

COLD ROOM SYSTEMS



MODULAR COLD ROOMS AND CABINETS



Modular cold storage rooms are compact, prefabricated cold room that allow food, chemical, and medical products to be preserved for long periods without spoiling, thus extending their shelf life. The components are designed to be easily assembled and disassembled, making them portable and expandable based on needs.

These modular rooms feature custom-made corner, narrow, and wall panels that lock together without the need for cutting. They are produced and delivered in predetermined dimensions and specifications, packaged for convenience. Installation begins with the floor panels. The floor, walls, and ceiling are secured using hygienic polyurethane-filled plastic, fixed by screws in designated mounting points without the need for additional accessories. The ceiling is joined with an upper-section plastic application, providing a load-bearing capacity of 250 kg per square meter.









Heat Insulation



Water, Moisture Resistant



Sound Insulation





















INDUSTRIAL COLD ROOM PANEL



WALL AND CEILING PANEL

It is a type of cold room panel with grooves (waterways) on both surfaces. They are interlocking locked panels produced by injecting 42 (+/-2) kg/m3 density polyurethane foam between 0.50 mm sheet metal.

It can also be produced without lock upon request.

Poly, PVC, and Cr-Ni sheet surface options are available. The panels can be produced in thicknesses of 50, 60, 80, 100, 120, 150, 180, and 200 mm



FLOOR PANEL

Our production consists of interlocking panels with a Plywood top surface and a poly sheet bottom surface, injected with 42 (+/-2) density polyurethane. Panel thicknesses are 50, 60, 80, 100, 120, 150, 180, 200 mm, and the width is 1110 mm.

Floor panels have a distributed load-bearing capacity of 2000 kg/m². Optionally, they can be produced using non-slip Cr-Ni coated sheet metal on plywood on the surface. When necessary, the distributed load capacity can be increased to 4000 kg/m².



NARROW PANEL

Thanks to our 30 cm, 40 cm, 50 cm standard narrow panels, our cold storage rooms allow assembly without any waste or cutting on the panels.

Production can be made in thicknesses of 5-6-8-10-12-15-18-20 cm with locked or unlocked options.



CORNER PANEL

- · Provides ease of assembly.
- Eliminates the need for cutting the panel to achieve the correct dimensions, a common issue encountered during installation.
- Allows for corner column turns to be securely locked using the reverse corner panel.
- Panels can be produced as corrugated or flat upon request.
- Standard production is according to the B2 fire resistance class, but can also be produced according to the B1 fire resistance class upon preference.



TPANFI

It is a specially designed product that connects rooms with different or the same panel thicknesses, providing ease of installation without losing insulation value. It provides an aesthetic appearance as no extra accessories and consumables are required in room combinations.

COLD ROOM DOORS

PVC FRAME HINGED DOOR

It is a type of cold room panel with grooves (waterways) on both surfaces. They are interlocking locked panels produced by injecting 42 (+/-2) kg/m3 density polyurethane foam between 0.50 mm sheet metal.

It can also be produced without lock upon request.

Poly, PVC, and Cr-Ni sheet surface options are available. The panels can be produced in thicknesses of 50, 60, 80, 100, 120, 150, 180, and 200 mm



PANEL MOUNT STANDARD DOOR

Impact locking doors used in cold and freezer rooms are panel-mounted doors designed for quick opening and closing. They are the most commonly preferred storage doors due to their ease of installation. During installation, the doors can be easily mounted by locking onto the panels on the left and right sides without any cutting. We can be produced as panel-mounted doors up to a width of max 90 cm.



ALUMINUM AND INDUSTRIAL HINGED DOOR

It is used in cold and freezer rooms and is especially preferred in European countries and the United States. The door leaf surface is made of embossed aluminum.

The frame is produced from PVC, but upon request, it can be covered with embossed aluminum. The door hinges and lock are made of stainless steel (inox).



DOUBLE AND SINGLE WING SLIDING DOOR

These are sliding doors that can open to the right or left over wide ranges. They are used in cold and frozen storage rooms and can be produced in various sizes. The standard surface options are Poly, PVC, and Cr-Ni, with different color choices available for the door leaf.



DOUBLE AND SINGLE WING FLIP-FLAP DOOR

These are sliding doors that can open to the right or left over wide ranges. They are used in cold and frozen storage rooms and can be produced in various sizes. The standard surface options are Poly, PVC, and Cr-Ni, with different color choices available for the door leaf.





INDUSTRIAL COOLING SYSTEMS

The cooling groups are produced under the ISO - 9001: 2000 quality assurance system. They are advanced technology products with world leader brands in the field of all cooling equipment used in production. Our cooling systems are produced in accordance with European Safety Norms and have the CE label.

The greatest power behind the cooling system; refrigeration units. We have a wide range of product lines including hermetic, semi-hermetic, double & single screw compressors. Compressor selection is made by our engineers according to customer demands and needs.

All brands of compressor are able to be used in the line and mainly BITZER, DORIN, FRASCOLD, TECUMSEH, EMBRACO we are used.











Determination the necessary capacity of compressors are depending on temperature of working environment (condensation) & evaporation working areas conditions. The selection is made according to the product and process conditions.

Our compressor group it has low noise and low energy consumption. In addition was celebrated as caged with RAL 7047 oven painted galvanized sheet.









INDUSTRIAL SPLIT COOLING DEVICES

Evaporators & compressor-condensers are individual components & are connected each other by copper pipes. There are several types of split cooling devices such as semi-hermetic compressors and 2 stage compressors.

Generally, preferred to be used in large storage rooms and shock freezer rooms & able to be interconnected with many different evaporators as needed.





SHOCK(BLAST FREEZER) DEVICES

The blast freezing process makes the products freeze from surface to core by way of sending. High speed (5m/s) cold air $(-35 \text{ C}/-40 \, ^{\circ}\text{C})$ through the products.

- The blast freezing process should be made as fast as possible.
- The maximum freezing time should be considered according to type of products in point of the food safety.
- The thickness of the products affects the blast freezing period.
- The air velocity affects the blast freezing period.







TECHNICAL SPECIFICATIONS

STANDARD	OPTIONAL
CASE-CABINED	
OIL SPERATOR	
	FAN SPEED CONTROL
SOUND INSULATION	
VIBRATION SENSORS	
HP SWITCH (HIGH PRESSURE)	
LP SWITCH (LOW PRESSURE)	
FAN PRESSURE SWITCH	
	MANOMETER (LOW-HIGH PRESSURE)
SIGHT GLASS	
VIBRATION ABSORBER	
DRIER	
SELENOID VALVE	
CIRCUIT BREAKER - ELECTRICAL BOX	
LIQUID TANK WITH SAFETY VALVE	
PHASE FAILURE RELAYS	



EVAPORATOR

Evaporator in a cooling system in which the liquid evaporates and this order is Refrigerant device that extracts heat from its environment. In other words, the evaporator is a refrigerant.

Evaporator types including standard wall type, both side blower, ceiling type and shock. These evaporators are choosen according to the product and storage temperature requirements and are able to be used at maximum compressor capacity.

As a standard; brand of THERMOWAY evaporators are used in our cooling units. Also if necessary FRITERM, TERMCOOL, İBS and similar brands are able to be preferred.

- Our evaporator fans are high efficiency axial fans of European origin and have an IP55 protected electrical box.
- High quality resistance rods were used for defrosting, and resistance rods were placed in copper pipes for maximum efficiency and durability.
- Fan and resistance electrical terminals are produced with terminals and collected in an IP55 protected plastic box.
- There is a system consisting of By-Pass pan and drainage hose in order to easily discharge the evaporator defrost water
- Heating Cable Resistance is added to the discharge hose to prevent icing to occur in the hoses in rooms where the room temperature is low during the gas discharge of the evaporator.
- Evaporator is painted with electrostatic powder paint in RAL 9010 (white) and cassetteed with galvanized sheet metal.



TCC SERIES EVAPORATOR (Standard Wall Type)

This type of evaporators are generally used in cold storages established for the purpose of storing -5/+5 and -18/-25 products.



SHOCK EVAPORATOR

This type of evaporators are generally used in cold storages established for the purpose of freezing -35/-40 products.



TCD SERIES EVAPORATOR

This type of evaporators are generally used in cold storages established for +12/+18 product processing.



TCS SERIES EVAPORATOR (Both Side Blower)

This type of evaporators are generally used in small volume cold storages established for the purpose of -5/+5 and -18/-25 product storage.

MONOBLOC DEVICES

- Monoblock cooling units are manufactured for Positive (+5°C/-5°C) and Negative (-18°C/-25°C) operating ranges.
- · Installation is very simple; it is mounted to cold rooms and only needs to be plugged in. Although typically used with 220V household sockets, it can also be configured for 380V industrial sockets upon request.
- Package-type split cooling units developed for small cold rooms are delivered ready for use.
- We offer ceiling-type or wall-type models depending on the features of cold and frozen rooms.
- Delivered compactly with the electrical panel and all control elements included.
- Operates at low noise levels during use.
- · Can operate outdoors without any issues.
- Equipped with a hermetic compressor and air-cooled condenser.
- · Has a defrost feature.
- · Available with R404 and R449 gas options.











TECHNICAL FEATURES

- Electrostatic powder-coated cabinet
- ✓ Low-high voltage protection relay
- ✓ Thermal magnetic circuit breaker
- ✓ Contactor in three-phase and single-phase compressors
- ✓ Crankcase heater
- ✓ Copper tube, aluminum finned condenser
- ✓ Fan speed control

- ✓ Receiver
- ✓ Dryer filter
- ✓ Liquid sight glass
- ✓ Liquid flow control solenoid
- ✓ Service and maintenance valve on the liquid line
- ✓ Low-High pressure switch
- ✓ Oil separator and accumulator







Fireproof



Heat Insulation



Water, Moisture Resistant



Sound Insulation



Easy Assembly