



EKIN ENDUSTRIYEL

**PLATE HEAT EXCHANGER
GASKET CATALOGUE**

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





The first condition of innovation is to question.

And the first condition of sustainable innovation is to question constantly.

The journey of innovation has started with a question for us too: “How can we develop value-added technologies in Turkey?”. First turning point in this long journey was the birth of MIT (Made in Türkiye) brand. MIT made us the first plate heat exchanger producer of Turkey and it’s founding vision was not to become a local alternative, it was to build a high-quality brand that can compete on a global level.

While we are working towards this goal in the past 17 years, our products and processes deemed worthy for documentation by many national and international quality assessment institutions such as ISO, TSE, CE, GOST and many more. This was the natural outcome of our constant questioning of the status-quo and our desire to outperform ourselves.

New Generation Engineering

With our engineering approach that focuses on the process, not the problem, we do not just specialize in a product, we consider the entire ecosystem of that product. Ergo, we produce all the other components of a system in addition to plate heat exchangers and we focus on the constant development of engineering staff required to provide an end-to-end application.

We provide a “solution” rather than a product with our business development, presales, sales and after sales services provided by our expert engineers.

In our 17th year, we continue to grow as a solution partner for projects that need high technology in more than 60 countries with our internationally approved high-quality plate heat exchangers; components such as accumulation tanks, boilers, industrial pumps and installation materials that completes these exchangers to form a system; and complementary services provided by our expert engineer staff.



HEAT TRANSFER PRODUCTS

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

PRESSURE VESSELS

- Water Heater Tanks
- Water Storage Tanks
- Buffer Tanks
- Expansion Tanks
- 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
- 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
- Thermoplastic Valves

ENERGY SYSTEMS

- Boilers
- Steam Generators
- Solar Collectors
- Chillers
- Cooling Towers

PRODUCT RANGE



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MIT Plate Heat Exchanger Gaskets

Ekin Endüstriyel produces gaskets for plate heat exchangers, with an experienced team and high-tech R&D laboratory since 2006. Developing its own technology, Ekin Endüstriyel focuses on producing solutions that can meet customer needs at the highest level.

Our experience allows us to design gaskets that will ensure long-lasting and high quality operation of plate heat exchangers with its flexible production and product development methodology.

The delivery time of your gaskets is also of particular importance to us. In our production approach, customer service is more important than saving costs.

Therefore, we stock up on raw materials and finished goods used in production. It is among our goals to reduce the operating costs of your heat exchanger.

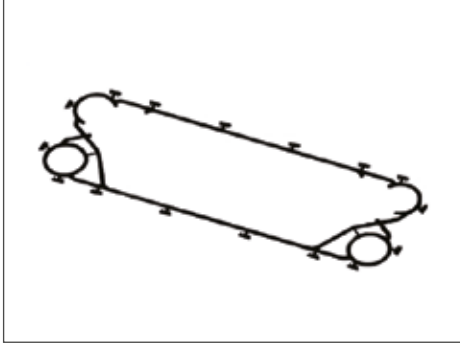
In heat exchangers, gaskets with high quality standards should have the following features:

Process	MIT Gaskets
Custom Molded Production	✓
Special Production Formula	✓
ISO 9001 Certified Laboratory	✓
International Collaborations	✓
System Development for Special Needs	✓
12 Months Warranty For All Manufacturing Defects	✓



MIT Plate Heat Exchanger Gaskets

MIT gaskets offer experience and superior service for many years. Ekin Endüstriyel is the only company in Turkey that produces the most comprehensive gaskets compatible with all brands and models.



The quality of MIT gaskets is also a result of new generation production molds.

- CAD/CAM Center
- CNC Units
- Molding Device
- Turning Line
- Mold Maintenance Line

Thanks to all these possibilities, we can make a new mold which is ready for production in 30 days and we can produce gaskets for all heat exchangers in your facility.



Ekin Endüstriyel is the gasket manufacturer with the widest product range in the market. Please learn the model of your heat exchanger with the relevant details and call us.

Operating Performance and Service Life of Gaskets

Gaskets are known as replacement parts in plate heat exchangers. They have a shorter service life than metal machine parts.

Where leakage is unacceptable, changing gaskets periodically should be considered as a preventive measure.

We can list the parameters that affect the service life of the gaskets as follows.

Pressure: The higher the working pressure, the shorter the gasket life.

Pressure Difference: The greater the pressure difference between the two fluids, the shorter the gasket service life.

Fluid Temperature: The higher the temperature to which the gasket is exposed, the faster the loosening and shorter service life will be.

Fluid Aggressiveness: The aggressive nature of the fluid causes the gasket to age, swell, and deteriorate its structure.

Quality: The higher the quality of the materials used in gasket making, the longer the gasket will last.

Exposing Plate Stacks: Each exposing of the heat exchanger increases the risk of gaskets leaking. Exchangers should not be exposed frequently, and if it is necessary to expose, the places of the plates should never be changed.

Change of Operation Parameters: Fluctuations in pressure, changes in temperature, fluid type and initial operating pressure should not be changed.

When gaskets reach the end of their working life, they often cause leaks at low temperatures.



Gasket Temperature Resistance Chart



Gasket Types and Features

EPDM Gasket

Color Code : White

Maximum Temperature : -20 °C + 145 °C

EPDM stands for ethylene propylene diene monomer rubber. EPDM is a kind of polymer material produced by copolymerization of rubber propylene and unsaturated diene. It has a very wide usage area due to its very good properties in both static and dynamic applications.

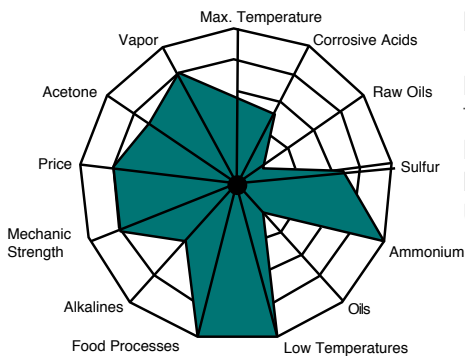
Recommended Uses

- Ethanol or ethanol mixtures
- Alcohol
- Ketones
- Diluted acids and alkalis
- Water
- Ozone
- Steam systems below 145°

Not Recommended Usage Areas

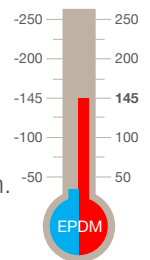
- Petroleum-based oils and greases
- Halogen solvents
- Aromatic hydrocarbons

! If you want to get detailed information about which fluids it is based on, you can contact our sales representative.



EPDM

Hardness : 80 Shore
 Tensile Strength : 17 MPa
 Elongation Rate : %240 Food Safe.
 Max. Operating Temperature : 145 °C
 Usage Areas : Hot water and steam up to 145 °C. Resistance to oxidation.



EPDM-HT Gasket

Color Code : White

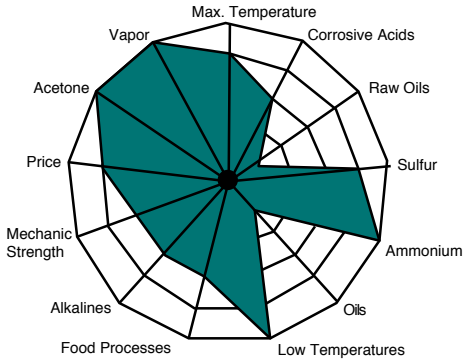
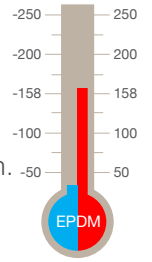
Maximum Temperature : -20 °C + 158 °C

EPDM-HT stands for ethylene propylene diene monomer rubber high temperature.

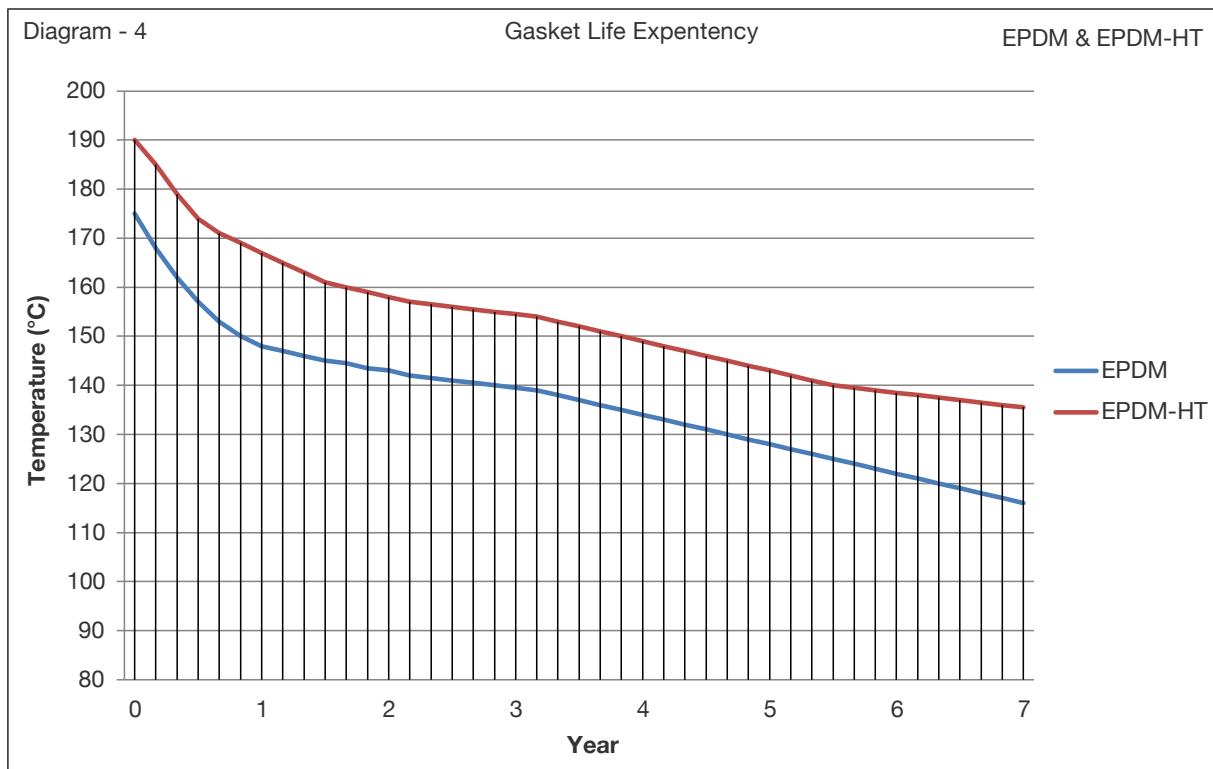
! If you want to get detailed information about which fluids it is based on, you can contact our sales representative.

EPDM - HT

Hardness : 82 Shore
 Tensile Strength : 15 MPa
 Elongation Rate : %180 Food Safe.
 Max. Operating Temperature : 158 °C
 Usage Areas : Hot water and steam up to 158 °C. Resistance to oxidation.



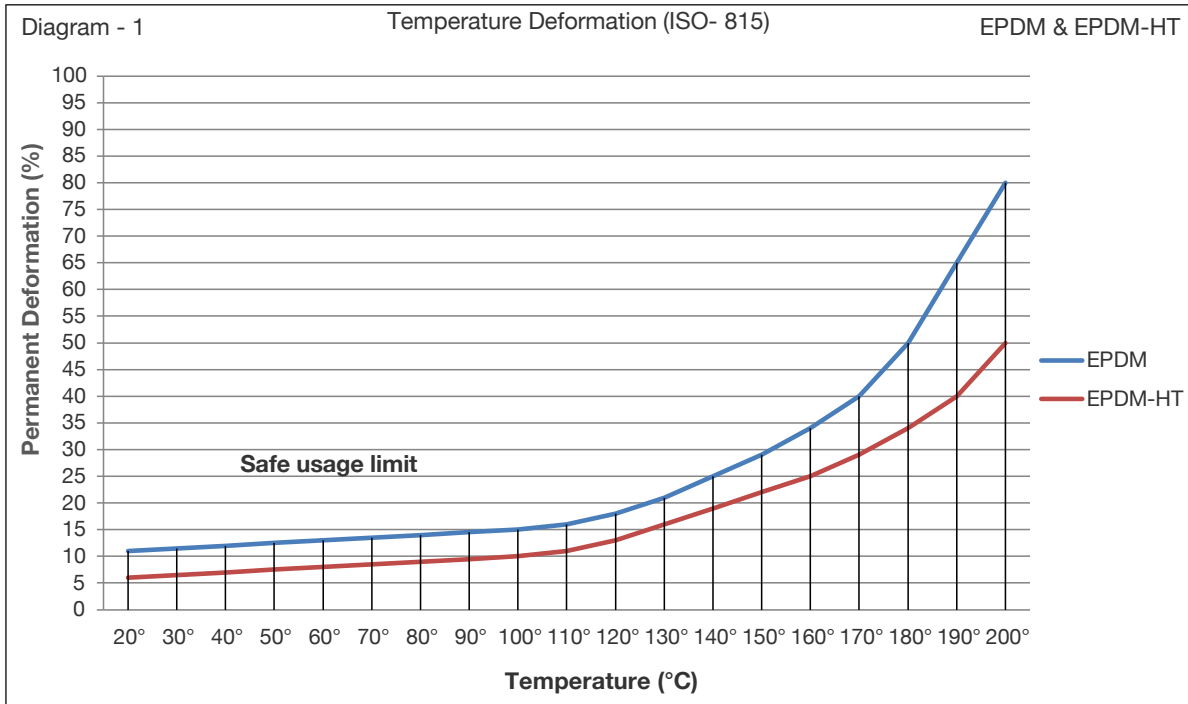
Temperature - Life Graph



! Values may differ according to type of liquid being used and usage conditions.

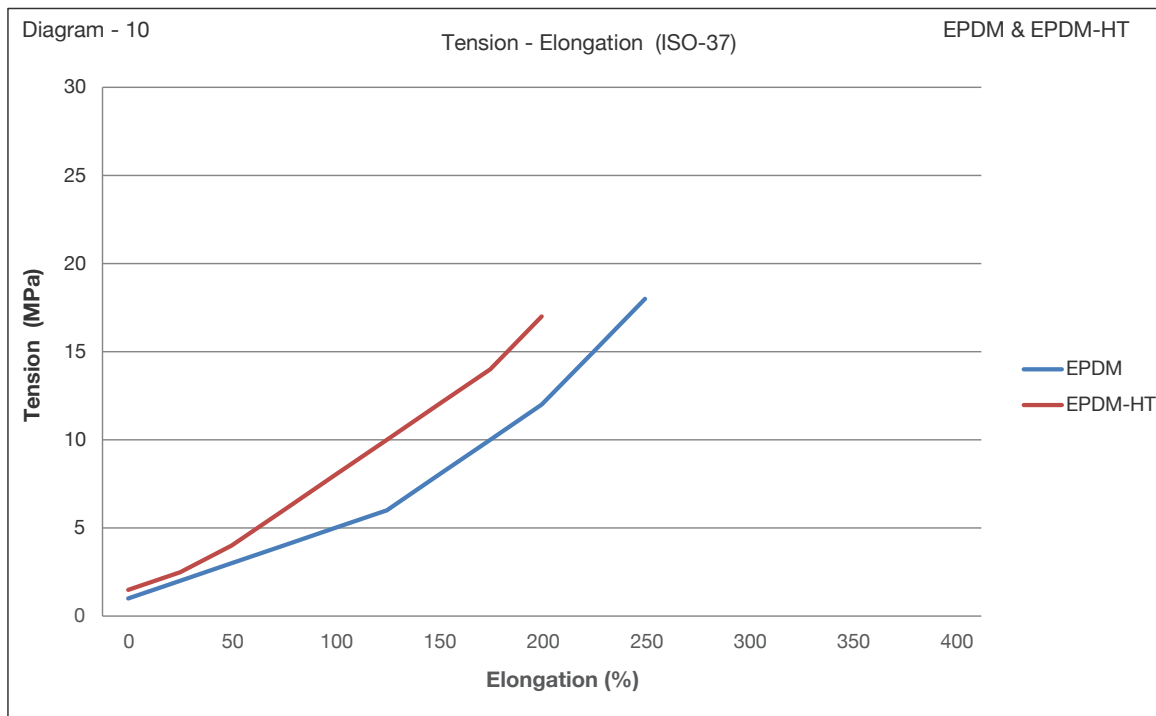


Temperature - Deformation Graph



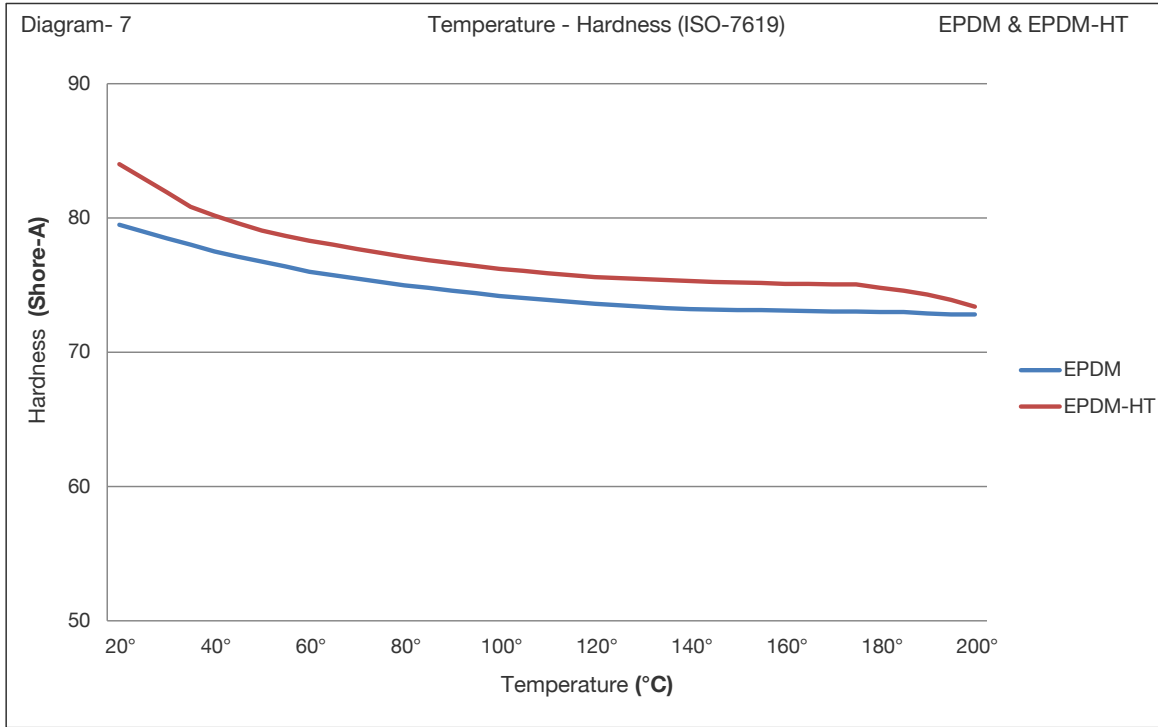
! If you want to get detailed information about which fluids it is based on, you can contact our sales representative.

Tension - Elongation Graph



! If you want to get detailed information about which fluids it is based on, you can contact our sales representative.

Temperature - Hardness Graph



Values may differ according to type of liquid being used and usage conditions.

NBR Gasket

Color Code : Yellow

Maximum Temperature : -10 °C + 120 °C

Nitrile rubber is called NBR. It is the most preferred material type due to its functional structure. It has good mechanical properties. Nitrile rubbers are often blended with sulfur. The aging feature is moderate.

Recommended Uses

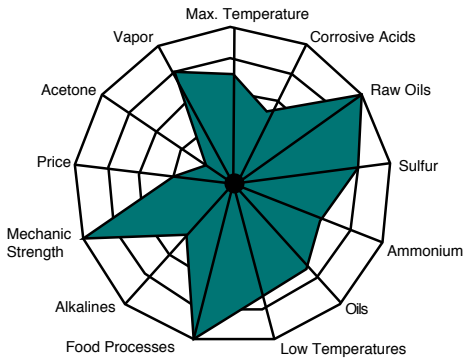
- Petroleum-based fuels and oils
- Plant-based oils
- Silicone oils and greases
- Diluted acids
- Ethylene glycol
- Hydrocarbon-based oils

Not Recommended Uses

- Strong acids
- Ethers
- Esters
- Ketone
- Steam

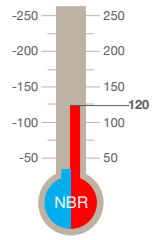


If you want to get detailed information about which fluids it is based on, you can contact our sales representative.



NBR

Hardness : 78 Shore
 Tensile Strength : 21 MPa
 Elongation Rate : %200 Suitable for food.
 Max. Operating Temperature : 120 °C
 Usage Areas : Vegetable and mineral oils.



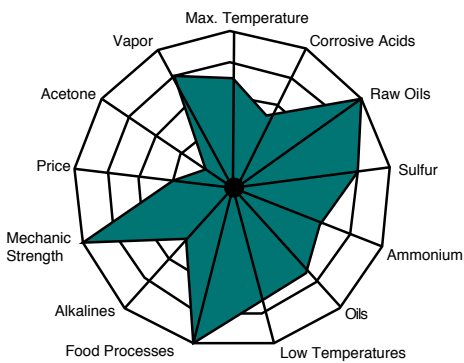
NBR-HT Gasket

Color Code : Yellow

Maximum Temperature : -10 °C + 140 °C

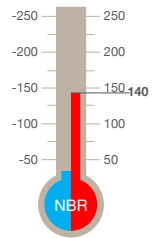
It has higher maximum temperature than NBR gaskets. The types of fluids used do not differ.

! If you want to get detailed information about which fluids it is based on, you can contact our sales representative.



NBR-HT

Hardness : 78 Shore
 Tensile Strength : 21 MPa
 Elongation Rate : %200 Suitable for food.
 Max. Operating Temperature : 140 °C
 Usage Areas : Vegetable and mineral oils.



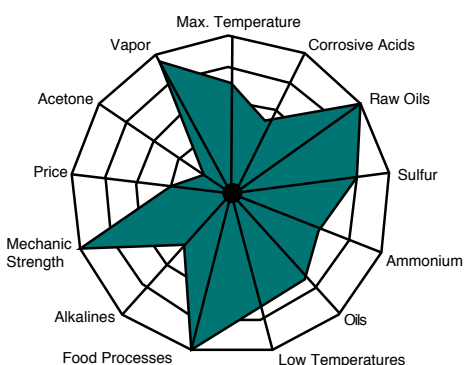
H-NBR Gasket

Color Code : Yellow

Maximum Temperature : -10 °C + 160 °C

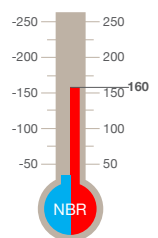
What sets H-NBR apart from other NBR gaskets is that they can be used in applications requiring a high maximum temperature and resistance up to 2 bar steam (120 °C).

! If you want to get detailed information about which fluids it is based on, you can contact our sales representative.

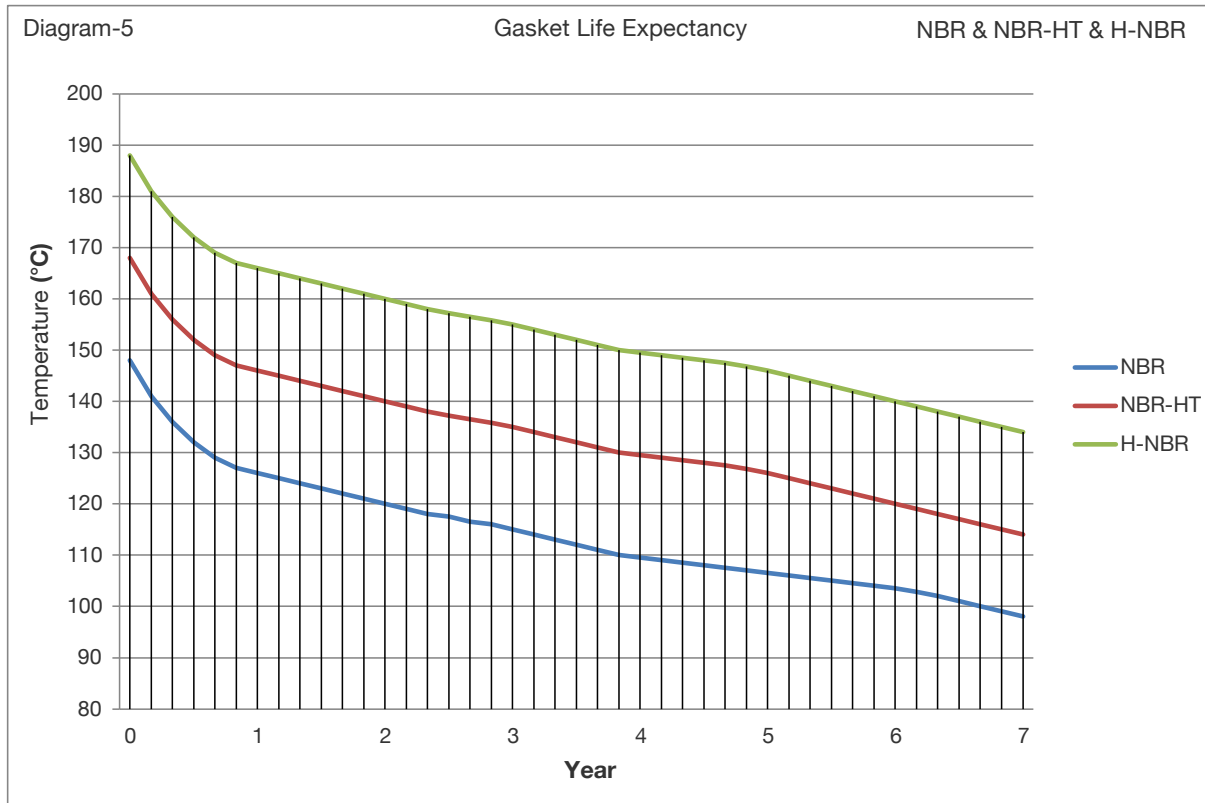


H-NBR

Hardness : 78 Shore
 Tensile Strength : 21 MPa
 Elongation Rate : %200 Suitable for food.
 Max. Operating Temperature : 160 °C
 Usage Areas : Vegetable and mineral oils.

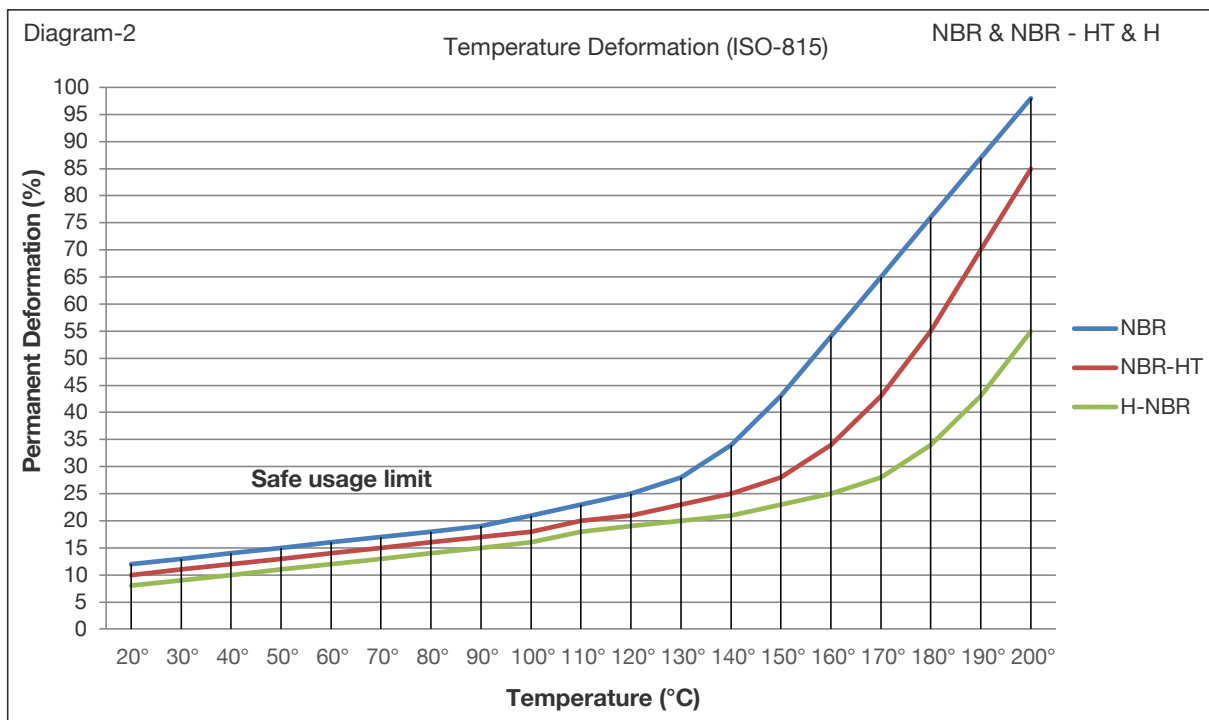


Gasket Life Expectancy



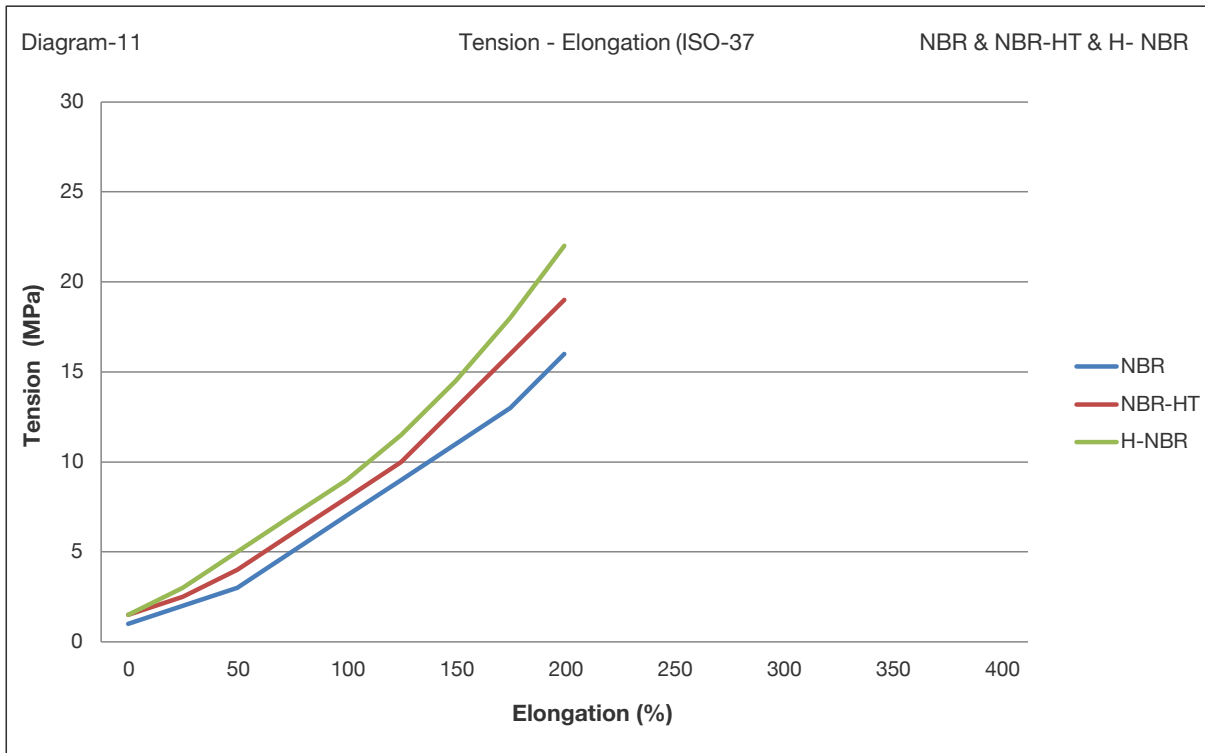
Values may differ according to type of liquid being used and usage conditions.

Temperature - Deformation Graph



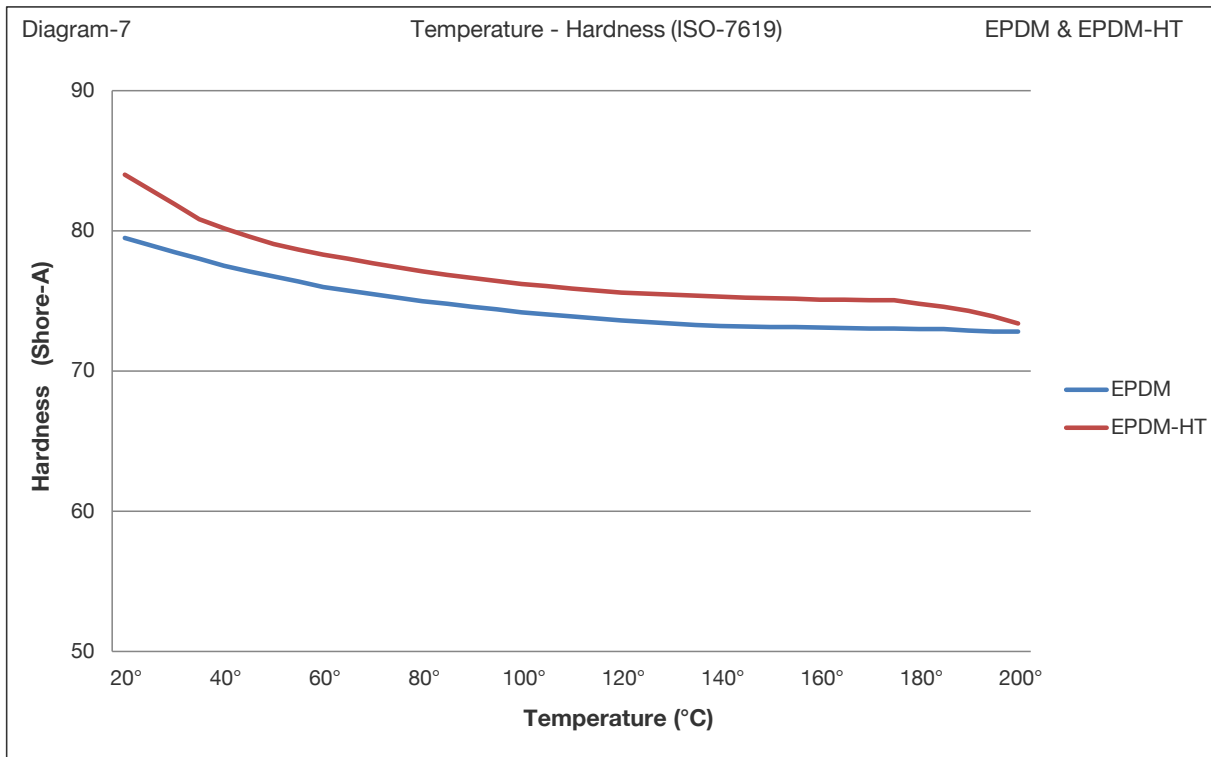
Values may differ according to type of liquid being used and usage conditions.

Tension - Elongation Graph



! Values may differ according to type of liquid being used and usage conditions.

Temperature - Hardness Graph



! Values may differ according to type of liquid being used and usage conditions.

FKM (Viton) Gasket

Color Code : Grey

Maximum Temperature : -5 °C + 180 °C

Fluorocarbon is a high performance rubber. Compared to other rubber materials it has the best aging properties. Due to its superior properties it is an expensive material.

Recommended Uses

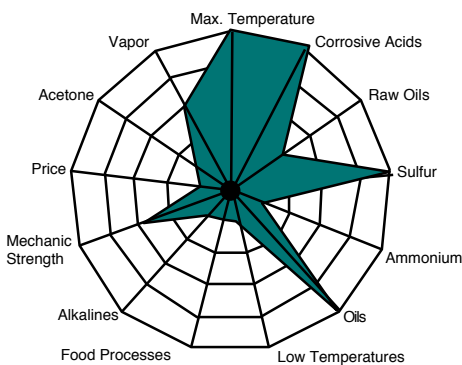
- Petrol Products
- Fuel, ethanol or ethanol mixtures
- Diesel or Bio-diesel fuels
- Silicon oils and greases
- Mineral oils and greases
- High pressures
- Ozone, air and extremely high temperatures
- Strong acids

Not Recommended Uses

- Ketones (Organic materials including Acetone)
- Formic and acidic acids (Organic acids with low molecule weight)
- Extreme amounts of Steam
- Esters and ethyl group with low molecule weight

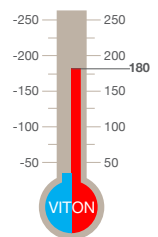


If you want to get detailed information about which fluids it is based on, you can contact our sales representative.



VITON-G

Hardness : 82 Shore
 Tensile Strength : 15 MPa
 Elongation Rate : %180 Suitable for food.
 Max. Operating Temperature : 180 °C High resistance to corrosive fluids.



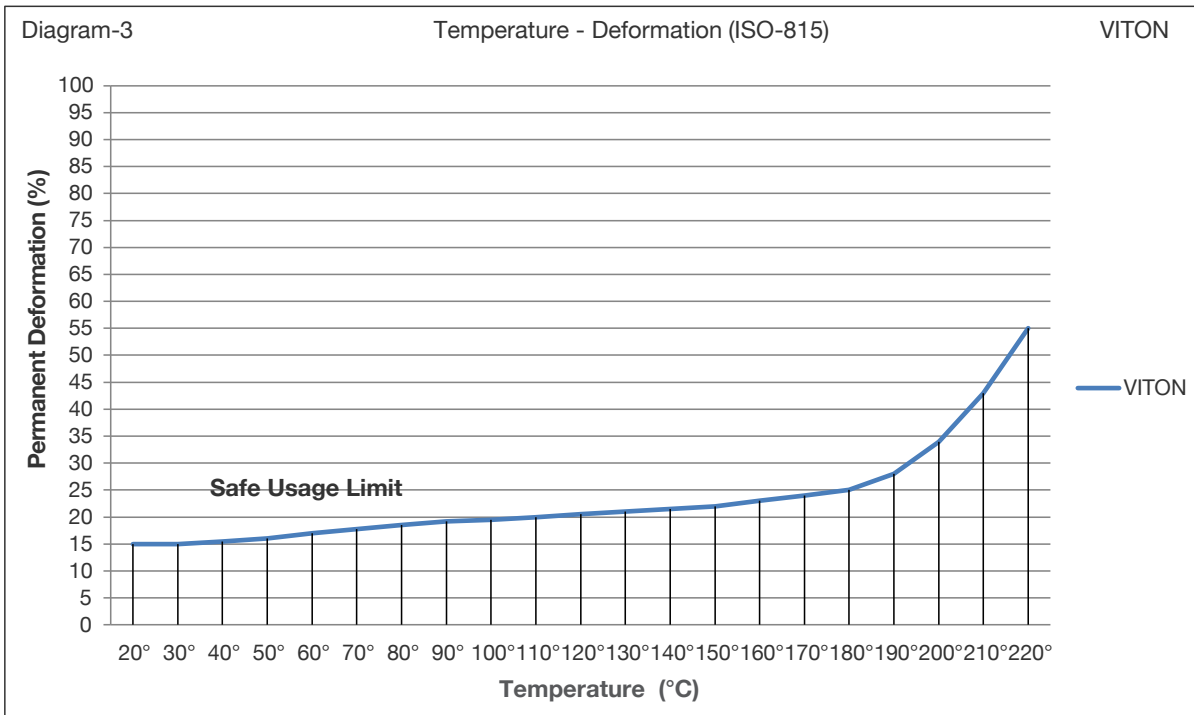


Gasket Life Expectancy



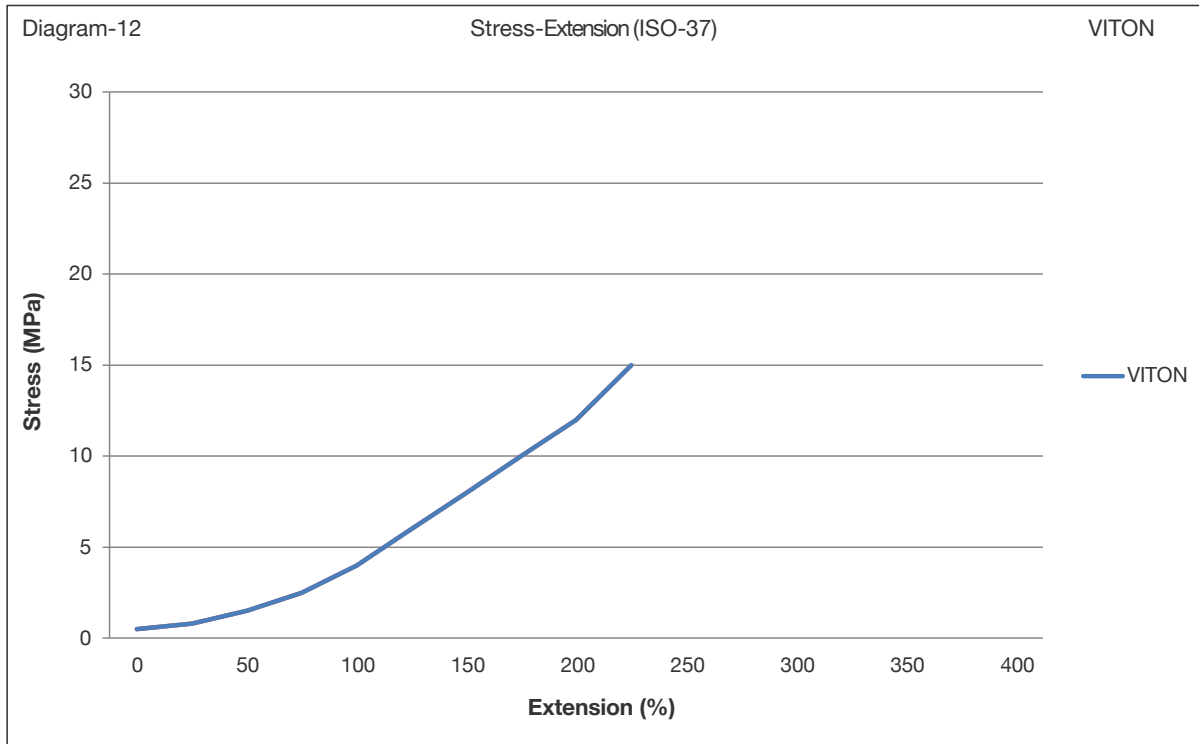
! Values may differ according to type of liquid being used and usage conditions.

Temperature - Deformation Graph



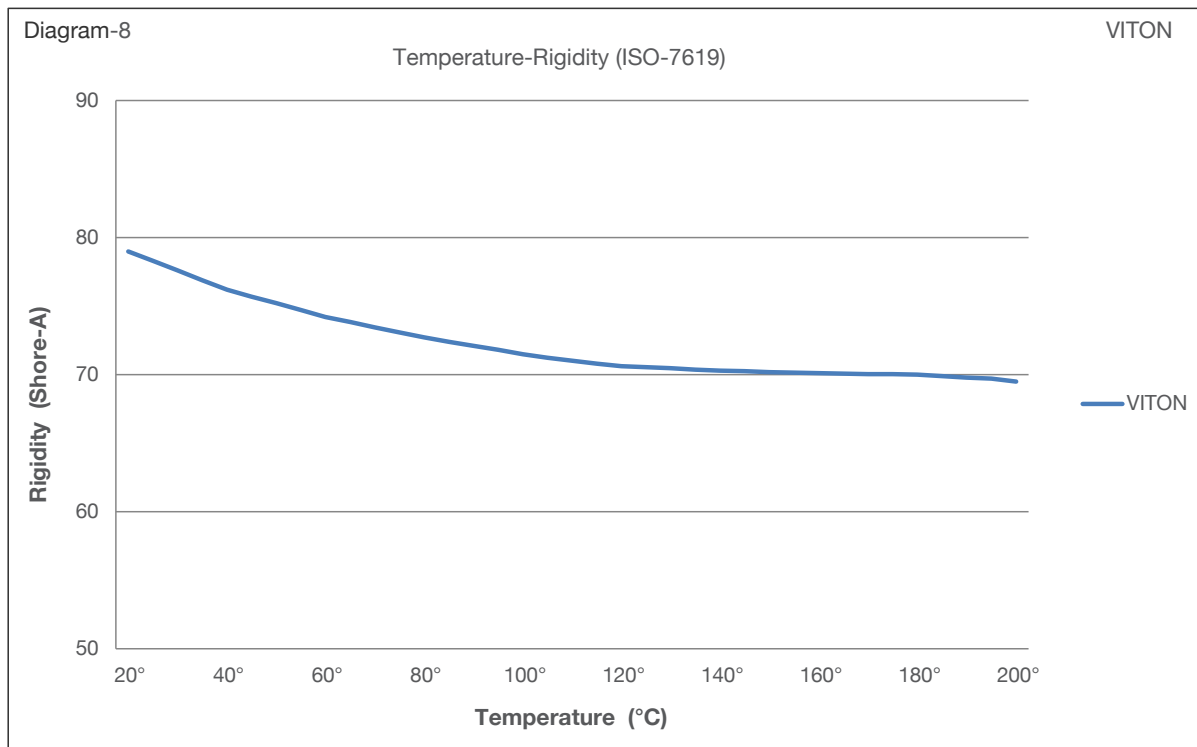
! Values may differ according to type of liquid being used and usage conditions.

Stress – Extension Graph



Values may differ according to type of liquid being used and usage conditions.

Temperature – Rigidity Graph



Values may differ according to type of liquid being used and usage conditions.



Notes

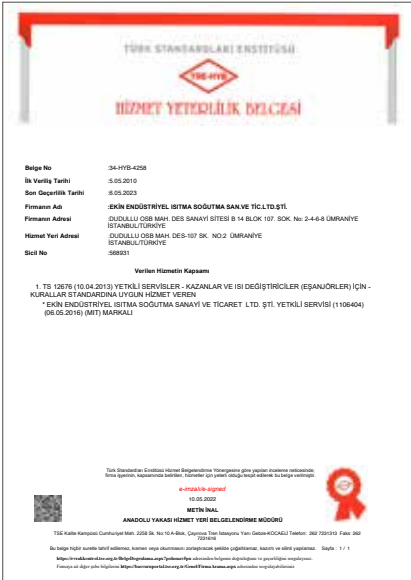
Lined area for notes, consisting of horizontal dotted lines.



Notes

A series of horizontal dotted lines for writing notes.

Certificates





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 high-quality 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

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, 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.**



+90 850 811 04 18

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.

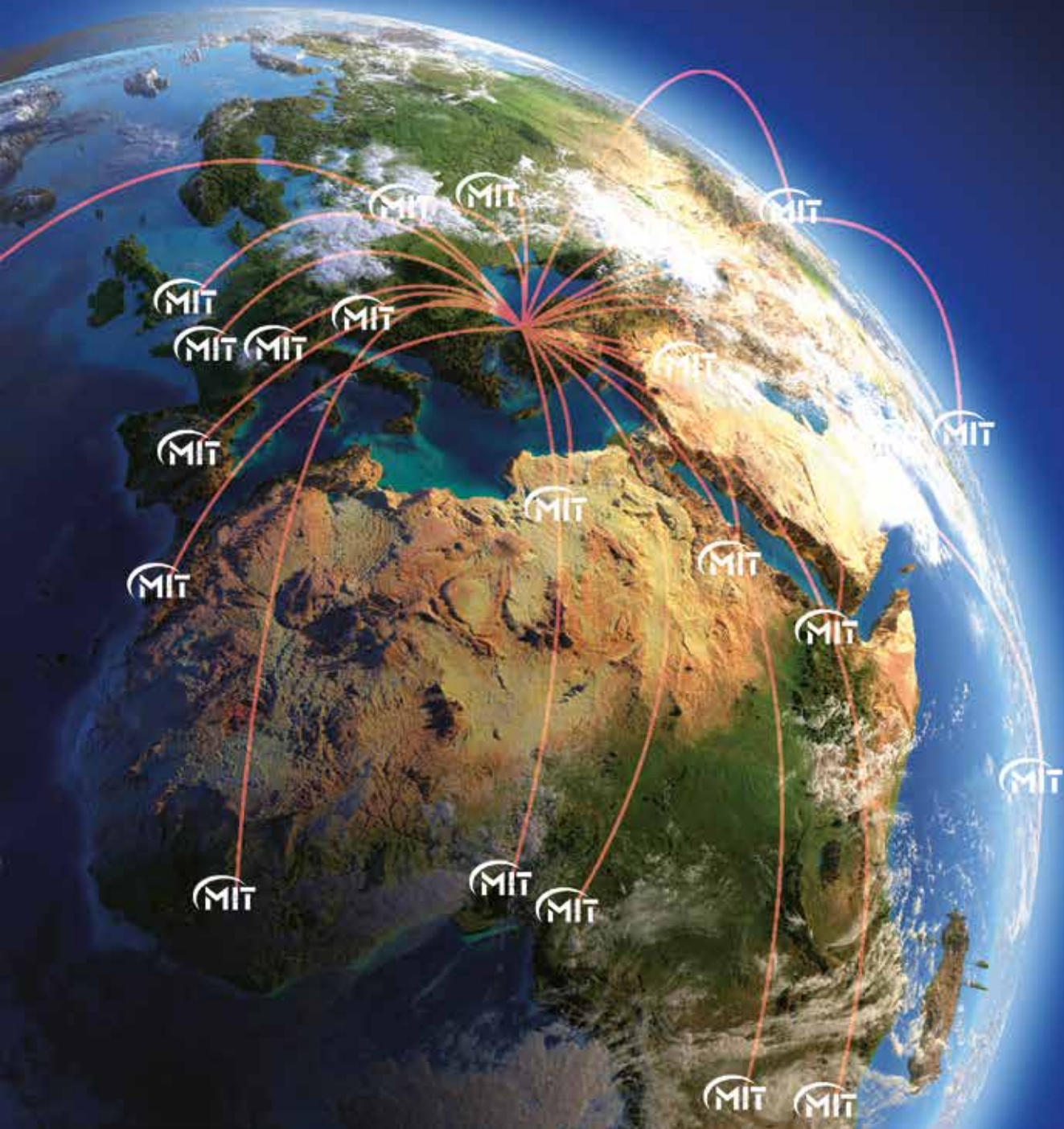


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