



ERKAR[®]
INDUSTRIAL COOLING SYSTEM

**INDUSTRIAL
COOLING
SYSTEMS**



Erkar Quality

All over the world..



- ETHIOPIA
- KENYA
- UGANDA
- TANZANIA
- SOMALIA
- MORITUS
- SOUTH AFRICA
- GAMBIA
- GHANA
- LIBERIA
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- GUINEA
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- EGYPT
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- LIBYA
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- SUDAN
- AZERBAIJAN
- BULGARIA
- GEORGIA
- KAZAKHSTAN
- ROMANIA
- HUNGARY
- LITHUANIA
- ALBANIA
- BOSNIA AND HERZEGOVINA
- ITALY
- MALTA
- KOSOVO
- AUSTRIA
- BELGIUM
- FRANCE
- GERMANY
- LUXEMBOURG
- NETHERLANDS
- SWITZERLAND
- USA
- AUSTRALIA
- NEW ZEALAND
- MALDIVES
- SINGAPORE
- CYPRUS
- LEBANON
- QATAR
- KUWAIT
- TAIWAN
- SRI LANKA
- UNITED ARAB EMIRATES
- JORDAN
- BANGLADESH
- CAMBODIA
- PHILIPPINES
- OMAN
- UZBEKISTAN
- TURKMENISTAN
- THAILAND
- INDONESIA
- SAUDI ARABIA
- INDIA

The countries that we export to.





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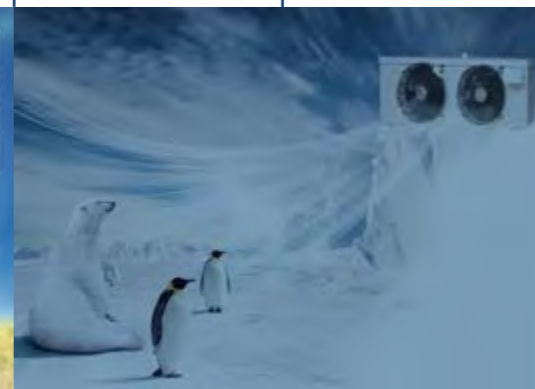
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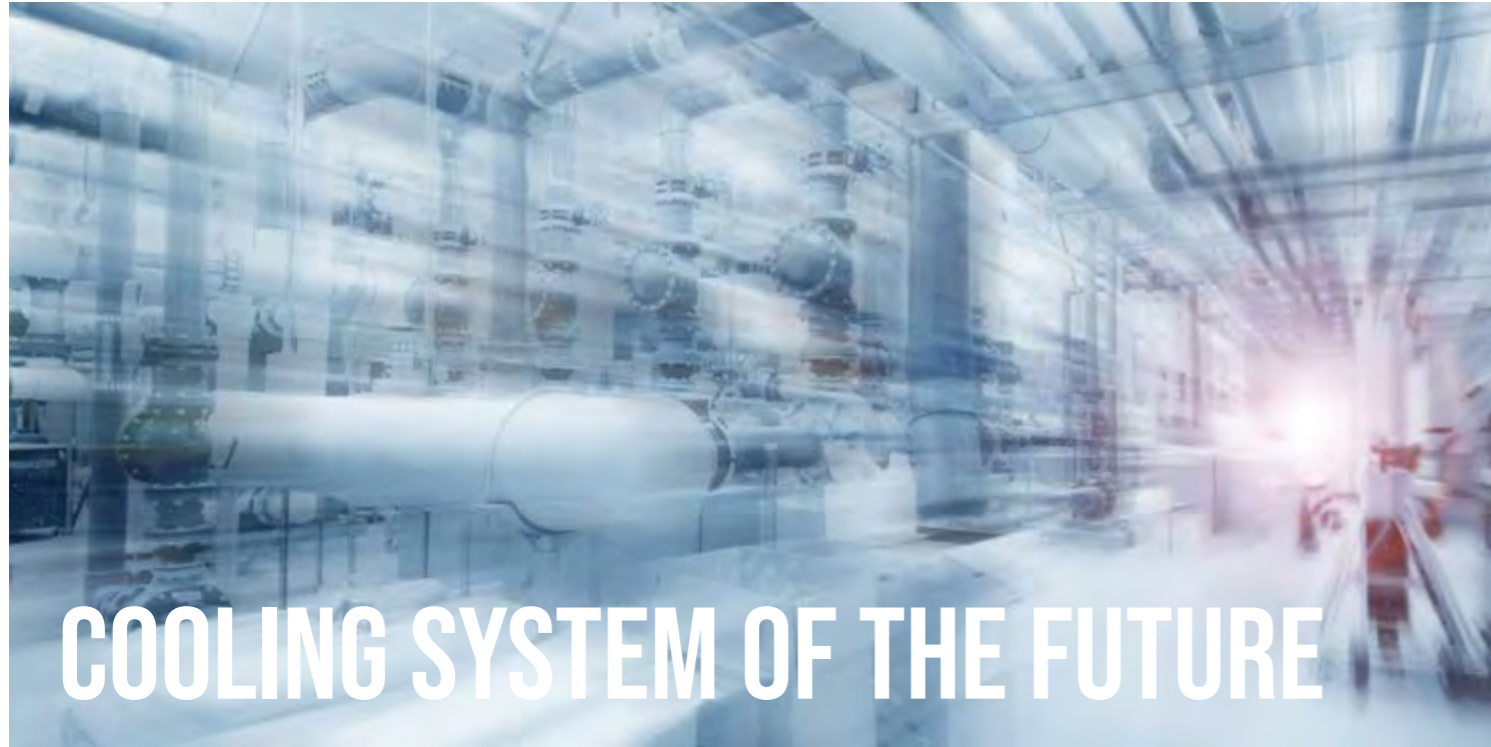
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COOLING SYSTEM OF THE FUTURE

ERKAR ICS

“ Erkar ICS is a technology and engineering company specializing in 'green energy' in the machinery manufacturing sector, producing cooling machines, and monitoring cold rooms that work according to the needs of its customers. Erkar ICS employees are a team that has been conducting training and R&D studies worldwide for 15 years.

Erkar ICS meets the cooling needs of many different industries. Our company, which produces and supplies all the team, equipment and machines related to cooling, offers you a professional service with its service network and experienced staff. Erkar ICS, which has been a partner for sectors that need cold storage for many years and those working in this field, designs the products it produces with its own professional staff. Our company, which uses all the innovations of technology as well as its expert, trained engineers and technical team, makes production above world standards by giving importance to durability, function and aesthetics. In this way, it offers its customers reliable and healthy products.

”



WE PRODUCE HIGH QUALITY PROJECTS AROUND THE WORLD

We adopt a coordinated working approach with our customers in our project designs and contracting services. Our experienced project team informs you on important issues such as physical suitability to the area where your project will be made, feasibility analysis, project draft cost and operating cost. The design of your projects, transferring references similar to your projects and making new works specific to you are among the main subjects of our project team. As we all know, industrial projects are irreversible investments. In line with your request, we are at your side with our experienced and expert team in your projects that you can use safely with zero defects.

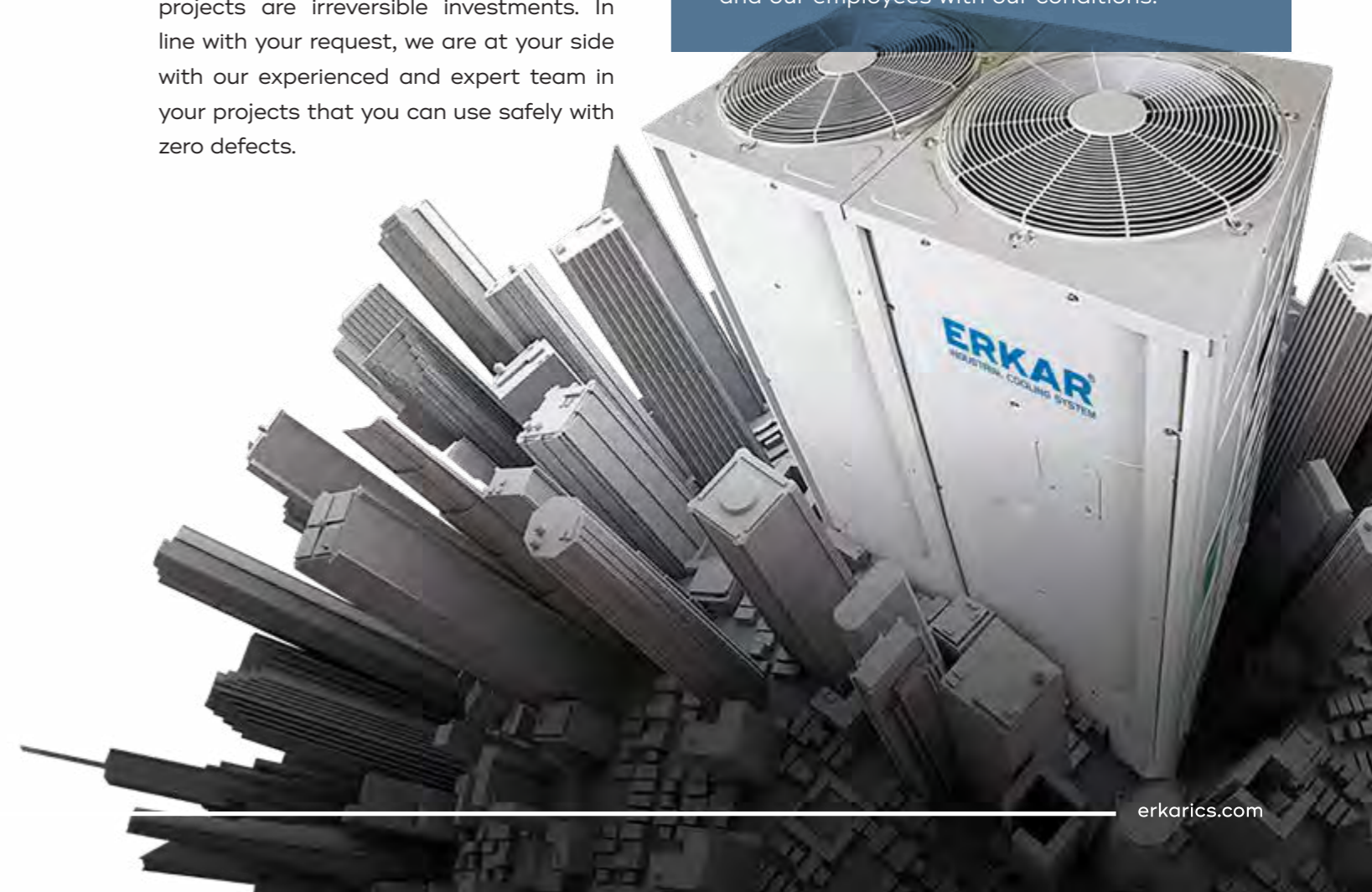


MISSION

To develop and offer more reliable, efficient and sustainable innovative solutions.

VISION

To be a high-value brand in national and international markets, to be the first choice by making our customers happy with our solutions, our solution partners with our work and our employees with our conditions.





Production requires years of experience and professional competence. With our expert staff and production facility that will meet the expectations, all kinds of cooling equipment reach you under ERKAR ICS assurance. In addition to this, we always wish to present you flawlessly by combining the idea of **"ALWAYS FOR BETTER"** with technological data that constantly renews itself.



WE LOVE THE COLD

NETWORK SERVICES

SERVICE

ERKAR Central Services, with its experienced and trained technical team in its staff, resolves all the demands of its customers in place and on time. We support our customers with specialized service personnel in our headquarters and authorized services in different regions.

Fast response and a wide service network around the world are our most important parameters to satisfy you. We use emergency service labels to provide you with a faster and better service.

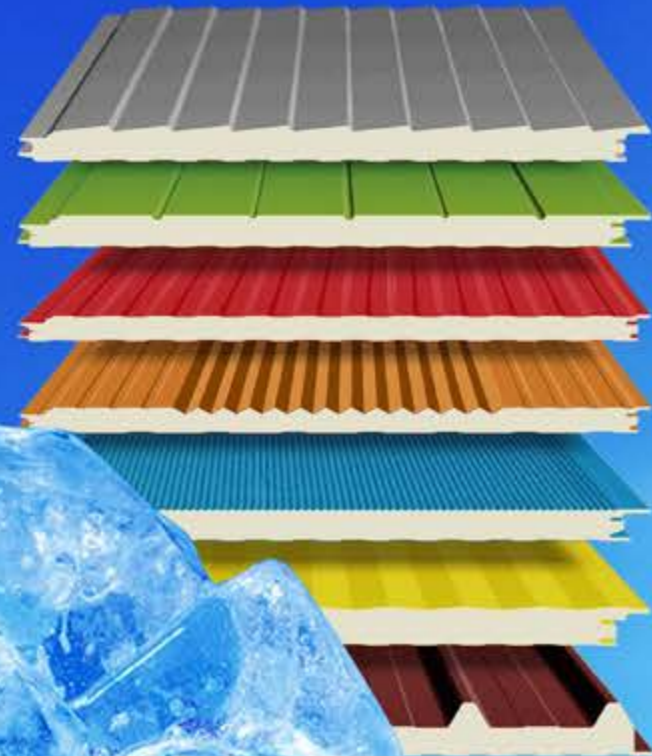
With its GSM number available 24/7, our on-call service personnel meet your demands even out of working hours. Its sales and after-sales service network ensure that the customers use suitable and quality products with confidence.



INDUSTRIAL
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CALL NOW

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INDUSTRIEL PANELS

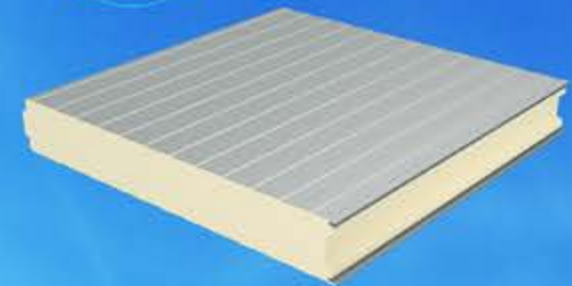
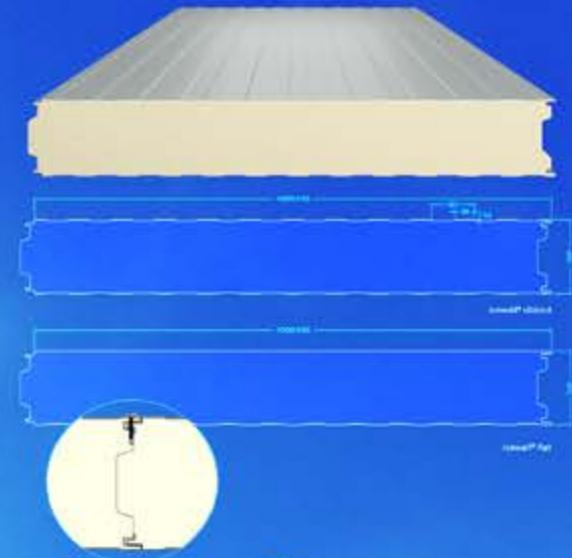
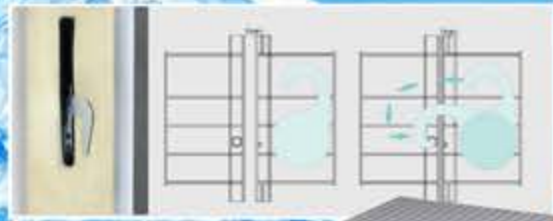


SANDWICH PANELS

Cold Room Panel
Facade Panel
Roof Panel

COLD ROOM

Corrugated Panel
(Locked - Unlocked)
Flat Panel
Floor Panel
Corner Panel
Narrow Panel



AVAILABLE COLORS

RAL 9002 Broke White



RAL 9010 Pure White



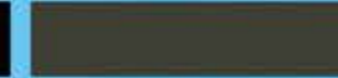
RAL 9006 White Aluminum



RAL 9004 Signal Black



RAL 7022 Umbra Grey



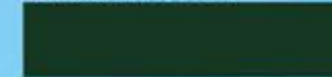
RAL 7016 Anthracite Grey



RAL 7012 Basalt Grey



RAL 6005 Moss Green



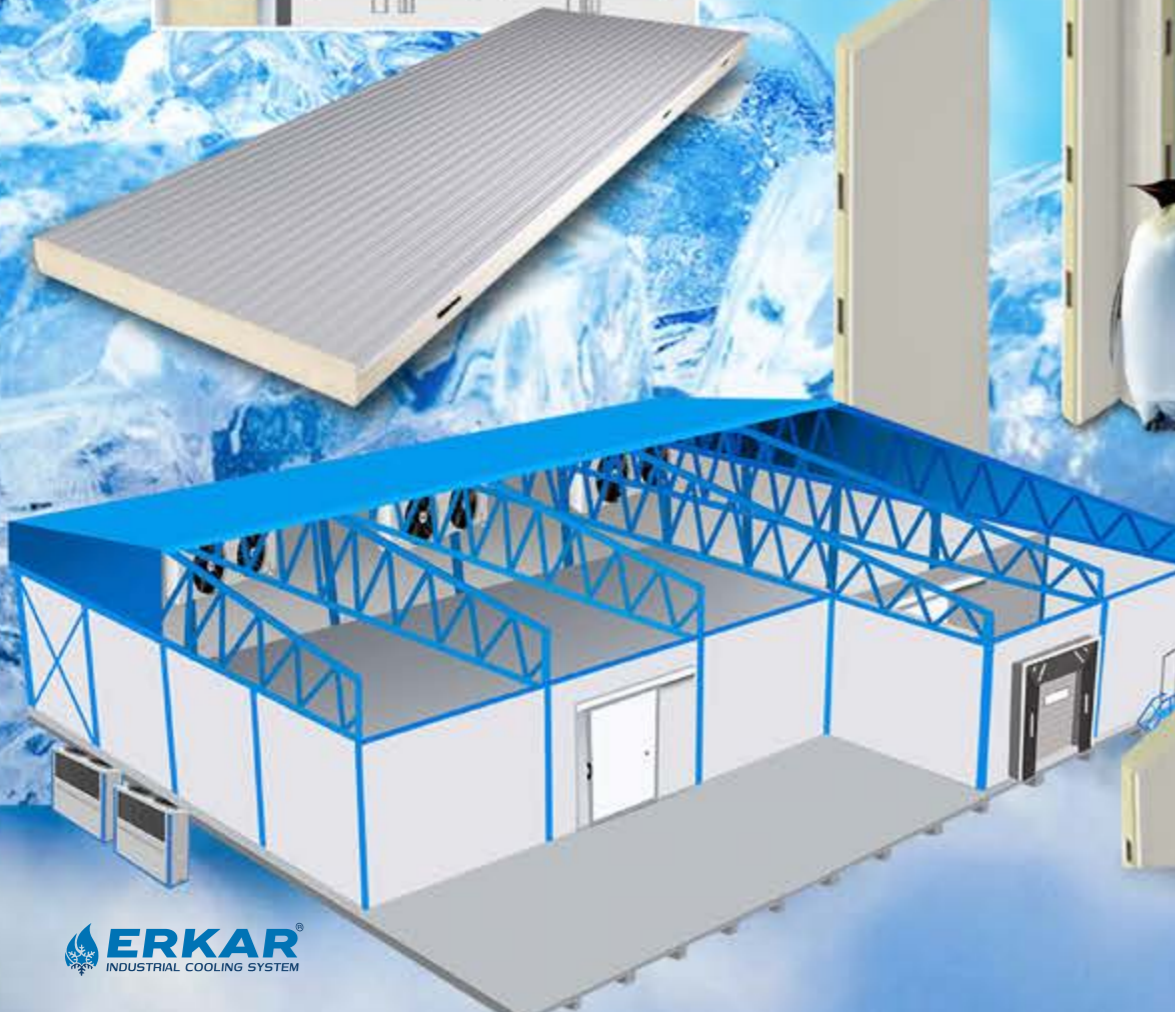
RAL 5010 Gentian Blue



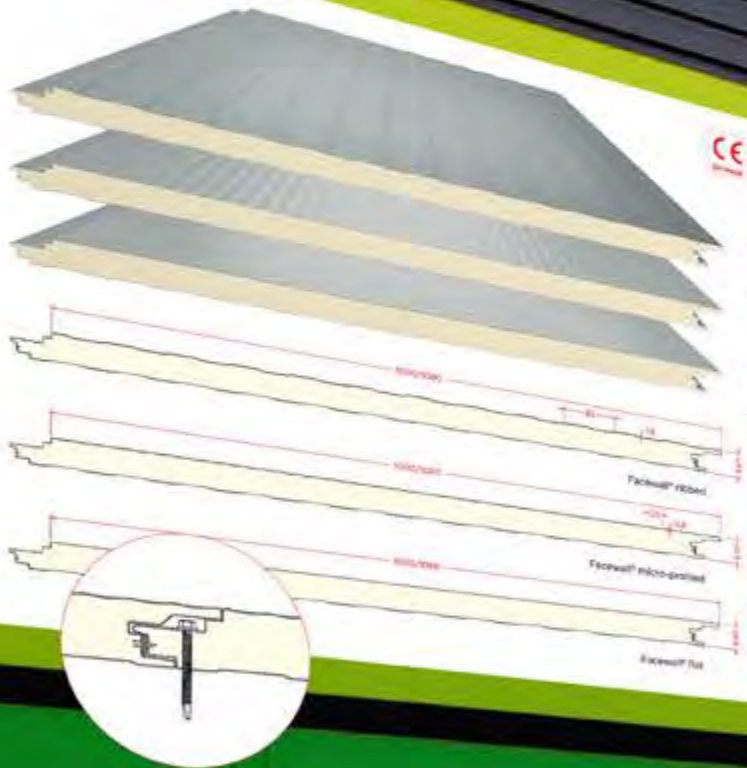
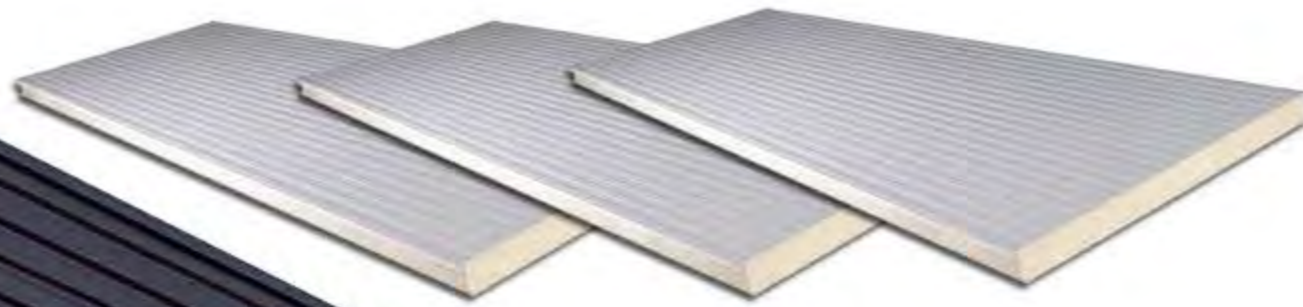
RAL 3009 Oxide Red



RAL 1015 Light Ivory



FACADE

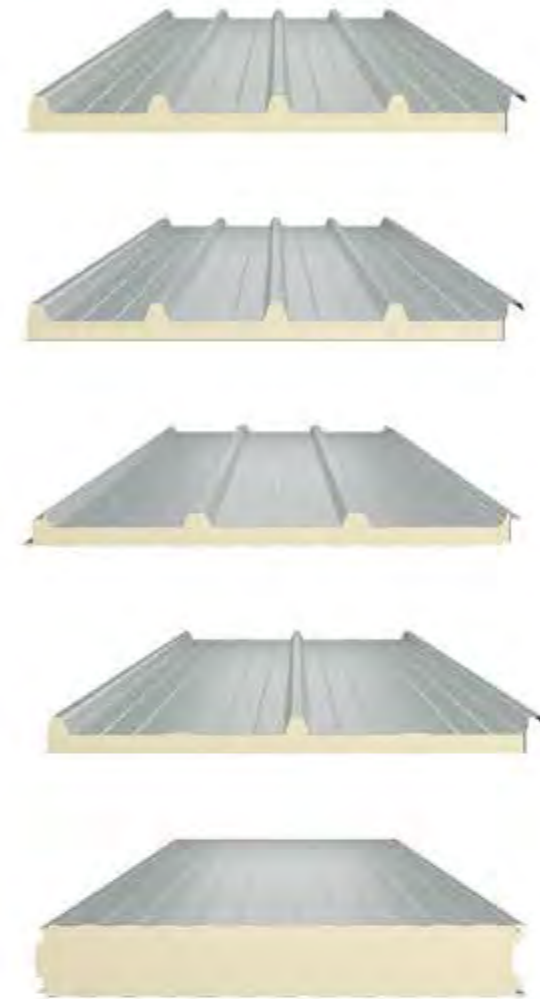
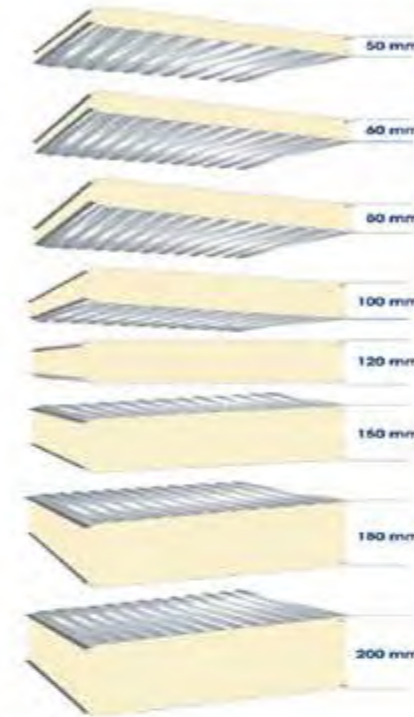


FACADE PANEL

Sandwich Panel is aesthetic materials used as surface coating, composite roof and facade cladding, which is manufactured by applying polyurethane injection of various thickness and density between two layers of painted galvanized sheet or aluminium sheet. Facade panels provide heat, water, sound insulation and fire safety. It protects the building safely from external atmospheric conditions. It is produced as either hidden or external fastening. The produced panels are available in thicknesses of **60, 80, 100, 120, 150, and 200 mm**, width of **111 cm** and up to **13.5 meters** in length according to the project. Its inner and outer surfaces are galvanized sheet metal of **0.50 mm** thickness and painted with **RALL9002** polyester as standard. Our panels are manufactured according to the lock system and are combined with the detail of interlocking as male and female format. The surface of the panels is smooth, hygienic, and easy to clean. Due to its hygienic nature, it is preferred especially in hospitals, food products warehouses and pharmaceutical industry. It prevents heat loss with its special design and accessories.

PANEL

DIMENSION



and ROOF PANELS

ROOF PANEL

Roof panels are aesthetic materials that protect cold rooms from external factors. Roof panels vary according to carrier systems, roof slopes and covering material. Our roof panels provide maximum heat, sound and water insulation with Rockwool, Polyurethane and Polystyrene Insulation alternatives. The most preferred roofing materials in roof panels are sandwich panels consisting of inner and outer metal sheet and insulation core. Sandwich panels stand out with their high insulation properties in addition to their rapid production and installation, high carrying capacity and lightweight construction.

COLD ROOM



COLD ROOM PANELS

Cold rooms are rooms created to keep foods longer than they can be stored under normal conditions. These cold rooms consist of panels. **Panels are divided into two as a special eccentric lock system or an unlocked screw connection.** With the eccentric lock system, cold rooms are created to provide minimum heat transfer. In this way, foods are stored with less energy consumption under the desired suitable conditions.

Our panels are **CE certified**, filled with polyurethane with a density of **42 kg / m³**, and have a prefabricated structure. We have a wide range of products such as **5-6-8-10-12-15 -18 and 20 cm** thick chromium, PVC, polyester painted over galvanized, corrugated or non-corrugated in desired sizes **up to 12 meters in length, with locked and unlocked options.** Thanks to the protective film on our panels, it is protected from external factors until the installation process begins. Our products with lock system in female-male form enable the panels **to be assembled / disassembled** without deterioration of their structures.



Wall Panels

Wall panels are panels that make up most of the cold store and they are used to protect the heat of cold storages from external factors.

We have a wide range of products such as **5-6-8-10-12-15 -18 and 20 cm** thick chromium, PVC, polyester painted over galvanized, corrugated or non-corrugated in desired sizes up to **12 meters** in length, with locked and unlocked options.

Spessore del pannello (mm)	k=W/Mk	U-Value m ² K	Peso Kg /m ²	°C	ERKAR ICS inferiore e superiore Spessori metallici
			0.5+0.5		
60	0,226	0.39	11,08	+10°C/+5°C	0.50/0.50 mm
80	0,226	0.30	11,62	+5°C/-5°C	0.50/0.50 mm
100	0,226	0.24	12,42	-5°C/-12°C	0.50/0.50 mm
120	0,226	0.20	13,22	-12°C/-20°C	0.50/0.50 mm
150	0,226	0.16	14,42	-20°C/-30°C	0.50/0.50 mm
180	0,226	0.14	15,62	-30°C/-40°C	0.50/0.50 mm
200 0	0,226	0.12	16,42	-40°C/-60°C	0.50/0.50 mm



INDUSTRIAL PANELS

FLOOR PANEL

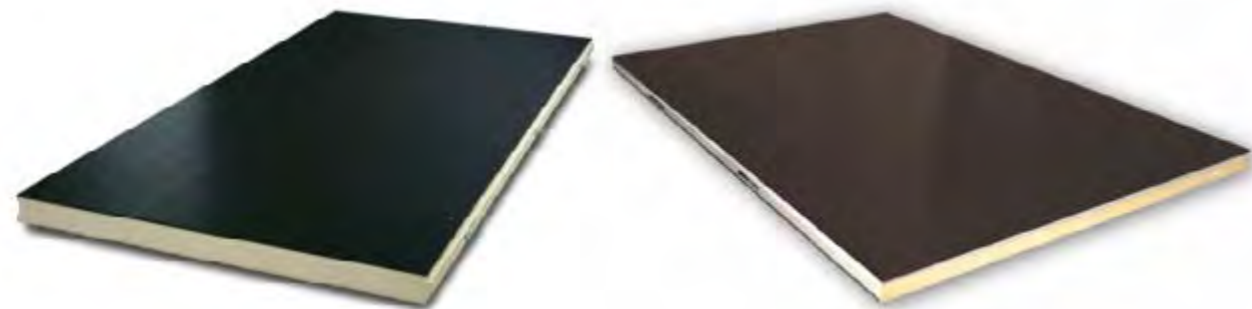
Floor panels form the floor of cold rooms. The floor panel has a very important place in terms of insulation because the biggest heat loss in cold rooms is from the floor. Floor panels reduce this heat loss to a minimum. The bottom surface of our **5-6-8-10-12-15-18 and 20 cm** thick floor panels is galvanized sheet metal and the upper surface is produced from a **90 mm** thick anti slip surface and water-resistant plywood. The load carrying capacity of our standard produced cold storage floor panels is **2000 kg** for live loads and **3000 kg** for fixed loads for per square meter.

NARROW PANEL

Narrow panels enable cold room installation without wastage. By using narrow panels of **30, 40 and 50 cm** widths, you can install your cold rooms quickly and practically without the need for any cutting process and without allowing the formation of a heat bridge. The locking system is available in 80 mm and thicker panels.

CORNER PANEL

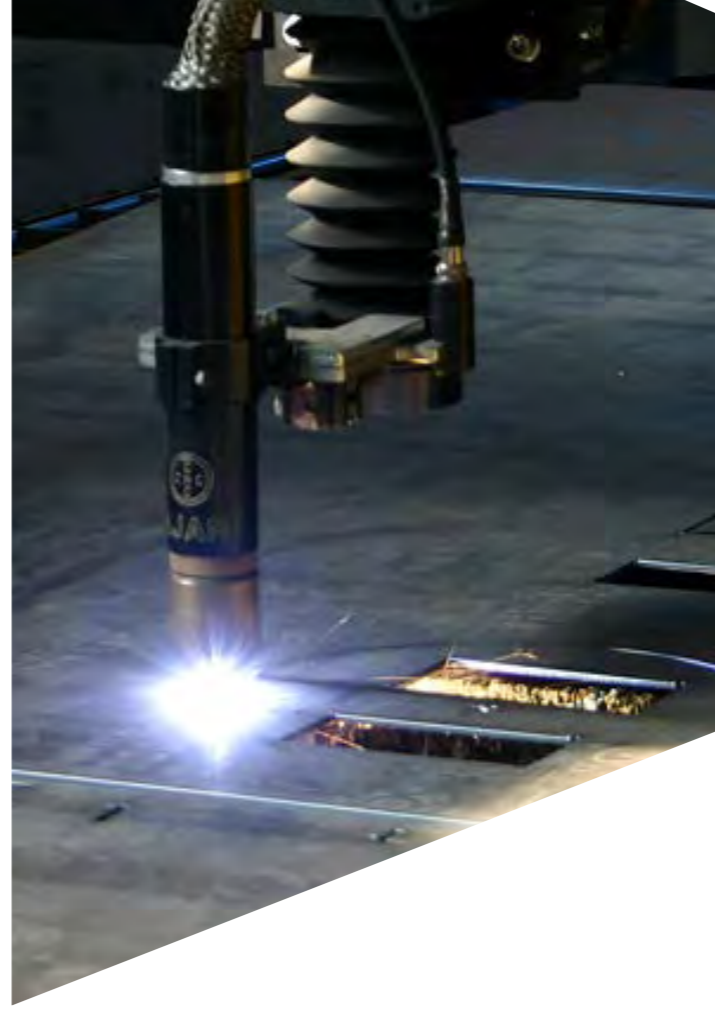
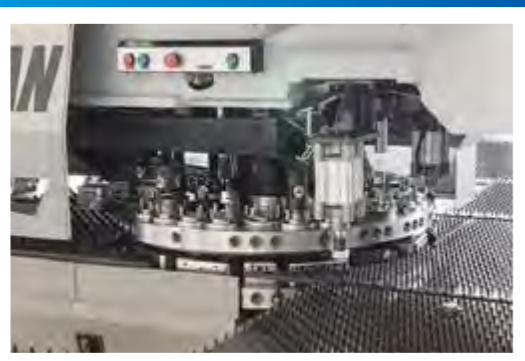
Corner panel is the material that provides protection of the thermal bridge that is tried to be formed by locking the panels together in the corner joints. Reverse corner panel allows corner column rotation to be locked, and **Z panel enables** all kinds of column rotations to be locked.





MACHINE

PARKOUR AND PRODUCTION



INDUSTRIAL COOLING SYSTEM CALL NOW



ENERGY SAVING

MACHINE

PARKOUR AND PRODUCTION





COLD ROOM DOORS

Cold room doors are materials that ensure minimum heat transfer from inside and outside during product, food, equipment, and human entry-flow so that the stored products can be stored without deterioration. Doors are manufactured by injecting polyurethane with a density of **40+-2** are between two plate sheets (**polyester, PVC, plastisol, CrNi**).

It is used in cold and frozen storage rooms and blast freezing rooms. The surfaces are produced with the same coating as the panel surfaces or different surface coating. Door leaf and frame are polyurethane filled, there are thermal bridges. There is an anti-panic handle that can be locked from the outside with a key and can be opened from the inside with or without a key. There is a resistance against freezing in frozen storage and blast freezing doors.

HINGED DOORS

Cold room doors are materials that ensure minimum heat transfer from inside and outside during product, food, equipment, and human entry-flow so that the stored products can be stored without deterioration. Doors are manufactured by injecting polyurethane with a density of **40+-2** are between two plate sheets (**polyester, PVC, plastisol, CrNi**).

It is used in cold and frozen storage rooms and blast freezing rooms. The surfaces are produced with the same coating as the panel surfaces or different surface coating. Door leaf and frame are polyurethane filled, there are thermal bridges. There is an anti-panic handle that can be locked from the outside with a key and can be opened from the inside with or without a key. There is a resistance against freezing in frozen storage and blast freezing doors.



SLIDING DOORS

Sliding doors are doors that are sliding from the top or mounted on the rail system from below and can move to the right or left. Sliding system cold room doors are produced with high quality in desired dimensions. Anodized aluminum rail system and two arms are available for easy opening from inside and outside. It has a lockable feature. When the door is fully opened, thanks to the inner arm system, the door becomes zero with its frame and offers convenience in the case of forklift-pallet truck use. The rail mechanism used on the upper part allows the door to be opened and closed easily. It is long-lasting thanks to its highly durable arm, lock, roller and door seal. Sliding doors are produced in the desired color, in desired properties, in accordance with your needs.



FLIP-FLAP DOORS

Flip-flap doors are single and double winged doors that can be opened 180 degrees in both directions. Single and double winged doors can be panel or wall mounted. It has specially designed hinges that can be opened permanently when necessary. Optionally, windows can be placed on the wings. Flip-flap doors are produced in the desired color, in desired properties, in accordance with your needs.



MONORAIL DOORS

Cold room doors are materials that ensure minimum heat transfer from inside and outside during product, food, equipment, and human entry-flow so that the stored products can be stored without deterioration. Doors are manufactured by injecting polyurethane with a density of **40+-2** are between two plate sheets (**polyester, PVC, plastisol, CrNi**).

It is used in cold and frozen storage rooms and blast freezing rooms. The surfaces are produced with the same coating as the panel surfaces or different surface coating. Door leaf and frame are polyurethane filled, there are thermal bridges. There is an anti-panic handle that can be locked from the outside with a key and can be opened from the inside with or without a key. There is a resistance against freezing in frozen storage and blast freezing doors.

**SECTIONAL DOOR**

Sectional doors are space-saving doors that open vertically. It is preferred in facilities with loading and unloading operations that require medium speed. It is very durable and long-lasting with its polyurethane filled, steel or optional aluminum coated panels inside. Sectional doors are produced in the desired color and desired properties, in accordance with your needs.

**ROLLER DOORS**

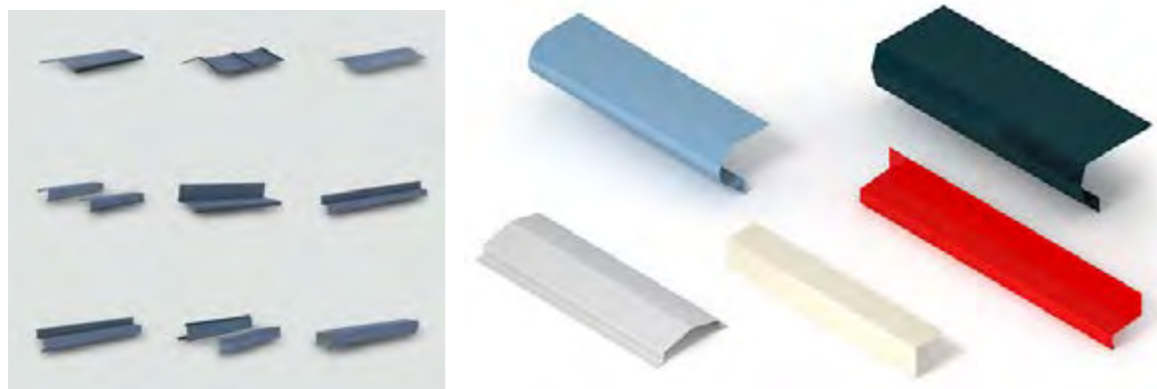
Roller doors are doors that save time in large warehouses where product loading and unloading are intense and protect inside from unwanted external factors such as dust, dirt and moisture from the external environment. Roller doors are produced in the desired color and desired properties, in accordance with your needs.



PANEL ACCESSORIES

They are products ensuring the structure used in panel installation stays together and provides an aesthetic appearance at corner joints. It provides a hygienic environment in the installation of floor, wall, and ceiling panels to each other. It can be produced as **hygienic or chromium, PVC, polyester coated galvanized profile**.

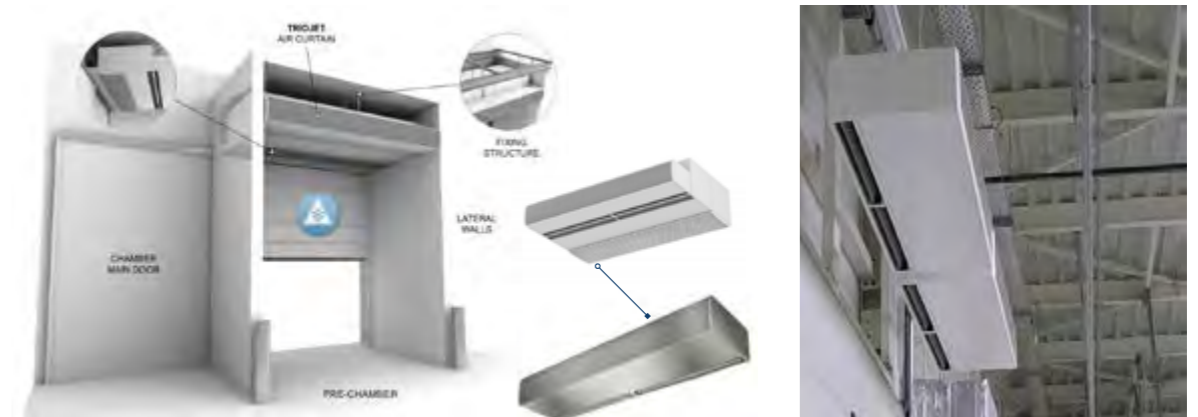
There are varieties such as angular inner - outer profiles, corner connectors, flat and Z profiles, U profiles for panel positioning, ceiling suspension profiles and apparatus, aluminum angle brackets.

**COLD ROOM DOORS ACCESSORIES**

We have varieties such as door hinges, door locks, lock sets, door opening levers, door seals suitable for the needs and desired aesthetic appearance.

**AIR CURTAINS**

Air curtains are a system that creates a boundary between indoor and outdoor environment by blowing air at a certain speed with horizontal or vertical air flow according to the type of installation. While maintaining the quality of the indoor air, it prevents dust and flying insects that may come from the poor quality and hot air from the outside. Air curtains used in cold rooms provide energy savings by preventing unnecessary heat loss during loading and unloading.

**PVC STRIP CURTAINS**

PVC Strip Curtains is a practical and economical system consisting of transparent PVC bands, separating the working areas from each other and reducing the cold air in the environment from going out and the moisture ingress from the external environment. It has a bright transparency and very good light transmission. It provides convenience in personnel and vehicle transitions. In case of damage, it is easy to replace and clean. It provides easy and fast installation to all types of door systems.



1. BRAND
ERKAR (E)

2. UNIT TYPE
It defines the type of the machine
COMPACT (C)
OUTDOOR (O)
INDOOR (I)

4. CABIN TYPE AND FAN LOCATION
It gives information about the cabin type of the machine and the direction of fan discharge.
ENCLOSED CABINET WITH TOP FAN (A)
ENCLOSED CABINET FRONT FAN (F)
OPEN CABINET FRONT FAN (M)
OPEN CABINET WITH TOP FAN (K)
SEPARATE CONDENSER (R)

6. COMPRESSOR
Refers to the type of compressor used in the machine.
ROTARY (R)
HERMETIC (H)
SCROLL (C)
SEMI HERMETIC (S)
SCREW (R)
DOUBLE STAGE
SEMI HERMETIC (2)

8. FAN BRAND
EBM (E)
ZIEHL ABEGG (Z)
ROSEMBERG (R)

9. WORKING PRESSURE OF THE MACHINE
HIGH (H)
MEDIUM (M)
LOW (L)
VACUUM (V)
MEDIUM+LOW (ML)

E O S S F - B H T Z M - O 50 O Z

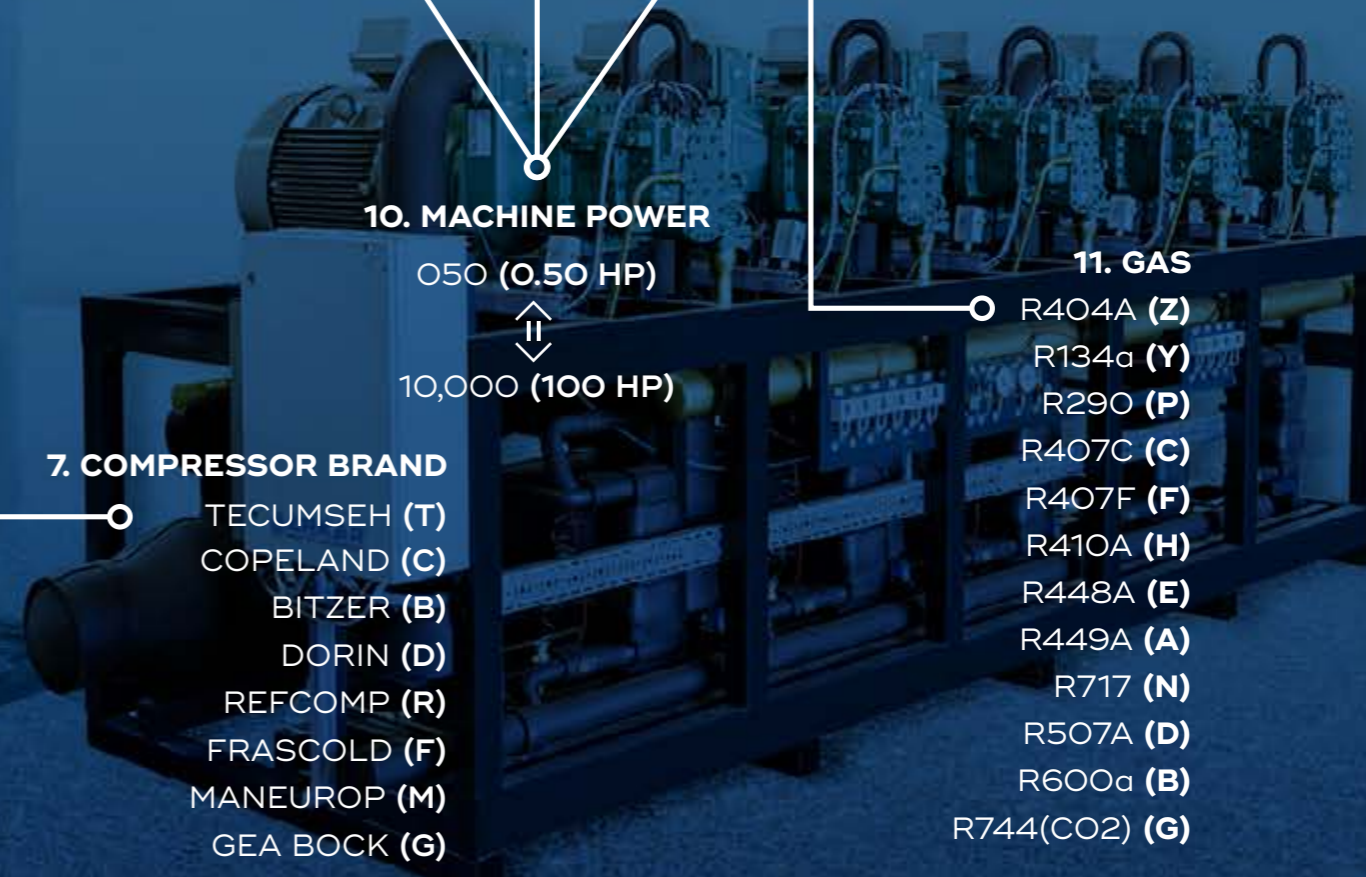
3. SYSTEM
SPLIT SYSTEM OUTDOOR COOLING UNIT (SS)
CENTRAL SYSTEM OUTDOOR COOLING DEVICES (CS)
MULTI SPLIT SYSTEM OUTDOOR COOLING DEVICE (MS)

5. BATTERY
It provides battery information for manufacturing.

7. COMPRESSOR BRAND
TECUMSEH (T)
COPELAND (C)
BITZER (B)
DORIN (D)
REFCOMP (R)
FRASCOLD (F)
MANEUROP (M)
GEA BOCK (G)

10. MACHINE POWER
O50 (0.50 HP)
⇕
10,000 (100 HP)

11. GAS
R404A (Z)
R134a (Y)
R290 (P)
R407C (C)
R407F (F)
R410A (H)
R448A (E)
R449A (A)
R717 (N)
R507A (D)
R600a (B)
R744(CO2) (G)





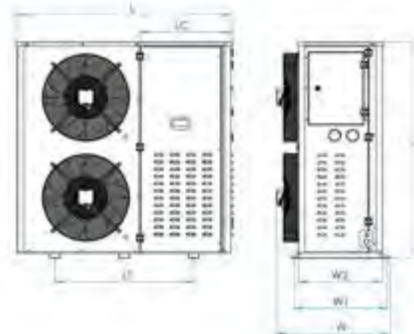
Split System Cooling Devices

Split System Cooling Devices are cooling machines designed for cooling a single environment with a compressor. It has a wide range of products in cooling capacity ranges of **484.Watt-149. 200.Watt** in cold, frozen or blast freezing rooms.

They are manufactured as CE certified and in all types of refrigerants, **Hermetic, Scroll, Semi-Hermetic or Screw compressor, Air-Cooled or Water-Cooled Condenser, AC or EC fan** and delivered as nitrogen charged and cased according to the outer weather conditions.

Usage Areas :

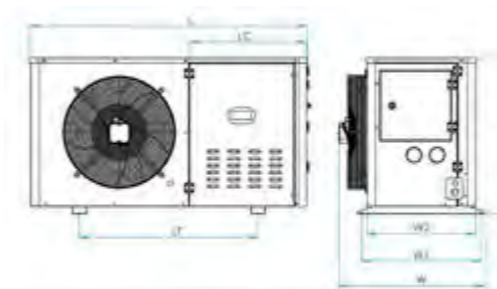
- COLD STORAGE ROOMS
- FROZEN STORAGE ROOMS
- ICE MACHINES
- WATER COOLING DEVICES
- CHILLER UNITS
- MUSHROOM PRODUCTION FACILITIES
- BANANA RIPENING ROOMS
- MANGO RIPENING ROOMS
- LEMON RIPENING ROOMS
- FACILITY WORK AREAS
- PROCESSING AREAS
- SHIPMENT AREAS
- PRODUCTION AREAS
- POTATO STORAGE ROOMS
- ONION/GARLIC STORAGE ROOMS
- STRAWBERRY STORAGE ROOMS
- CITRUS STORAGE ROOMS
- APPLE STORAGE ROOMS,
- CHERRY STORAGE ROOMS
- FRESH VEGETABLE STORAGE ROOMS
- SEED STORAGE ROOMS
- DOUGH STORAGE ROOMS
- DOUGH PROCESSING ROOMS
- SHOCKING ROOMS
- FAST COOLING ROOMS



Split System Cooling Devices Capacities Chart		MINIMUM	MAXIMUM
SC1	HERMETIC	1.401 W	36.360 W
	SCROLL	3.310 W	41.400 W
	SEMI HERMETIC	2.920 W	198.300 W
	SCREW	70.000 W	508.000 W
SC2	HERMETIC	1.016 W	26.280 W
	SCROLL	2.480 W	31.000 W
	SEMI HERMETIC	2.110 W	145.500 W
	SCREW	51.100 W	402.000 W
SC3	HERMETIC	738 W	12.310 W
	SCROLL	2.160 W	24.000 W
	SEMI HERMETIC	1.170 W	68.050 W
	SCREW	26.900 W	226.000 W
SC4	HERMETIC	517 W	8.894 W
	SCROLL	1.700 W	19.250 W
	SEMI HERMETIC	850 W	49.660 W
	SCREW	20.500 W	180.400 W
SC5	HERMETIC	634 W	4.913 W
	SCROLL	-	-
	SEMI HERMETIC	630 W	28.510 W
	SCREW	12.890 W	124.000 W

* All capacities are calculated in EN12900 conditions.

GAS TYPE	COMPRESSOR HR	FAN	FAN SPEED	TEMPERATURE RANGE
R134A, R404A, R407A, R407C, R407F, R410A, R448A, R449A, R450A, R507A, R513A, R744 (CO2)	1-180 HP	AC, EC	660 - 880 -1400 RPM	+20 / -80°C



WE LOVE THE COLD



Multi-Split System Cooling Devices

They are machines where multiple split outdoor units are combined in a single outdoor unit, each compressor operates according to its own indoor unit, and all compressors share a condenser. **Multi-Split System Cooling Devices are recommended to increase energy efficiency and save space in facilities with more than one indoor unit with the same regime.** Multi-Split System Cooling Devices provide energy savings in the range of **5-15%** depending on the project.

It has a wide range of products in cooling capacity ranges from **968.Watt to 1.192. 000. Watt** in cold, frozen or blast freezing rooms. They are manufactured as **CE certified** and in all types of refrigerants, **Hermetic, Scroll, Semi-Hermetic or Screw Compressor, Air-Cooled or Water-Cooled Condenser, AC or EC fan** and delivered as nitrogen charged and cased according to the outer weather conditions. In addition, we design efficient and specific machines that meet the hot water needs of your business from cooling units without the cost of electricity.

Usage Areas:

- COLD STORAGE ROOMS
- FROZEN STORAGE ROOMS
- ICE MACHINES
- WATER COOLING DEVICES
- CHILLER UNITS
- MUSHROOM PRODUCTION FACILITIES
- BANANA RIPENING ROOMS
- MANGO RIPENING ROOMS
- SPECIAL STRAWBERRY STORAGE ROOMS
- CITRUS STORAGE ROOMS
- APPLE STORAGE ROOMS,
- CHERRY STORAGE ROOMS
- FRESH VEGETABLE STORAGE ROOMS
- LEMON RIPENING ROOMS
- FACILITY WORK AREAS
- PROCESSING AREAS
- SHIPMENT AREAS
- PRODUCTION AREAS
- POTATO STORAGE ROOMS
- ONION/GARLIC STORAGE ROOMS
- FIDE STORAGE ROOMS
- DOUGH STORAGE ROOMS
- DOUGH PROCESSING ROOMS
- SHOCKING ROOMS
- FAST COOLING ROOMS



Multi-Split System Cooling Devices Capacities Chart		MINIMUM	MAXIMUM
SC1	HERMETIC	2.802 W	109.080 W
	SCROLL	6.620 W	124.200 W
	SEMI HERMETIC	5.840 W	594.900 W
	SCREW	140.000 W	1.524.000 W
SC2	HERMETIC	2.032 W	78.840 W
	SCROLL	4.960 W	93.000 W
	SEMI HERMETIC	4.220 W	436.500 W
	SCREW	102.200 W	1.206.000 W
SC3	HERMETIC	1.476 W	36.930 W
	SCROLL	4.320 W	72.000 W
	SEMI HERMETIC	2.340 W	204.150 W
	SCREW	53.800 W	678.000 W
SC4	HERMETIC	1.034 W	26.682 W
	SCROLL	3.400 W	57.750 W
	SEMI HERMETIC	1.700 W	148.980 W
	SCREW	41.000 W	541.200 W
SC5	HERMETIC	1.268 W	14.739 W
	SCROLL	-	-
	SEMI HERMETIC	1.260 W	85.530 W
	SCREW	25.780 W	372.000 W

All capacities are calculated in EN12900 conditions.

GAS TYPE	COMPRESSOR HR	FAN	FAN SPEED	TEMPERATURE RANGE
R134A, R404A, R407A, R407C, R407F, R410A, R448A, R449A, R450A, R507A, R513A, R744 (CO2)	1-180 HP	AC, EC	660 - 880 -1400 RPM	+20 / -80°C





Central System Cooling Devices

It is a device in which more than one compressor systematically operates in a single outdoor unit. At the same time, it provides control of more than one cooler and cooling of the environment. Central system cooling units are preferred to increase energy efficiency and save space in facilities with more than one indoor unit with the same regime. Compared to split system cooling devices, it provides energy savings in the range of **10-30%** depending on the project.

It has a wide range of products in cooling capacity ranges from **968.Watt to 1.192.000.Watt** in cold, frozen or blast freezing rooms. They are manufactured as **CE Certified** and in all types of refrigerants, **Hermetic, Scroll, Semi-Hermetic or Screw compressor, Air-Cooled or Water-Cooled Condenser, AC or EC fan** and delivered as nitrogen charged and cased according to the outer weather conditions. In addition, we design efficient and specific machines that meet the hot water needs of your business from cooling units without the cost of electricity.

Usage Areas:

- COLD STORAGE ROOMS
- FROZEN STORAGE ROOMS
- ICE MACHINES
- WATER COOLING DEVICES
- CHILLER UNITS
- MUSHROOM PRODUCTION FACILITIES
- BANANA RIPENING ROOMS
- SPECIAL ONION GARLIC STORAGE ROOMS
- SPECIAL STRAWBERRY STORAGE ROOMS
- CITRUS STORAGE ROOMS
- APPLE STORAGE ROOMS,
- CHERRY STORAGE ROOMS
- FRESH VEGETABLE STORAGE ROOMS
- MANGO RIPENING ROOMS
- LEMON RIPENING ROOMS
- FACILITY WORK AREAS
- PROCESSING AREAS
- SHIPMENT AREAS
- PRODUCTION AREAS
- POTATO STORAGE ROOMS
- MARKET DISPLAY CABINETS
- FIDE STORAGE ROOMS
- DOUGH STORAGE ROOMS
- DOUGH PROCESSING ROOMS
- SHOCKING ROOMS
- FAST COOLING ROOMS



Central System Cooling Devices Capacities Chart		MINIMUM	MAXIMUM
SC1	HERMETIC	2.802 W	218.160 W
	SCROLL	6.620 W	248.400 W
	SEMI HERMETIC	5.840 W	1.189.800 W
	SCREW	140.000 W	3.048.000 W
SC2	HERMETIC	2.032 W	157.680 W
	SCROLL	4.960 W	186.000 W
	SEMI HERMETIC	4.220 W	873.000 W
	SCREW	102.200 W	2.412.000 W
SC3	HERMETIC	1.476 W	73.860 W
	SCROLL	4.320 W	144.000 W
	SEMI HERMETIC	2.340 W	408.300 W
	SCREW	53.800 W	1.356.000 W
SC4	HERMETIC	1.034 W	53.364 W
	SCROLL	3.400 W	115.500 W
	SEMI HERMETIC	1.700 W	297.960 W
	SCREW	41.000 W	1.082.400 W
SC5	HERMETIC	1.268 W	29.478 W
	SCROLL	-	-
	SEMI HERMETIC	1.260 W	171.060 W
	SCREW	25.780 W	744.000 W

All capacities are calculated in EN12900 conditions.

GAS TYPE	COMPRESSOR HR	FAN	FAN SPEED	TEMPERATURE RANGE
R134A, R404A, R407A, R407C, R407F, R410A, R448A, R449A, R450A, R507A, R513A, R744 (CO2)	1-180 HP	AC, EC	660 - 880 -1400 RPM	+20 / -80°C





Condenser Units

A condenser is a device or unit used to condense a gaseous substance into a liquid state through cooling. In so doing, the latent heat is released by the substance and transferred to the surrounding environment. It is manufactured as **CE certified** and it is manufactured with or without an electric panel, with or without cooling equipment, with or without a fan and it is delivered with nitrogen charge in line with the request of our customers.

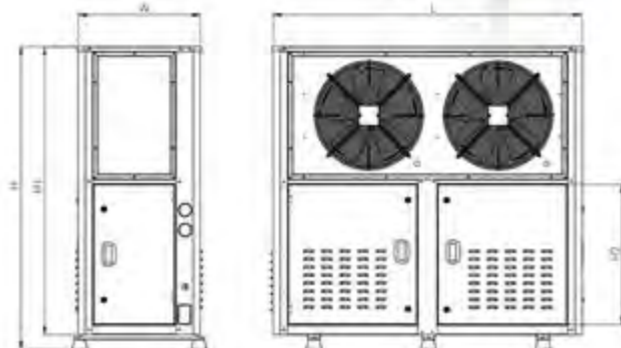
Condenser Capacities Chart

MINIMUM	MAXIMUM
780 W	4.260.000 W

GAS TYPE	FAN	FAN SPEED
R134A, R404A, R407A, R407C, R407F, R410A, R448A, R449A, R450A, R507A, R513A, R744 (CO2)	AC, EC	660 - 880 -1400 RPM

Condenser Capacities Chart		MINIMUM	MAXIMUM
SC1	HERMETIC	2.802 W	218.160 W
	SCROLL	6.620 W	248.400 W
	SEMI HERMETIC	5.840 W	1189.800 W
	SCREW	140.000 W	3.048.000 W
SC2	HERMETIC	2.032 W	157.680 W
	SCROLL	4.960 W	186.000 W
	SEMI HERMETIC	4.220 W	873.000 W
	SCREW	102.200 W	2.412.000 W
SC3	HERMETIC	1.476 W	73.860 W
	SCROLL	4.320 W	144.000 W
	SEMI HERMETIC	2.340 W	408.300 W
	SCREW	53.800 W	1.356.000 W
SC4	HERMETIC	1.034 W	53.364 W
	SCROLL	3.400 W	115.500 W
	SEMI HERMETIC	1.700 W	297.960 W
	SCREW	41.000 W	1.082.400 W
SC5	HERMETIC	1.268 W	29.478 W
	SCROLL	-	-
	SEMI HERMETIC SCREW	1.260 W	171.060 W
		25.780 W	744.000 W

All capacities are calculated in EN12900 conditions.



WE LOVE THE COLD



INDUSTRIAL COOLING SYSTEM CALL NOW



1. BRAND
ERKAR (E)

3. BATTERY

It provides the battery information in the indoor unit for manufacturing.

5. BATTERY

It provides the battery information in the indoor unit for manufacturing.

E I B K C - 2 . 1 . 3 0 0 Z

2. UNIT TYPE

Defines the type of the machine
COMPACT (C)
OUTDOOR (O)
INDOOR (I)

4. INDOOR UNIT (I)

SUBUNITS

- Positive Static Evaporator (SC)
- Negative Static Evaporator (SF)
- Positive Cubic Evaporator (KC)
- Negative Cubic Evaporator (KF)
- Positive Single Blow Ceiling Evaporator (BC)
- Negative Single Blow Ceiling Evaporator (BF)
- Positive Double Blow Ceiling Evaporator (DC)
- Negative Double Blow Ceiling Evaporator (DF)
- Blast Freezer Evaporator (BF)
- Positive shell and Tube Evaporator (TC)
- Negatif shell and Tube Evaporatör (TF)
- Negative Plate Heat Exchanger Evaporator (PF)

6. NUMBER AND DIAMETER OF FAN

It gives information about the number and diameter of fans in the indoor unit.

- 30cm diameter with 1 fan (1.300)
- 35cm diameter with 1 fan (1.350)
- 40cm diameter with 1 fan (1.400)
- 45cm diameter with 1 fan (1.450)
- 50cm diameter with 1 fan (1.500)
- 63cm diameter with 1 fan (1.630)
- 80cm diameter with 1 fan (1.800)
- 91cm diameter with 1 fan (1.910)

7. GAS

It gives information about the type of gas used in the machine

- R404A (Z)
- R134a (Y)
- R290 (P)
- R407C (C)
- R407F (F)
- R410A (H)
- R448A (E)
- R449A (A)
- R717 (N)
- R507A (D)
- R600a (B)
- R744(CO2) (G)



EVAPORATOR

Evaporators are devices that transfer the heat in the environment to the fluid that passes through it; so that it cools down the environment. They can be designed to provide defrosting as electricity or hot gas in standard, static, ceiling type evaporators according to need.

INDOOR UNIT CAPACITY CHART		MINIMUM	MAXIMUM
SC1	STATIC EVAPORATOR CUBIC EVAPARATOR CEILING TYPE EVAPARATOR	1400 W 430 W	118.599 W 28.058 W
SC2	STATIC EVAPORATOR CUBIC EVAPARATOR CEILING TYPE EVAPARATOR	950 W 290 W	80.514 W 18.906 W
SC3	STATIC EVAPORATOR CUBIC EVAPARATOR CEILING TYPE EVAPARATOR	770 W 594 W	56.987 W 14.719 W
SC4	STATIC EVAPORATOR CUBIC EVAPARATOR CEILING TYPE EVAPARATOR	550 W 837 W	45.495 W 11.844 W
SC5	BLAST FREEZING EVAPORATOR	340 W	62.400 W
SC10	GLYCOL (BRINE) EVAPORATOR	116.965 W	198.965 W
SC11	GLYCOL (BRINE) EVAPORATOR	977 W	83.537 W

STATIC EVAPORATOR

In the unpackaged meat, poultry and fish resting rooms, the air flow from the fans reduces the amount of moisture on the surface of the stored product, and the unwanted appearance outside the products and the weight of the product decreases. Thus, we protect and cool our customers' valuable products with limited air movement. It is suitable for all cold storages but is preferred only for special applications due to high cost.

Usage Areas : Meat Resting Rooms, Poultry Resting Rooms, Fish Resting Rooms, Meat Processing Areas, all cold storage rooms that do not need fast air movement



GLYCOL (BRINE) EVAPORATOR

It is a type of evaporator where glycol water is used as a cooling liquid instead of refrigerant. It is used in projects where precise cooling is desired, the use of refrigerant in the room is not desired, or where there is readily cooled glycol water.

Usage Areas : All Cold Storage Depots, Cold Storage Rooms Required Precision Cooling, Cold Storage Rooms Where Refrigerant Circulation is Not Required

CEILING TYPE EVAPARATOR

They are evaporators used for cooling the environments where fast air movement is not desired. It has two types as single blowing and double blowing. Our designs vary according to the needs and demands of our customers.

Usage Areas : Working Areas, Cold Storage that is in intensive use and do not require fast air movement

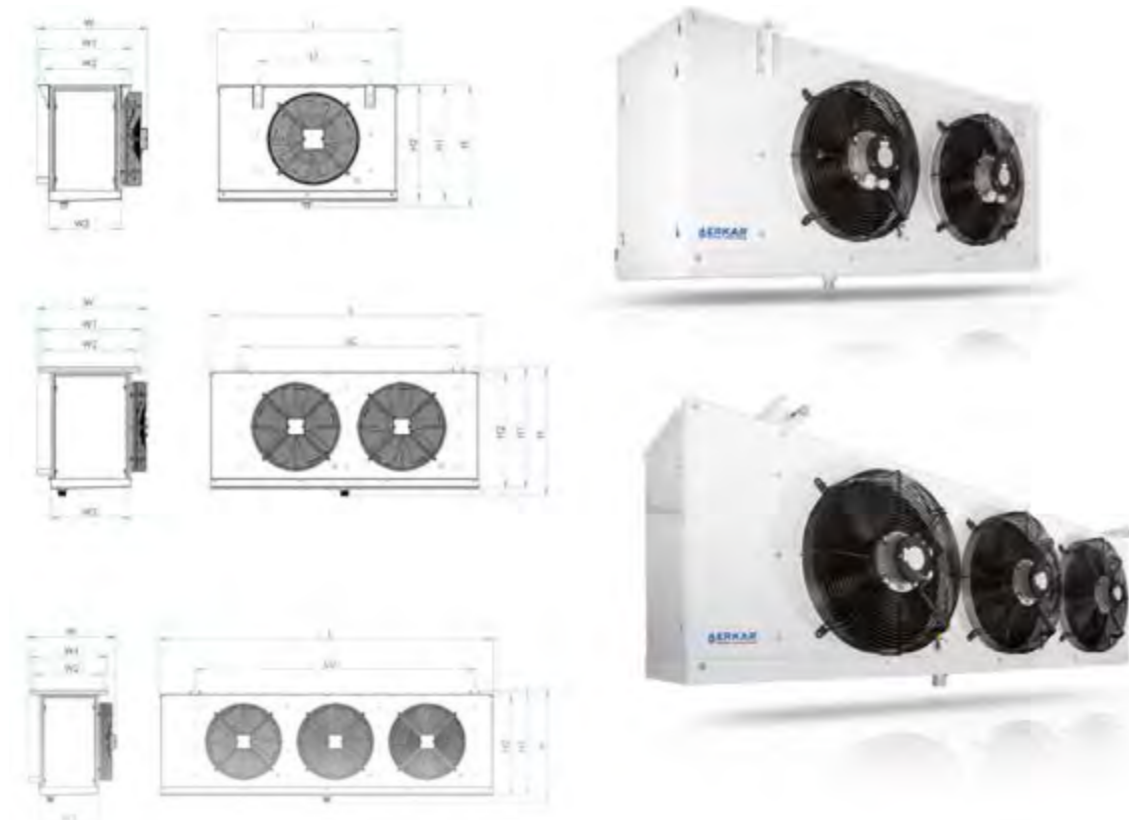




AIR-COOLING INDOOR UNITS
CUBIC EVAPARATOR

They are the standard evaporators used in packaged cold storage rooms that do not have special needs.

Usage Areas : All kinds of cold storages



BLAST FREEZING EVAPORATOR

Freezing process products are applied for further processing or storing for a long time. Equipped with fans that supply high pressure and high flow air, these evaporators are used for freezing. Our designs vary according to the needs and demands of our customers.

Usage Areas: Cold storage depots installed for product freezing in between -35 / -80 ° C.



BUTCHER DISPLAY CABINETS

Butcher cabinets ensure that meat and meat products are preserved without freezing, while preserving their freshness. In this way, the products purchased are always ready to be used and served. It is very important for butcher cabinets to have large volumes, clean and sufficient lighting for both the people who exhibit the product and who will buy the product. We have a wide range of products in this field. Butcher cabinets are produced by our expert team in accordance with the needs and wishes of our customers.



CHARCUTERI CABINETS



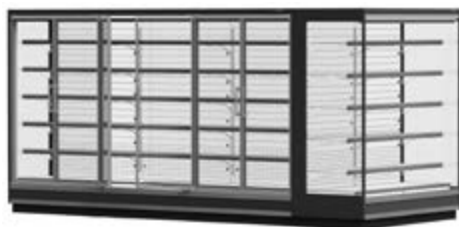
Charcuteri cabinets are used to keep the food cold and fresh without the need for freezing. These cabinets, which are horizontal with glass doors, are mostly used for storing cheese, meat, sausage and similar pickled foods. We have a wide range of products in this field. Charcuteri cabinets are produced by our expert team in accordance with the needs and wishes of our customers.

BOTTLE COOLER CABINETS

Bottle cooler cabinets are used to keep a large number of beverages cold and fresh for a long time. It is produced in many varieties such as horizontal, vertical, with single or double door, and in varying volumes depending on the needs. We have a wide range of products in this field. Bottle cooler cabinets are produced by our expert team in accordance with the needs and wishes of our customers.



CABINETS FOR DAIRIES



Bottle cooler cabinets are used to keep a large number of beverages cold and fresh for a long time. It is produced in many varieties such as horizontal, vertical, with single or double door, and in varying volumes depending on the needs. We have a wide range of products in this field. Bottle cooler cabinets are produced by our expert team in accordance with the needs and wishes of our customers.

WATER COOLING INDOOR UNITS



SHELL AND TUBE EVAPORATORS

The main function of the Shell & Tube Evaporator is to efficiently transmit the heat of the hot liquid passing through it to the refrigerant thanks to its compact design. Shell & Tube Evaporators are used in projects that require high flow rate of cold liquid. These evaporators with ergonomic design provide longer service life with high working efficiency.

PLATE HEAT EXCHANGER EVAPORATORS

Plate Heat Exchanger is a type of heat exchanger that provides heat transfer by using metal plates. It efficiently transmits the heat of the hot liquid passing through it to the refrigerant through the plates.

Plate heat exchangers with compact design operate at high performance with low noise and save space thanks to their special design.



2. UNIT TYPE
Defines the type of the machine
COMPACT (C) OUTDOOR (O)
INDOOR (I)

1. BRAND
ERKAR (E)



3. MACHINE NAME
Indicates the name and function of the machine.

Brine Type Ice Machine	(BI)	Mobil Shop	(MF)
Direct Type Ice Machine	(DI)	Mobil Shop	(MS)
Flake Type Ice Machine	(LI)	Positive Standard Monoblock Unit	(BC)
Crystal Type Ice Machine	(KI)	Negative Standard Monoblock Unit	(BF)
Cube Type Ice Machine	(FI)	Positive Channel Monoblock Unit	(CC)
Positive Chiller Unit	(SC)	Negative Channel Monoblock Unit	(CF)
With Shell & Tube Negative Chiller Unit	(SF)	Carpet Drying Unit	(CD)
With Shell & Tube Plate Heat Exchanger Positive Chiller Unit	(PC)	Seed Drying Unit	(SD)
Mobile Shop	(MS)	Heat Pump	(HP)
Mobile Blast Freezing Rooms	(MB)	Positive Modular Room	(RC)
Mobile Cold Rooms	(MC)	Negative Modular Room	(RF)

5. GAS

It gives information about the type of gas used in the machine.

R404A	(Z)
R134a	(Y)
R290	(P)
R407C	(C)
R407F	(F)
R410A	(H)
R448A	(E)
R449A	(A)
R717	(N)
R507A	(D)
R600a	(B)
R744(CO2)	(G)

700Z

4. CAPACITY

It provides information on the capacity of the machine in kg per day, kcal per hour or the place where heating or cooling will be made.



MONOBLOCK COOLING MACHINES

They are compact cooling machines that we combine the latest technologies with traditional effective solutions. They are plug-and-play, do not look for a special team for installation, have a design suitable for outdoor or indoor environments, have minimum maintenance requirements, and can operate smoothly even in tropical weather conditions.



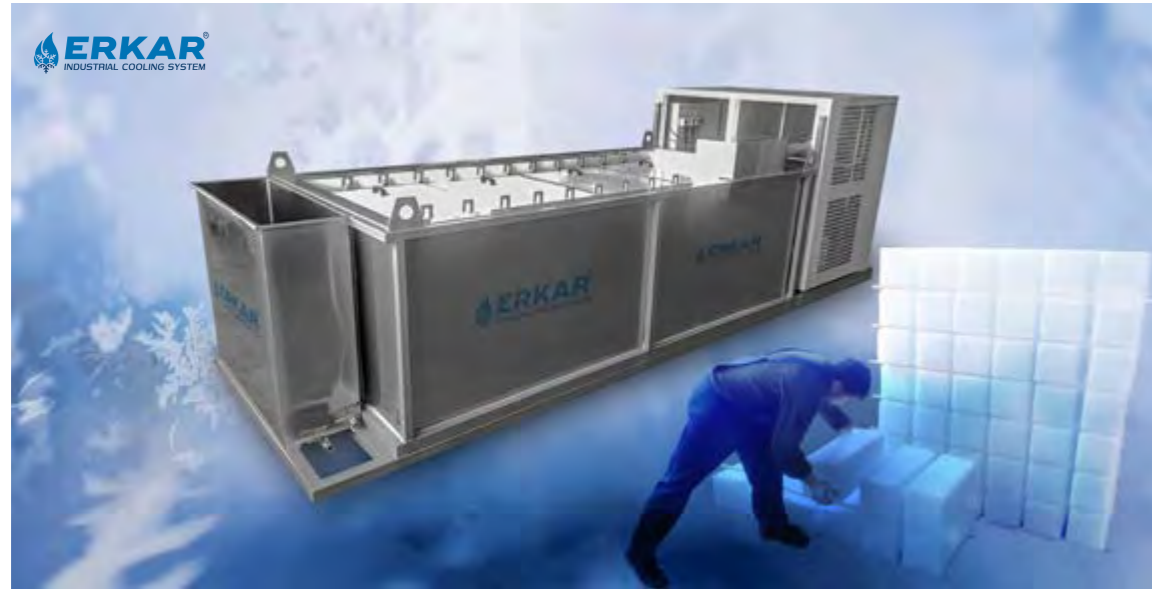
CHILLER COOLING MACHINES

Chiller device is a system that cools the water by throwing the energy gained by the refrigerant gas inside the evaporator and the compressor through the condenser. Systems that prepare cold water for use in fan coils and air handling units in order to increase the production quality or in line with various needs in buildings are generally called chiller cooling systems. **The working principle of the chiller device is as follows:** The refrigerant from the evaporator is compressed in the compressor to increase its pressure and temperature, then the refrigerant passes to the condenser, where the temperature of the refrigerant is discharged with water or air, the liquid refrigerant goes through the throttling valve and changes its state and cools in the evaporator. The coolant and water allow the water to cool by transferring heat, the cooled water is sent to the system through the pump.

It provides air conditioning by producing the water needed to be used in auxiliary equipment such as fan coils and air handling units in factories, buildings, shopping centers, hospitals. In this system, a much higher capacity cooling occurs compared to other cooling systems. We produce our chiller devices with air or water cooling.







BLOCK MAKING ICE MACHINES

Block ice is created by immersing water blocks in a chilled glycol tank. One of the reasons why block ice is popular is that it can be easily transported over long distances by non-refrigerating vehicles. In addition, block ice has a wide range of uses **fishing, bakery products, etc.**

Block ice machines in our facility are produced for commercial and industrial applications. It is designed to produce clean and fresh ice block smoothly. We have custom manufacturing in the range of **500 kg - 100,000 kg** per day. The ice blocks produced are available in **10-15-20-25-30-40-50 kg** options. Parts in contact with water are stainless steel. It is produced with water- or air-cooled condenser upon request.

Standard (AS) and Tropical (AT) versions are also available. We have options with hermetic, scroll, semi-hermetic piston or screw compressor. Our devices can be designed to meet the hot water need of your business from our cooling units without electricity or operating costs. In line with the request of our customers, we have separate indoor unit and outdoor unit options and not assembled or all adjustments are installed, plug and play options.



DIRECT TYPE BLOCK ICE MACHINE

Direct Type Block Ice Machines are cylindrical and transparent ice production tools for the food and beverage industry. Hygiene is important for **Erkar Industrial Cooling Systems**. For this reason, all areas in contact with water in our Tube Ice Machine are made of stainless steel.

Erkar Industrial Cooling Systems, which adopts sustainable energy and environmentalism as a principle, has reduced its gas emission to the atmosphere with its Direct Type Ice Machine and stood one step ahead of its competitors. Compared to its equivalents, our machine produces ice with **90%** less gas consumption.





FLAKE ICE MACHINE

Flake ice machine is a machine that can produce ice with both fresh and salt water. Flake ice is created by pouring water into the film layer on the inner surface of a vertical drum. We cool the drum to make the ice brittle and then shred it with an ice knife and store it. Flake ice is very thin and therefore ideal for cooling products such as **concrete, fish, fruit etc.**

Daily production capacity is between **500 kg - 50 tons**. Our machines are also available in standard (AS) and tropical (AT) versions. We have options with hermetic, scroll, semi-hermetic piston or screw compressor. The refrigerant is **R407F, R507A or R404A**. It can be produced with water or air-cooled condenser according to the request of our customer. In addition, if desired, the hot water need of your business can be met from our cooling units without electricity or operating costs. Again, In line with the request of our customers, we have separate indoor unit and outdoor unit options and not assembled or all adjustments are installed, plug and play options.

Uses: Concrete cooling, mortar mixes, bread ovens, dough leavening processes, fish display operations for fishermen, fruit preservation and cooling systems and all other ice needs



TUBE ICE MACHINES

They are machines designed to produce transparent, hard and dust-free ice in the form of hollow tubes. It is mostly used for fast consumption. Our machines are produced for industrial applications and are designed seamlessly to produce clean and fresh ice. There are different sizes for tube ice machines in our business.

We have customized production in the range of **500 kg- 50,000 kg** per day. Parts in contact with water are stainless steel. It is produced with water- or air-cooled condenser upon request. Standard (AS) and Tropical (AT) versions are also available. We have options with hermetic, scroll, semi-hermetic piston or screw compressor. The refrigerant is **R407F, R507A or R404A**.

We have options that have separate indoor unit and outdoor unit and all adjustments are installed, plug and play or not. In case of demand, the hot water need of your business can be met from our cooling units without electricity or operating costs.

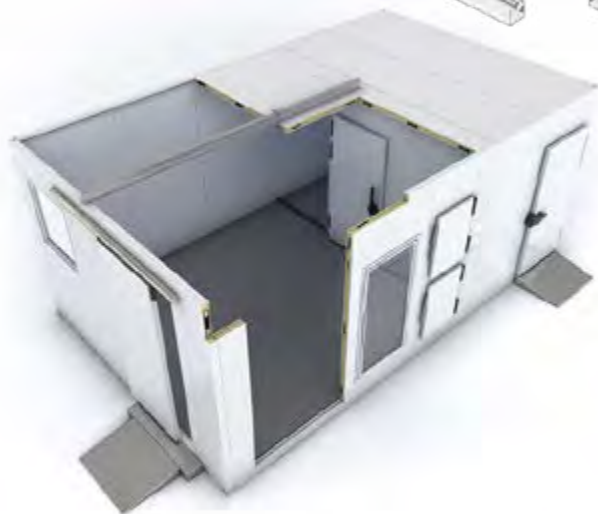
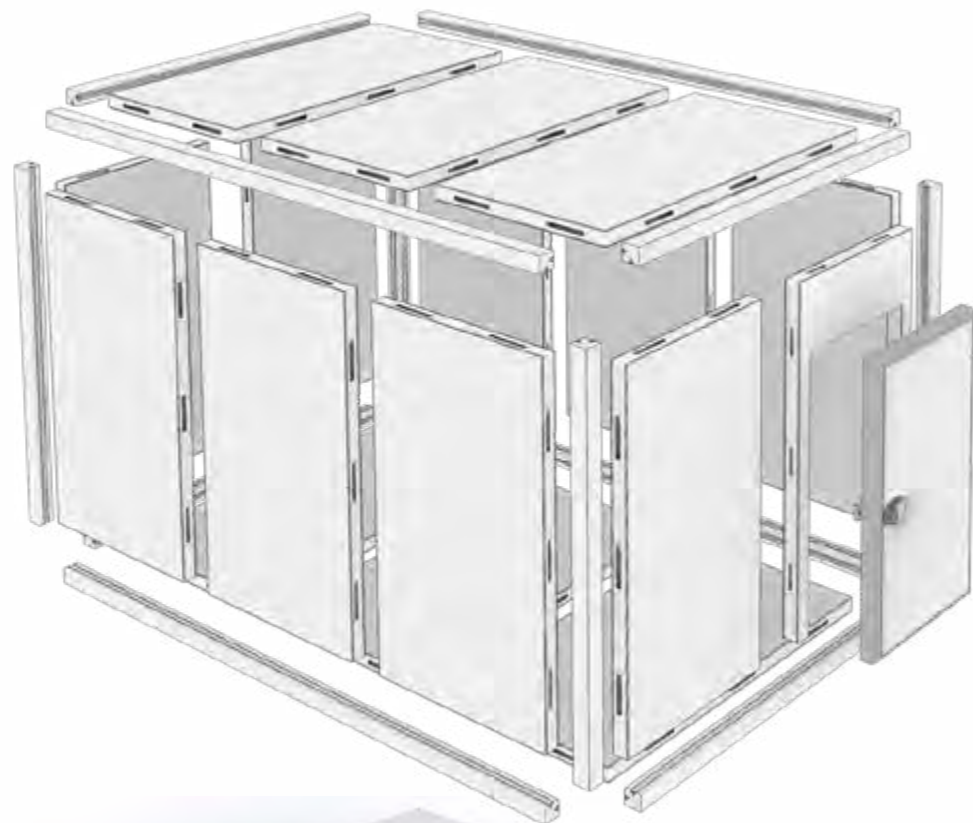


COLD ROOMS

MODULAR ROOMS

Modular cold rooms ensure that the products stored in them are kept in the desired climatic conditions. These rooms, which can be assembled by the user, have the features of being mobile, being easily installed in any desired location and easily moved to different places when desired. Cold and frozen storage can be done with maximum energy savings. Since it can be produced as a container, it can also be used in road and air transportation. Modular cold rooms are produced and assembled in desired sizes and in desired climatic conditions according to the needs.

Usage Areas: Butcher, Market, Restaurant, Hotel



COMPACT COOLING MACHINES

COMPACT COOLING MACHINES

Cold storages are cold areas where ideal air is created with the help of the cooling devices of the place, which is isolated from the external environment conditions in order to preserve the freshness of the needed foods and to extend the shelf life. Mobile cold rooms are portable and can be used on any desired flat floor and are economical. The internal temperature of mobile cold storages can be produced in the range of **+15 / -50 C** according to the need. If required, more than one cold storage can be manufactured in a container.



MOBILE BLAST FREEZING ROOMS

The blast freezing process is to remove the heat of the product and ensure that it is completely transformed into the solid phase. The blast freezing process is applied to process the products later or to store them for a long time. The products are **frozen between -35 C and -50 C**. When the temperature reaches **-18 C**, the process is completed. The blast freezing time affects the quality of the product. Therefore, the freezing period should be kept short.

Usage areas: Military Bases, Fishing Sector, Meat Sector, Leasing Companies



MOBILE SLAUGHTERHOUSE

Slaughterhouse is a facility rated according to technical conditions and capacity, where slaughtering animals are slaughtered and stored in cold storage after slaughter, and where has an offal cleaning and processing facility. The advantages of mobile slaughterhouses are that they can be moved, assembled and operated wherever they want without being involved in any assembly or disassembly process.

We produce in appropriate sizes and features. They are produced in accordance with international transportation standards and do not pose any problems during transportation. Our devices are designed to meet the hot water need of your business from our cooling units without electricity or operating costs in case of your demand.



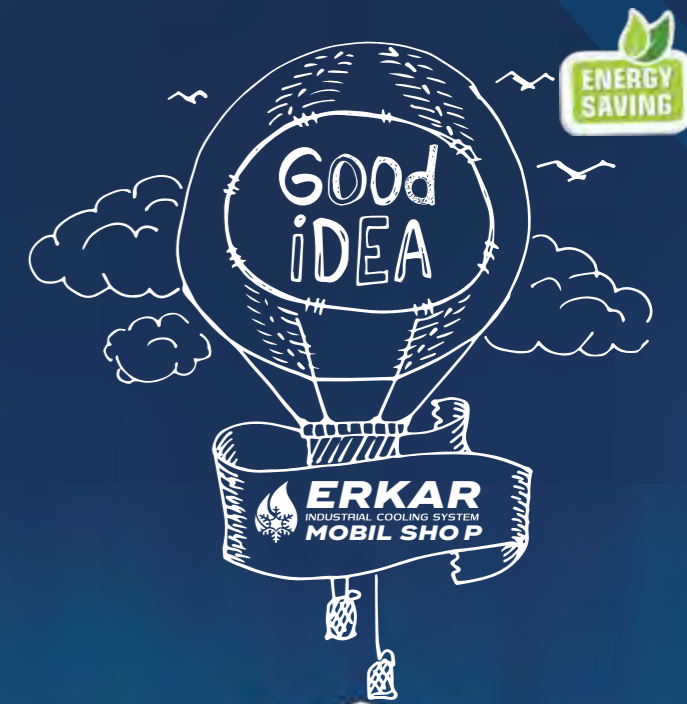
COMPACT COOLING

MOBILE SALES

MOBILE SALES AREA

The mobile sales area is the areas where products that are ready to be delivered to the consumer are sold. These sales areas, which vary according to the type of product to be sold, can be produced in a way to protect the cold chain and under normal climatic conditions according to your needs. The mobile sales area is very advantageous as they can be moved, assembled and operated without being involved in any assembly or disassembly process.

We produce in appropriate sizes and features. They are produced in accordance with international transportation standards and do not pose any problems during transportation. Our devices are designed to meet the hot water need of your business from our cooling units without electricity or operating costs in case of your demand.





HEAT PUMPS

Buildings have different internal loads throughout the year, including lighting, people, equipment and sun. These loads are recovered as heating-cooling and domestic hot water with the heat pump system. Heat pump systems are the most efficient. A heat pump is the name given to the refrigerant system in the device capable of cooling, and heating by reversing it with a 4-way valve.

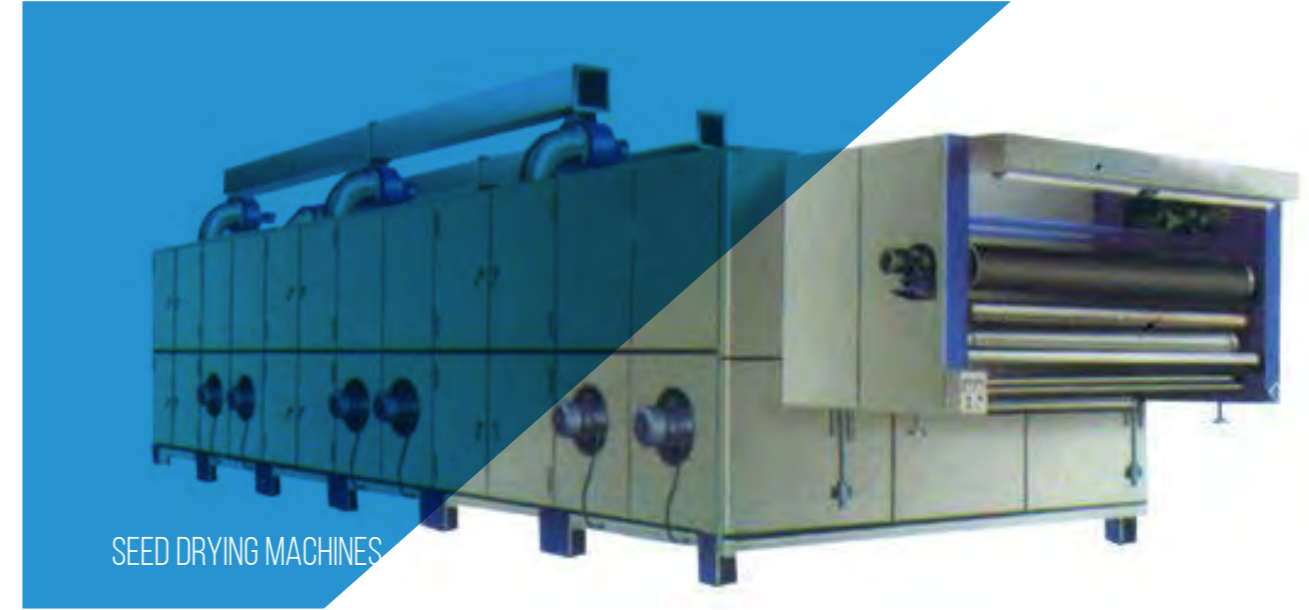
In this system, a much higher capacity and efficient air conditioning occurs compared to other air conditioning systems. It provides air conditioning by producing the water needed to be used in auxiliary equipment such as fan coils and air handling units in factories, buildings, shopping centers, hospitals.



CARPET DRYING MACHINES

It is a type of evaporator that uses glycol water as a cooling fluid, not a refrigerant. Glycol evaporators are used in projects where precise cooling is required, the use of refrigerant in the room is not desired, or where there is readily cooled glycol water.

Areas of Usage: All cold storage depots, Cold storage rooms required precision cooling, Cold storage where refrigerant circulation in room is unwanted, Projects with ready-made cold glycol water.



SEED DRYING MACHINES

SEED DRYING MACHINES

They are devices that help to dry any vegetable, fruit, cereal seeds. Ideal for seed producer or seed research organization certificate. It has desktop working feature. The specially developed system with removable feature provides easy use. Thanks to the small pore system of 120 micrometers in size, that is almost 1/10 of 1 mm, no other seed evacuation occurs when the air vapor passes.

Food drying system dries special products while preserving their color and taste. The contact points of the products to be dried are made of stainless material. The products that are dried by working with the pan drying elevator system are dried without intervention from the outside. This system highly prevents heat loss in the dryer. The machine is designed according to the product to be dried. The number of trays is increased upon request.

Usage areas:

- Drying onions, mushrooms, spices, grapes, apples, apricots, tomatoes, garlic
- Drying plum, hazelnut, grape, pomegranate seed pulp, carrot
- Plum, olive leaves
- Apricot kernel shell
- Bitter-sweet apricot kernel
- Bay and pepper drying
- Drying peaches and roses
- Seafood, fish, etc.

SOLAR POWER PLANT

WIND TURBINE POWER PLANT



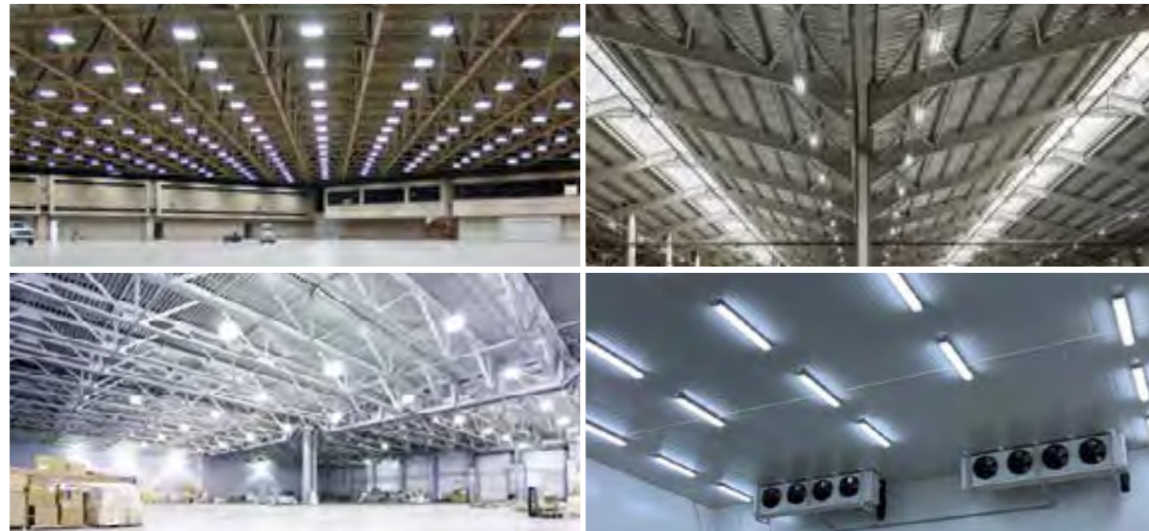
SOLAR ENERGY SYSTEMS

Solar energy systems are a system used to generate electrical energy by using the sun rays coming to the world. It is preferred because it is a renewable, environmentally friendly and endless energy source. Its areas of use are quite wide and are mainly used in areas such as agriculture, animal husbandry, service sector, energy and heat sources of shopping centers, hospitals, fuel stations and storage. In addition, solar energy panels are installed in regions where electrical energy does not exist, and the energy needs of these regions are met.



LIGHTING SYSTEMS

Lighting is the most important factor that directly affects issues such as ensuring occupational safety, increasing production speed, reducing manufacturing errors and protecting worker health in industrial facilities. Therefore, Erkar ICS specially designs lighting systems for industrial facilities according to the working environment and the nature of the work done.



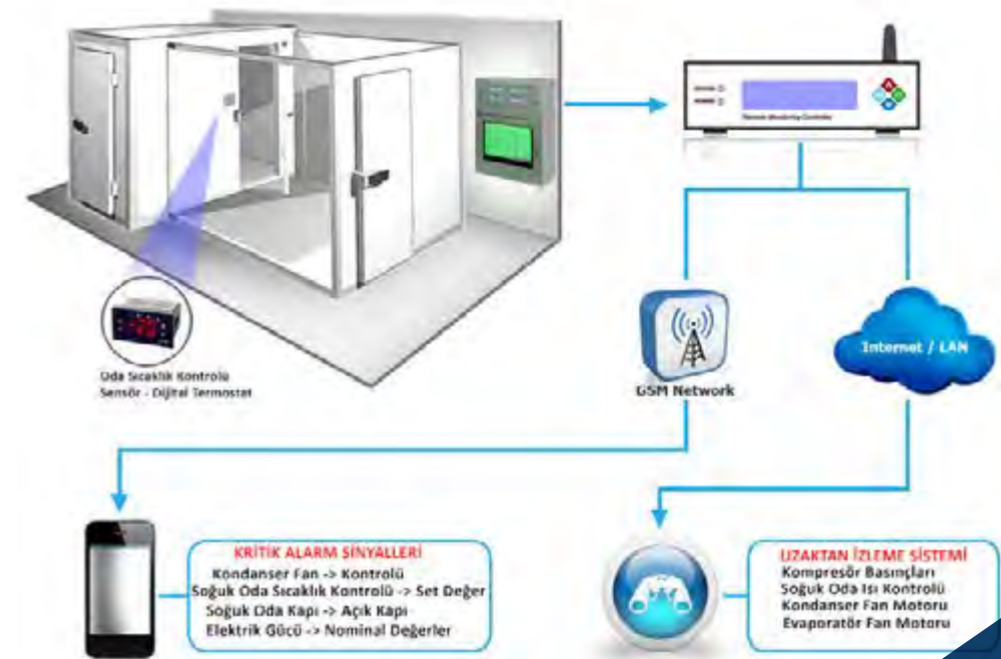
HUMIDIFYING AND DEHUMIDIFYING SYSTEMS

They are devices that keep the relative humidity of the product stored in cold storage rooms at the same level. Thanks to the automatic control panel, it keeps the environment at the desired humidity level without the need for any intervention. Depending on the capacity of the cold room, humidifying and dehumidifying devices produced in different series will ideally meet your needs.



REMOTE MONITORING SYSTEMS

It enables the electrical systems with all communication interfaces to be monitored instantly, retrospective reports to be taken and analysis to be made.





COMPRESSORS



FANS



DIGITALS



ELECTRICAL MATERIALS



CONSUMABLES



INDUSTRIAL
COOLING
SYSTEM
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**PLEASE
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SITE TO VIEW
OUR PRODUCTION
AREAS.**

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