energy recycle systems
- Pool heating systems

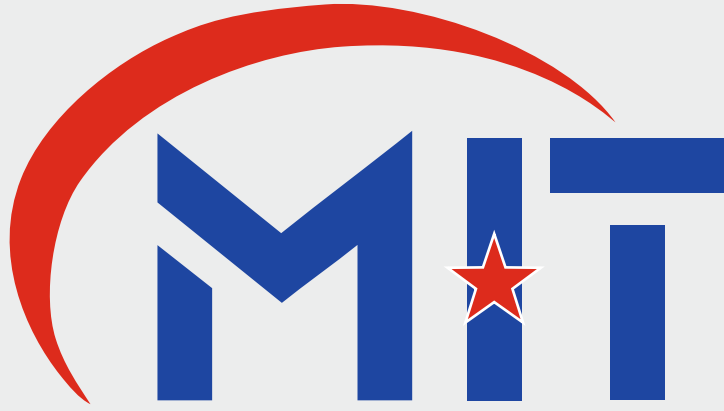


0216 444 35 46

In Plate Heat Exchanger systems, it is vital to setup the system correctly to get the desired capacity. That is why, when you set-up your systems you can take needed assistance from first hand just using a phone (+90 444 35 46) for 7 days and 24 hours.

To make your system and heat exchanger work correct and full performance, we want to share the information we've had through the long years. It really is a big happiness for us.

We want to emphasize that again and again. Ekin Endüstriyel will continue being the best solution partner in every place where heat exchanger is used.



You are in exact point where quality,  
experience and technology meet

Our Quality Certificates:





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