

### TEHNO FOOD SRL, or.Chisinau, str. Ion Neculce nr.1 bl.1 of.47 Telefon: 069099980/079613999, www.evotek.md

CĂTRE GRUPUL DE LUCRU AL AGENȚIEI ASIGURARE RESURSE ȘI ADMINISTRARE PATRIMONIU A MINISTERULUI APĂRĂRII

Nr. 1/24 din 09.05.2024

La nr. 70/713 din 07.05.2024

#### **Demers**

Prin prezentul, SRL TEHNO FOOD ca urmare a solicitării Dvs. atașează documentele solicitate la procedura <u>ocds-b3wdp1-MD-1712572281701</u> din <u>29.04.2024 Utilaj frigorific</u>:

- Extrasul din Registrul de Stat al persoanelor juridice;
- Certificatul de atribuire a contului bancar;
- Certificatul privind lipsa sau existența restanțelor față de bugetul public național;
- Paşapoartele tehnice ale utilajelor;
- Certificate de conformitate de la producători;
- Confirmare privind atribuirea numărului de înregistrare în "Lista producătorilor" de produse supuse reglementărilor de responsabilitate extinsă a producătorului (EEE);
  - Certificat de garanție a utilajelor;
- Declarație privind confirmarea identității beneficiarilor efectivi și neîncadrarea acestora în situația condamnării pentru participarea la activități ale unei organizații sau grupări criminale, pentru corupție, fraudă și/sau spălare de bani.
  - Certificat ISO al SRL TEHNO FOOD;
  - Document confirmativ privind deținerea service centru pentru reparația utilajelor.

Totodată, ținem să menționăm că camerele frigorifice fabricate de Tunelgroup Cold Room Systems (IBS Isitma Sogutma Havalandirma Taah. Sa. VE Ticaret. A.Ş., TURCIA), se realizează la comanda clientului (cu dimensiunile și caracteristicile solicitate în cazul dat de Autoritatea contractantă).

În acest sens, sperăm pe imparțialitatea Dvs. în procesul evaluării documentelor ofertanților la procedura respectivă.

SRL TEHNO FOOD vă garantează și pune la dispoziția Dvs. utilaj de înaltă calitate, cu garanție corespunzătoare, și speră la o colaborare fructuoasă cu instituția Dvs.!

Cu respect și considerațiune,

09.05.2024

DIRECTOR SRL TEHNO FOOD Eugeniu VOLONTIR



#### CAMERA ÎNREGISTRĂRII DE STAT

#### **EXTRAS**

din Registrul de stat al persoanelor juridice Nr. 350879 data 24.01.2017

Denumirea completă: Societatea cu Răspundere Limitată "TEHNO FOOD".

Denumirea prescurtată: "TEHNO FOOD" S.R.L.

Forma juridică de organizare: Societate cu răspundere limitată,

Numărul de identificare de stat și codul fiscal (IDNO): 1017600003659

Data înregistrării de stat: 24.01.2017 Modul de constituire: nou creată.

Sediul: MD-2069, str. Ion Neculce, 1/1, ap.(of.) 47, mun. Chișinău, R.MOLDOVA. Obiectul principal de activitate:

1. Comerț cu ridicata al altor mașini și echipamente

2. Intermedieri în comerțul cu mașini, echipamente industriale, nave și avioane

3. Repararea echipamentelor electrice

- 4. Comerț cu amănuntul al mobilei, al articolelor de iluminat și al articolelor de uz casnic n.c.a., în magazine specializate
- 5. Repararea aparatelor electronice de uz casnic
- 6. Instalarea maşinilor şi echipamentelor industriale
- 7. Comert cu ridicata al altor bunuri de uz gospodăresc
- 8. Comert cu ridicata al aparatelor electrice de uz gospodăresc, al aparatelor de radio și televizoarelor

9. Repararea articolelor de uz personal și gospodăresc n.c.a.

10. Repararea dispozitivelor de uz gospodăresc și a echipamentelor pentru casă și grădină

11. Repararea altor echipamente

- 12. Repararea mobilei și a furniturilor casnice
- 13. Repararea masinilor
- 14. Intermedieri în comerțul cu produse diverse
- 15. Intermedieri în comerțul cu mobilă, articole de menaj și de fierărie
- 16. Intermedieri în comerțul specializat în vînzarea produselor cu caracter specific, n.c.a.
- 17. Comerț cu amănuntul al articolelor de fierărie, al articolelor din sticlă și a celor pentru vopsit, în magazine specializate
- 18. Comerț cu amănuntul al articolelor și aparatelor electrocasnice, în magazine specializate
- 19. Comerț cu amănuntul al altor bunuri noi, în magazine specializate
- 20. Comerț cu amănuntul prin intermediul caselor de comenzi sau prin Internet
- 21. Comerț cu amănuntul efectuat în afara magazinelor, standurilor, chioșcurilor și piețelor
- 22. Comerț cu amănuntul prin standuri, chioșcuri și piețe al altor produse
- 23. Fabricarea utilajelor pentru prelucrarea produselor alimentare, băuturilor și tutunului

Capitalul social: 100 lei,

Administrator: VOLONTIR EUGENIU, IDNP 2006047012314/tel. 068301939 Asociat: VOLONTIR OLGA, IDNP 2005049004598, cota 100 lei, ce constituie 100%

Prezentul extras este eliberat în temeiul art.34 al Legii nr 220-XVI din 19 octombrie 2007 privind înregistrarea de stat a persoanelor juridice și a întreprinzătorilor individuali și confirmă datele din Registrul de stat la data de: 24.01.2017.

Registrator

Ion MERLICI

E A = 0 3 9 7 5 7 0 E

Date cu caracter personal. Detinător: Î.S. "Camera Înregistrării de Stat", NUID (număr de identificare unic) 0000151-001



### BC "MOLDINDCONBANK" S.A.

Sucursala "Alba-Iulia"

Republica Moldova, MD-2071

mun. Chişinău, str. Alba-Iulia, 77/19

Tel.: (373 22) 63-08-88, 59-39-64

Fax: (373 22) 63-08-87

Data 03 · 06 · Dott

Nr. 443

Республика Молдова, MD-2071

мун. Кишинэу, ул. Алба-Юлия, 77/19

Тел.: (373 22) 63-08-88, 59-39-64

Факс: (373 22) 63-08-87

#### **CERTIFICAT**

B.C. "Moldindconbank" S.A., confirmă că "TEHNO FOOD" SRL , IDNO 1017600003659, la data de 1 iunie 2022 deține următoarele conturi bancare:

Nr	IBAN	Valuta	Banca Beneficiara
1	MD78ML000000002251603373	MDL	MOLDMD2X
2	MD78ML000000002251603373	USD	BC MOLDINDCONBANK
3	MD78ML000000002251603373	EUR	3.A.

Director BC "Moldindconbank" S.A sucursala Alba-Iulia

Alexandr Hovanschi

Digitally signed by Volontir Eugeniu Date: 2022.11.22 09:17:32 EET Reason: MoldSign Signature Location: Moldova



Ex.: Efena Ciudac

Tet

ID: 637511C72114

Confidential - MICB

Atenție! Se interzice deținerea, sustragerea, alterarea, multiplicarea, distrugerea sau folosirea acestui document fără a dispune de drept de acces autorizat!

nr. 26/1-05/2-83354 din 03.05.2024

#### **CERTIFICAT** privind lipsa sau existența restanțelor față de bugetul public național

Nr. №	A2405174	din ot	03.05.2024	
1. Destinați	а / Назначение			
pentru participarea la proceduri de achiziții publice				
2. Date despre contribuabil / Информация о налогоплательшике				

<b>Denumirea</b> Наименование		Codul fiscal / Numărul de identificare Фискальный код / Идентификационный номер
TEHNO FOOD S.R.L.		1017600003659
		Denumirea localității именование населенного пункта
Ion Neculce nr.1 bl.1 of.47	0120-SEC.BUIUCANI	

3. Atestarea lipsei sau existenței restanțelor conform datelor Sistemului Informațional Automatizat / Подтверждение отсутствия или наличия недоимки согласно данных Информационной автоматизированной системы

La data emiterii prezentului certificat restanța față de bugetul public național constituie/ На дату выдачи данной справки недоимка перед национальным публичным бюджетом составляет: 0.00 lei/лей.

- **4. Valabil pînă la** / Действителен до 18.05.2024
- 5. Autentificarea Serviciului Fiscal de Stat / Подтверждение Государственной налоговой службы

	Şef SDPJ nr.1			Gabriela BRINEAC
<b>L.</b> Ş/ М.П.	Funcția/Должность	Digitally signed by Diffuent Gabriela Date: 2024.05.03 13:44:29 EEST Reason: MoldSign Signature Location: Moldova		Numele și prenumele/Фамилия и имя
Executor: _	C. Coşanu Numele şi prenumele/Фамилия и имя	Location. Woldova	-Q-	

Este extras din Sistemul Informațional al SFS SIA "Contul curent al contribuabilului"// 03.05.2024 ora 11:34:32 cu aplicarea prevederilor pct. 82-83 Ordin IFPS nr.400 din 14.03.2014 (Monitorul Oficial 72-77/399, 28.03.2014)

#### MINISTERUL MEDIULUI AL REPUBLICII MOLDOVA



#### MINISTRY ENVIRONMENT OF THE REPUBLIC OF MOLDOVA

#### AGENŢIA DE MEDIU

#### **ENVIRONMENTAL AGENCY**

MD-2005 mun.Chişinău, str. Albişoara, 38 Tel. (022) 820-770, Email: am@am.gov.md

#### **CONFIRMARE**

privind înregistrarea în "Lista producătorilor" de produse supuse reglementărilor de responsabilitate extinsă a producătorului (echipamente electrice și electronice)

În scopul plasării pe piață a produselor de echipamente electrice și electronice, în conformitate cu prevederile art. 12 alin. (5) și alin. (14) lit. b) din Legea nr. 209 din 29.07.2016 privind deșeurile, și punctele 46 – 50 din Regulamentul privind deșeurile de echipamente electrice și electronice, aprobat prin Hotărîrea Guvernului nr. 212 din 07.03.2018, se emite numărul de înregistrare

#### MD2023-9-EEE-001

pentru SRL TEHNO FOOD, IDNO: 1017600003659, cu adresa juridică: mun. Chișinău, str. Ion Neculce, 1/1, of. 47.

Numărul de înregistrare este valabil începînd cu data de 01.09.2023 pînă la data de 01.09.2026.

Director adjunct
Dorin POVERJUC

Digitally signed by Poverjuc Dorin Date: 2023.09.01 15:35:36 EEST Reason: MoldSign Signature Location: Moldova



### <u>TEHNO FOOD SRL, or.Chisinau, str. Ion Neculce nr.1 bl.1 of.47</u> <u>Telefon: 069099980/079613999, www.evotek.md</u>

#### DECLARAȚIE PRIVIND GARANȚIA UTILAJULUI

Către

#### AGENŢIA ASIGURARE RESURSE ŞI ADMINISTRARE PATRIMONIU A MINISTERULUI APĂRĂRII,

MD2021, MOLDOVA, mun.Chişinău, mun.Chişinău, şos.Hînceşti 84

#### Stimati domni,

Stimați domni, Ca urmare a anunțului/invitației de participare/de preselecție apărut în Buletinul achizițiilor publice și/sau Jurnalul Oficial al Uniunii Europene, nr. ocds-b3wdp1-MD-1712572281701 din 29.04.2024 (ziua/luna/anul), privind aplicarea procedurii pentru atribuirea contractului Utilaj frigorific (denumirea contractului de achiziție publică), noi S.R.L. TEHNO FOOD (denumirea/numele ofertantului/candidatului), declarăm pe propria răspundere că termenul de garanție constituie cel indicat în Anexa 22 (Specificații tehnice), cu condiția respectării normelor de exploatare a utilajului și condițiilor stabilite de producător.

Data completării 09.05.2024 Cu stimă,

Ofertant/candidat	
Semnat:	Numele, Prenumele: Volontir Eugeniu În calitate de: Administrator
Ofertantul:SRL TEHNOFO	OOD Adresa: Mun. Chişinău, str. Ion Neculce 1/1 (semnătura
autorizată)	

#### **DECLARAȚIE**

privind confirmarea identității beneficiarilor efectivi și neîncadrarea acestora în situația condamnării pentru participarea la activități ale unei organizații sau grupări criminale, pentru corupție, fraudă și/sau spălare de bani.

Subsemnatul, Eugeniu VOLONTIR reprezentant împuternicit al SRL TEHNO FOOD (denumirea operatorului economic) în calitate de ofertant/ofertant asociat în cazul desemnării ca câștigător în cadrul procedurii de achiziție publică nr ocds-b3wdp1-MD-1712572281701 din 29.04.2024, declar pe propria răspundere, sub sancțiunile aplicabile faptei de fals în acte publice, că beneficiarul/beneficiarii efectivi ai operatorului economic în ultimii 5 ani nu au fost condamnați prin hotărâre judecătorească definitivă pentru participarea la activități ale unei organizații sau grupări criminale, pentru corupție, fraudă și/sau spălare de bani.

Numele și prenumele beneficiarului efectiv	IDNP al beneficiarului efectiv
Olga VOLONTIR	2005049004598
Data completării:09.05.2024	

Data completării:09.05.2024	
Semnat:	
Nume/prenume: Eugeniu VOLONTIR	
Funcția în cadrul persoanei juridice:	Administrator
Denumirea persoanei juridice	SRL TEHNO FOOD
IDNO al persoanei 1017600003659	



### CERTIFICAT DE INREGISTRARE

Acest certificat confirma faptul că sistemul de management al

#### "TEHNO FOOD" SRL

MD-2069, str. Ion Neculce, 1/1, mun. Chişinău, Republica Moldova MD-2028, str. Academiei, 11/2, mun. Chişinău, Republica Moldova

a fost auditat si aprobat de către Quay Audit UK Ltd pentru următorul standard de management :

ISO 9001:2015

Sistemul de management aprobat se aplică pentru urmatoarele domenii de activitate:

Comert cu amănuntul al articolelor și aparatelor: electrocasnice, de uz casnic n.c.a., de fierărie, și al altor bunuri noi, în magazine specializate. Comert cu amănuntul prin intermediul caselor de comenzi sau prin internet. Comert cu ridicata al aparatelor electrice de uz gospodăresc și al altor mașini și echipamente. Repararea aparatelor electronice de uz casnic. articolelor de uz personal și gospodăresc n.c.a., echipamentelor electrice și altor echipamente. Intermedieri în comerțul cu masini, echipamente industriale si produse diverse. Instalarea masinilor si echipamentelor industriale.

> Acest certificat se aplica pentru acele domenii de activitate descrise în Codurile NACE(CAEN) enumerate mai jos, recunoscute internațional:

3314, 3319, 3320, 4614, 4619, 4643, 4669, 4752, 4754, 4759, 4778, 4791, 9521, 9529

Aprobat initial la

11 Aprilie 2024

Certificare curentă

11 Aprilie 2024

Certificatul expira la

11 Aprilie 2027

Numarul certificatului 4159464





În numele Quay Audit UK Limited





www.global-accreditation.org





#### Chisinau, Direcția generală economie, comerț și turism a CMC

#### <u>ÎNȘTIINȚARE DE RECEPȚIONARE</u>

(CONFIRMĂ OFICIAL DREPTUL LA ÎNCEPEREA ACTIVITĂȚII)

Primăria mun. Chişinău, Adresa mun. Chişinău, şos. Hânceşti, 53 "A"

Nr. Notificării privind inițierea activității de comerț P-41066/2023

Data 01.09.2023 Ora 11:22

**COMERCIANTULUI:** 

Denumirea/ N.P.P. TEHNO FOOD S.R.L. IDNO/IDNP 1017600003659

Sediul/domiciliul Republica Moldova, mun. Chişinău, sec. Buiucani, str. Ion Neculce, 1, bloc. 1,

ap./of. 47

Tipul activității

Tel. 069367462 Fax E-mail info.tehnofood@gmail.com

Date din NIAC:

#### S 95.21. Repararea aparatelor electronice de uz casnic

(comerțul cu amănuntul, comerțului cu ridicata, perstării de servicii, alimentație publică, intermedierii în comerț, activității în baza patentei de întreprinzător)

În Unitate de reparație

(unitatea comercială)

din Republica Moldova, mun. Chişinău, sec. Centru, str. Academiei, 11, bloc. 2

(adresa amplasării unității comerciale)

N.P. persoanei responsabile APL Diana Lesnic-Rascoala functia Specialist

tel. 022222441, e-mail comert.autorizare@pmc.md

mun. Chişinău, şos. Hânceşti, 53 "A"

Tel: +37322226164 E-mail: dc@pmc.md





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#### WHO ARE WE?

Tunelgroup was founded in 2012 to produce innovative and ergonomic solutions in the industrial cooling sector and became one of the leading representatives of the sector in a short time thanks to the successful projects it implemented. Tunelgroup, which offers tailor-made, rational and permanent solutions by combining its expertise in production with its success in turnkey project applications, creates applications that provide maximum efficiency with its experience in cold storage facility production and innovative designs. By developing Tunelgroup R&D based products; It offers a wide range of solutions in the food, agriculture, animal husbandry, health, IT and logistics sectors.

#### VISION

To be a highly competitive, leading company that stands out with its brand value in the national and international markets with the innovative solutions it brings to the industrial cooling sector.

#### **MISSION**

By adapting to constantly developing and changing sectoral needs, to its domestic and foreign customers; To offer high value-added, innovative, environmentally friendly and energy efficient products and solutions.



### **OUR SERVICES**







#### **Production and Supply**

All products related to cold storage, selected on the basis of energy efficiency, with the foreseen capacity and high quality, come together under the roof of our company.

Many products such as refrigeration machinery and equipment, cold store panels, cold store doors, cold store installation accessories, modular cold rooms, remote monitoring and control systems, humidification systems, cold store ventilation systems, cold store lighting systems, cold store door and panel protection barriers. We offer service in a wide range of products without compromising on high quality and affordable costs.



#### **Design and Project Planning**

Our first goal in project design is to understand our customer's needs and to determine solutions that can make an aesthetic and economic difference in accordance with the needs.

Following R&D (Research - Development) activities, product or system design is carried out by our expert engineer staff. After the design phase is verified with the relevant engineering calculations, project work is started. Our company concludes its activities by making the necessary calculations and modeling on refrigeration and air conditioning with engineers who are experts in their fields.



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### **Turnkey Project**

Tunelgroup implements turnkey projects both at homeland and abroad by designing project design, material production and supply, installation and commissioning processes to ensure maximum efficiency.

www.tunelgroup.com.tr







### **Experienced Staff**

As a manufacturer of mechanical cooling units, we are ready to offer technical advice and solutions with our most professional team.



### **Quality Control**

Tunelgroup uses the ISO 9001 standard for continuous monitoring and optimization of all business processes and production methods within the scope of R&D, sales, marketing, production.



### **Support After Sale**

One of the most important factors that make our customers choose Tunelgroup in the cooling industry is the after-sales technical service support provided by our company.

The quality of the service and maintenancewe provide throughout the life of the products; It is offered at the highest level with its continuity, reliability and spare parts warranty.







#### **Investment and Grant Consultancy**

We provide you with the most accurate guidance and advice by producing solutions to your requests within the scope of Development Agency Projects, Agricultural Grant Projects and EU Grant Projects, in line with the standards determined by the grant institutions.





### **Installation and Operation Activities**

Our company provides installation and assembly services of our cooling machines and equipment in your turnkey projects.



After completing the testing phases by commissioning the projects with completed machinery and equipment installation, we make sure that the system works smoothly and deliver the project.



### **FIELDS OF ACTIVITY**



Food Distribution Facilities and Food & Beverage Warehouses

Microorganisms reproduce in a wide temperature range and cause foodspoilage. Forthis reason, products must be stored in appropriate environmental conditions. Their shelf life is also determined by storing under these conditions. Cold chain is defined as storing food products under appropriate environmental conditions at all stages, starting from the production stage, until they reach the customer, such as shipment and storage. Leaving food products under direct sunlight causes their properties to disappear and deteriorate.

MARGARINLER

### **AGRICULTURE**

#### **Controlled Growing and Maturation Rooms**

A suitable atmosphere is created in the warehouse so that fruits and vegetables can be stored for a long time without spoiling. This environment is an environment where oxygen (O2) is almost eliminated, a nitrogenous (N) environment is created, harmful carbon dioxide (CO2) and ethylene (C2H4) produced from stored vegetables and fruits are absorbed, and the ideal temperature is maintained.



#### **Mushroom Growing Rooms**

Although the growth of mushrooms naturally depends on the conditions desired by the mushrooms, these conditions are created artificially in commercial enterprises. Temperature, humidity and ventilation are the most important ecological factors in mushroom cultivation and greatly affect yield and quality. Mushrooms are very selective in terms of their climate demands, and they also have different ecological demands in different periods. For this reason, commercial cultivation areas must be air-conditioned in accordance with the requirements of the mushrooms.





When harvested fruits and vegetables are stored under appropriate conditions, they retain their fresh qualities to a significant extent for a while. Suitable conditions are achieved by adjusting the temperature and relative humidity. There is a certain temperature and relative humidity at which each fruit and vegetable can be stored in the best way. In fact, the optimum storage requirements of the same fruit or vegetable may vary depending on the variety and the ecological conditions in which it is grown.

Nomatter how well the optimum conditions in storage are provided, each fruit and vegetable can only last for a certain period of time. This period; It varies from a few days to 5-6 months. At the end of these certain periods specific to each product, the stored product rapidly loses its quality and eventually deteriorates completely. Therefore, the shelf life of fruits and vegetables in cold storage is limited.



#### **Potato and Onion Storage Rooms**

Potato tubers; They are living, "breathing" organisms. "While breathing"; They give off carbon dioxide, moisture and heat. In order to prevent the proliferation of these three products at extremely high levels and to provide a suitable environment for living potato tubers, potato tubers are ventilated. Ventilation and cooling of the potato warehouse; It can be defined as ensuring the correct air temperature, air circulation and distribution throughout the warehouse and tubers. The purpose of these three factors is; It is to obtain uniform tuber temperature, humidity and air throughout the potatoes in the warehouse. By providing these environmental conditions, potatoes can be stored for a long period of 10 = 12 months in high quality, depending on the variety characteristics.

### **FARMING**



#### **Meat Products Processing and Preservation**

The purpose of preserving meat and meat products is to prevent putrefaction and spoilage that may occur in the products and to make the conditions for the reproduction and multiplication of the microorganisms that cause this unfavorable. When this is achieved, the effects of microorganisms as well as physical, chemical and enzymatic factors that cause spoilage of meat and meat products can be greatly slowed down or stopped. Methods used to increase the durability of meat and meat products can be classified as physical and chemical methods.

Physical methods: Cooling, Freezing, Drying, Heating

Chemical Methods: Salting, Curing, Smoking, Irradiation, Using Chemical Preservatives, Fermentation

The purpose of cooling is to reduce the internal temperature of rigor mortis-formed carcasses (whole) or pieces of meat to +4°C. Cattle and buffalo carcasses are chilled as 1/2 or 1/4 body, and veal, sheep and goat carcasses are chilled as full body.

#### **Dairy Processing and Preservation**

In order for milk to be offered directly for consumption, it must be subjected to heat treatment under controlled conditions and thus become safe for public health. No matter how good the raw milk production conditions are, it is inevitable that there will be different types and numbers of microorganisms in the milk. These microorganisms can multiply in raw milk in a short time under suitable conditions, causing the milk's qualities to deteriorate and eventually become unconsumable.



Raw milk may also contain pathogenic microorganisms that cause disease in humans. With controlled heat application, pathogenic microorganisms are completely destroyed and other micro organisms that deteriorate the qualities of milk are destroyed to a large extent. In this way, milk is made microbiologically safe, but at the same time, it is aimed to prevent its nutritional value from being damaged as much as possible and to preserve its natural qualities, especially its taste and smell, at the highest possible level.



#### **Poultry Processing and Preservation**

Rapid cooling of meat after slaughter is very important in terms of obtaining a healthy product, improving taste, maintaining quality, and delaying enzymatic and microbial spoilage. The cooling process prevents the growth of pathogenic bacteria that cause many food poisonings and extends the shelf life of the product by delaying the proliferation of psychrophile bacteria. As the carcass temperature decreases, the development and reproduction rates of microorganisms decrease, the activities of enzymes that break down protein and fat decrease, and as a result, the quality and health of meat during storage and marketing is prolonged. For this reason, whether it is a product to be marketed or a product to be frozen, cleaned poultry meat should be immediately cooled to 4°C or lower.

After the carcass temperature, which is 35-40°C after slaughter, is cooled to 4°C, it should be kept at the same temperature until freezing or another process is applied.

When air is used to cool poultry meat, adequate bleeding is important to prevent discoloration during cooling. In the air cooling method, the carcass is cooled until its midpoint temperature drops to 0°C. Keeping the temperature of the cooling environment at -0.5°C is sufficient to provide cooling. During cooling, the relative humidity is tried to be kept at 100% or close to it. Keeping the relative humidity high is done to reduce moisture loss during cooling. Cooling of carcasses in a still air environment is completed in 12-16 hours, depending on species, weight, gender and age.

### Seafood

#### **Seafood Processing and Preservation**

Seafood is the most valuable food item in terms of the nutritional components it contains. The fact that it has a very high protein ratio, contains almost all amino acids found in nature, is rich in vitamins and has a high biological value makes aquatic products valuable. Aquatic products, which are so valuable, are among the nutrients that spoil the fastest and go bad the quickest. If the fish is not protected under appropriate conditions after being caught, it may become stinky within a few hours. For this reason, seafood products must be protected, transported and processed with appropriate techniques after they are caught or harvested.

In order to preserve seafood without spoiling and deliver it to the consumerinahealthyway, the correct seafood processing technology must be applied, taking into account the characteristics of the raw material.



## Shellfish Processing and Enclosure

The freezing method applied when freezing food affects the size of the ice crystals formed. If food is quickly frozen, especially If the range between -10C and -50C is crossed in a short time, the ice crystals formed will be small. The crystals remain inside the cell. It does not rupture the cell membrane. It does not tear the connective tissues between cells. Since the connective tissue and cells in the food do not break down, the quality of the food is preserved.

### **IQF Systems**

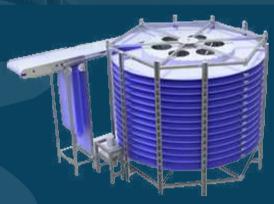
IQF-Food products are frozen individually at -40°C in a very short time without crystallization of the water inside. This process occurs by freezing the water inside the products, and in this way, food products are ensured to have a long life without additives. Since they are flash frozen at -40°C with the IQF method and stored at -18°C, it is not possible for microorganisms that cause decay to grow in frozen foods, resulting in the products deteriorating and losing their nutritional values.







**Tunnel Shocking (Blast Freezing)** 



**Spiral Freezing** 

tasy setup

Innovative of Innovative

J Product High Outslich

I mentally chair friendly control of the products

### **PRODUCTS**



**Central Cooling Units** 



**Split Cooling Units** 



**Monoblock Units** 



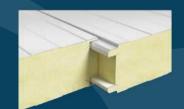
**Control Elements And Automation Systems** 



**Evaporators** 



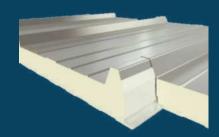
**Modular Cold Rooms** 



**Cold Room Panels** 



Hidden Screw Facade Panels



**Roof Panels** 



Container Cold Storages



Cold Room Doors



Accessories and Assembly Products



### \* Industrial and Split Cooling Units







Industrial refrigeration units, showcase type refrigerators, cold rooms, ice machines, ice cream machines, etc. They are condensing units that can be used in all commercial and industrial cooling applications. It is especially designed to operate quietly. In order to reduce the sound level to minimum levels, silent fans were used in the units, and acoustic insulation was applied by mounting the compressors in a separate compartment. Industrial cooling units are produced in a wide range of models and offer special models depending on changing areas of use.

Industrial type units are suitable for industrial facilities with medium and high capacity cooling needs. Thanks to its compact design, it is easy to install and maintain. Efficiency is at a high level in cooling devices where high capacity compressors are used.

#### <sup>©্ট</sup>় Advantages

- √ Compliance with standards
- √ Quality equipment
- √ Cabin resistant to external factors
- ✓ Easy installation-assembly
- √ Floor or wall mounting
- √ Wide selection range
- Complete ready-to-install unit
- Special models depending on the area of use
- √ Low sound level
- Ease of maintenance

#### **TECHNICAL SPECIFICATIONS**

- ✓ Electrostatic Powder Coated Cabin
- √ Phase Protection Relay
- √ Contactor and Thermal Conditioner
- √ Thermostatic Digital Control Panel
- √ Crankcase Heater
- √ High Pressure Switch
- √ Low Pressure Switch

- √ Fan Switch
- ✓ Fan Speed Control (Optional) 9 Liquid Tank
- ✓ Draver

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- √ Gas Indicator with Humidity Indicator
- ✓ Service and Maintenance Valve on Liquid Line
- ✓ Integrated Electrical Panel
- √ Liquid Flow Control Solenoid

# Central System Cooling Units (Screw, Scroll and Semi-Hermetic)





Central cooling units are suitable for industrial facilities and supermarkets that require high capacity cooling. The condenser is shipped separately. There is a wide selection range in capacities from 2 to 6 compressors. The condenser unit is specifically designed to operate quietly. Industrial cooling units are produced in a wide range of models and offer special models depending on changing areas of

Central cooling units are manufactured using vibration dampening elements on a durable chassis and multiple hermetic, semi-hermetic, scroll or screw compressors to ensure parallel operation of the compressors. Efficiency is at a high level in cooling devices where high capacity compressors are used.



#### **Advantages**

- √ Compliance with standards
- √ High efficiency
- ✓ Durable cabin suitable for outdoor environments
- √ Minimum noise level
- √ Reliable quality equipment
- ✓ Low initial investment cost
- √ Easy assembly and installation
- √ Easy maintenance
- ✓ Product variety
- √ Special model design opportunity

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#### **TECHNICAL SPECIFICATIONS**

- ✓ Electrostatic powder coated steel chassis
- √ Phase Protection Role
- √ Contactor and Thermal Conditioner
- √ Thermostatic Digital Control Panel
- √ Crankcase Heater
- √ On Off Compact Conditional
- √ Cartridge Filter
- √ Liquid Storage

- ✓ Service and maintenance valve on the liquid line
- ✓ Low High Pressure Prostate
- ✓ Service Valve on Suction and Pressure Line
- √ Fan Speed Control (optional)
- ✓ Semi-Hermetic, scroll or screw compressor
- √ Air or water cooled condenser
- ✓ Electrical and all automatic control elements
- √ Gradually activated compressor system





### **Monoblock Cooling Units**



Monoblock cooling units have hermetic compressors and air-cooled condensers. The device is a compact type and is shipped with all its equipment assembled and gas charged. It is cassette suitable for outdoor weather conditions. Hot gas defrost system is available.

In order to reduce the sound level to minimum levels, silent fans are used in the units, and acoustic insulation is applied to the cabin where the compressor is located. His work is very quiet. They provide a comfortable installation advantage by being easily hung on the warehouses where they are used. With their effective performance, they safely store all kinds of products in the warehouse. Depending on the characteristics of the warehouse, it is also possible to produce the ceiling type horizontally. Monoblock cooling devices have an automatic fan control system.



#### Advantages

- ✓ It has a hermetic compressor and air-cooled condenser.
- ✓ It is shipped compactly with the electrical panel and all control elements.
- ✓ The device is a compact type and is shipped with all its equipment assembled and gas charged.
- ✓ Taped in accordance with outside weather conditions.
- Hot gas defrost system is available.



#### **TECHNICAL SPECIFICATIONS**

- ✓ Service and maintenance valve on the liquid line
- ✓ Electrical panel
- √ All automatic control elements
- ✓ Low High pressure prostate
- ✓ Dryer Filter

### **Control Elements and Automation Systems**







Cold room control elements are a type of control tools that can keep the room temperature and humidity constant at the desired level. Control devices are used in places where temperature and humidity need to be adjustable, such as cold rooms and cold storages.

It is used to increase the efficiency of both small and large applications. Additionally, systems can be shaped as desired. It is designed to increase energy saving. Thus, it reduces operating costs and helps protect the environment. Our solutions focus on end-user needs; It is synonymous with quality, ease of use and efficiency.



#### ने मिने Alarm Management

An effective alarm management system easily detects alarm conditions and sends the necessary alerts to ensure optimum operation of the application.





It has maximum connectivity with hardware equipped with USB, Ethernet, RS485 and modem connection ports.



#### Multiple Integration

The user interface can be used with all new web browsers. There is no need to install additional software. It is also fully compatible with touch screen technologies.

#### **Food Quality**



Continuous information recording, HACCP reports and timely alarm notifications guarantee the quality of fresh and frozen foods and ensure compliance with standards.



Thanks to special algorithms and permanent energy consumption monitoring, it optimizes the functionality of the application by increasing energy efficiency, reducing costs.

#### **Environmentally Friendly**



It optimizes consumption with environmentally friendly, innovative and efficient practices, and is an environ mentally friendly system that reduces waste, environ mental pollution and gas emissions.





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### **Evaporators (Indoor Units)**



Cold room evaporators can meet small, medium and large cooling demands in all capacity ranges. The batteries included in the units are highly thermally efficient and are also compactly designed. Special models are available for project-specific needs.

Fan diameters are 300mm, 350mm, 400mm, 450mm, 500mm and 630mm and are used in sizes appropriate to the room volume.

It is manufactured with galvanized sheet metal, painted in aesthetic electrostatic white against rust, and exhibits a decorative feature as well as its durability. However, the side covers and drain pan are designed to be easily removable for installation and maintenance work. It can be produced from stainless material and with epoxy battery upon special request.

#### **TECHNICAL SPECIFICATIONS**

- ✓ Different pipe wall thickness and pitch of 4-6-8-10 mm
- ✓ Single-phase 220V 1~ 50Hz–Three-phase 400V 3~ 50 Hz fan options
- √ Drain pan
- √ Stainless steel cabin (Optional)
- √ Epoxy paint (Optional)
- √ Fan cable resistance
- √ Drain line cable resistance
- √ Heating resistance defrost system in the battery and pan (Electric Defrost)











#### **Battery**

- √ Lamel spacing is designed as 4-6-8-10 mm.
- ✓ Input-output collector material is copper
- √ The highest allowable working pressure Ps=21 Bar.
- √ Staggered pipe arrangement.
- ✓ Refrigerants are designed to work with R404A, R507C, R22, R134A, R407C, R449A, R448A refrigerants



- ✓ Electrostatic painted on galvanized steel.
- √ Optional stainless cassette option
- √ Removable side covers.
- ✓ Hinged / Folding drain pan is standard on all models.
- √ Intermediate drain pan.



- √ Cooler options with different fan diameters and number of fans depending on room sizes
- ✓ Standard or low noise maintenance-free fan option.
- ✓ Optional AC or EC fan motor options.
- √ Optionally selectable fan accessory types
- √ Axicool fans
- √ FlowGrid noise reducers
- √ Operating range is -45°C / +50°C.



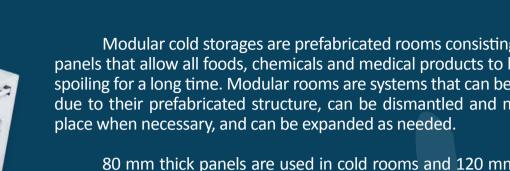
#### Defrost

- √ B1 Defrost system for application range at room temperature 0°C / +5°C
- ✓ Defrost heaters are only installed on the battery
- ✓ B2 Defrost system is for -34°C / 0°C room temperature application range.
- ✓ Defrost heaters mounted on the battery and drain pan
- ✓ Drain line heater, hot gas defrost system and water defrost system optional



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### **Modular Cold Rooms**



Modular cold storages are prefabricated rooms consisting of demountable panels that allow all foods, chemicals and medical products to be stored without spoiling for a long time. Modular rooms are systems that can be easily assembled due to their prefabricated structure, can be dismantled and moved to another

80 mm thick panels are used in cold rooms and 120 mm thick panels are used in frozen storage rooms. Depending on the area of use, the surface material of wall and ceiling panels may be polyester, PVC or CrNi. In floor panels, it is used with galvanized, PVC or CrNi sheet on plywood.



easily assembled due to their prefab thanks to their male-female form, they with the eccentric locking system. Thanks ricated structure, can be dismantled and are installed quickly and practically, to the male-female connection detail moved to another place when necessary, without the need for interconnecting between the two connection surfaces, a and can be enlarged as needed.

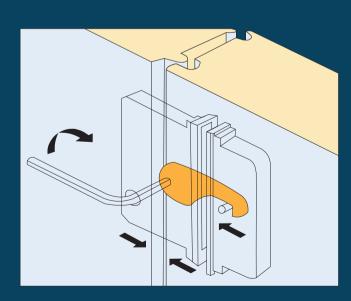
#### JF Joint Detail

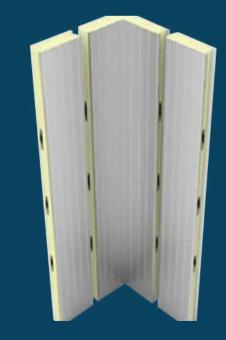
elements.

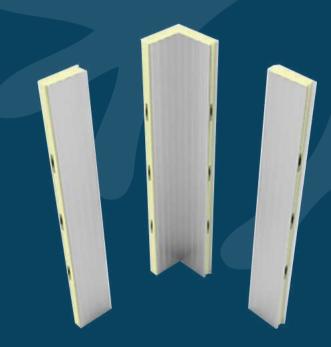


#### Lock Detail

Modular rooms are systems that can be By interlocking the modular room panels Sandwich panels can be easily combined perfectly leak-proof connection is achieved after application.















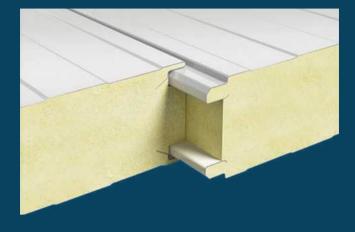






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### **Cold Room Panels**



Polyurethane filled sandwich panels are used in industrial cold storages. Polyurethane, used as the core material, does not contain harmful organisms due to its chemical structure. It provides excellent thermal insulation due to its low thermal conductivity coefficient.

Thermal insulated sandwich panels provide solutions to many insulation problems with their low heat conduction coefficient. It finds wide use in the cooling industry with its feature of providing maximum thermal insulation.

Polyurethanepanelshaveamonolithicsandwichstructurecreatedbyinjecting high density liquid polyurethane foam between metal coatings. Depending on the application area, cold stores can be used to control temperatures ranging from -45°C/+15°C.

Thickness mm	m² K	m² h°C	°C	
50mm				
60mm	0.315	0.270	+10°C/+5°C	
80mm	0.238	0.205	+5°C / -5°C	
100mm	0.188	0.162	-5°C/-12°C	
120mm	0.155	0.132	-12°C / -20°C	
150mm	0.126	0.109	-20°C / -30°C	
200mm	0.095	0.080	-30°C / -40°C	
$LAMBDA = \frac{K}{0.0185 r}$	mK			

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### **Wall and Ceiling Panels**



Flat surface sandwich panels are produced without forming on the surface sheet. It is preferred to create a hygienic environment since there are no grooves on the panel surface. The locking system is available on panels 80 mm and thicker.

Corrugated or trapezoidal sandwich panels are produced by forming them on the surface sheet in order to increase the panel strength. The locking system is available on panels 80 mm and thicker.

: 21,5 dB



 $\checkmark$  Panel Width : 1000 mm / 1110 mm

✓ Panel Thickness : 50 – 200 mm
 ✓ Maximum Panel Length : 13,5 m

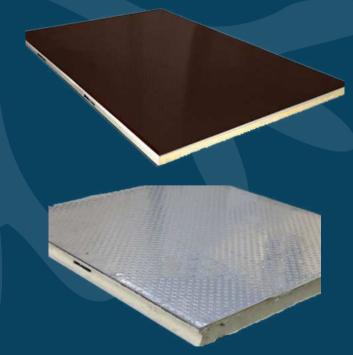
Sheet Thickness : 0,5 mm

Thermal Conductivity : ≤ 0,023 W/m.K

✓ Thermal Conductivity✓ Sound Insulation

 $\checkmark$  Density : 40 – 42 kg/m3





It is used on cold room floors. It has a distributed load carrying capacity of 2000 kg / cm2. The upper surface of the panel is created with 10 mm thick plywood. Optionally, non-slip CrNi or PVC coated sheet can be used on the plywood layer. There is a locking system on the floor panels.

: 0,5 mm

 $\checkmark$  Panel Width : 1000 mm / 1110 mm

✓ Panel Thickness : 80 – 200 mm
 ✓ Maximum Panel Length : 8 m

✓ Maximum Panel Length✓ Sheet Thickness

✓ Thermal Conductivity : ≤ 0,023 W/m.K

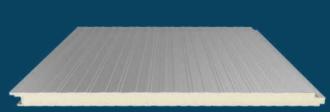
√ Sound Insulation : 21,5 dB

 $\checkmark$  Density : 40-42 kg/m3

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### **\*\* Hidden Screw Facade Panels**





Concealed screw facade panels are used to protect industrial facilities from external influences.

The most important feature of our hidden screw facade panels that we produce as Tunelgroup is that the screw joints are not visible from the outside. It provides high insulation in buildings by allowing easy horizontal and vertical installation. Thanks to its PUR insulation feature, it is watertight and protects from heat and sound, and thanks to its PIR insulation, it prevents fire and ignition, keeping safety at the highest level. It is aesthetic and economical.

✓ Panel Width : 1000 mm
 ✓ Panel Thickness : 40 – 200 mm
 ✓ Maximum Panel Length : 13,5 m
 ✓ Sheet Thickness : 0,30 mm - 0,45 mm

Thermal Conductivity : ≤ 0,023 W/m.K

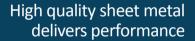
 $\checkmark$  Sound Insulation : 21,5 dB  $\checkmark$  Density : 30-36 kg/m3







#### **Fireproof**





### Waterproof

The only liquid inside you may have products



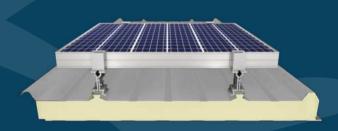
### **3 Ribbed Roof Panel**

Roof panels are used to protect industrial facilities from external effects.

Our 3-ribbed roof panels do not have the ability to absorb or absorb water, thanks to the load-bearing performance and superior performance of polyurethane insulated roof panels against moisture. It can be produced in different forms according to your wishes, allowing you to choose the most economical form. It has high resistance to heat and does not sustain the flame when ignition occurs.

 $\checkmark$  Panel Width : 1000 mm  $\checkmark$  Panel Thickness : 40 − 200 mm  $\checkmark$  Sheet Thickness : 0,30 mm - 0,45 mm  $\checkmark$  Thermal Conductivity :  $\le$  0,023 W/m.K  $\checkmark$  Sound Insulation : 21,5 dB  $\checkmark$  Density : 30 − 36 kg/m3

#### **4 Ribbed Solar Compatible Roof Panel**



**5 Ribbed Roof Panel** 

Our 4- ribbed solar energy system compatible roof panels do not have the ability to draw or absorb water, thanks to the load carrying performance and superior performance of polyurethane insulated roof panels against moisture. It can be produced in different forms according to your wishes, allowing you to choose the most economical form. It has high resistance to heat and does not sustain the flame when ignition occurs.

✓ Panel Width: 1000 mm✓ Panel Thickness: 40 - 200 mm✓ Sheet Thickness: 0,30 mm - 0,45 mm✓ Thermal Conductivity:  $\leq 0,023$  W/m.K✓ Sound Insulation: 21,5 dB✓ Density: 30 - 36 kg/m3

Our 5-ribbed roof panels do not absorb or absorb water, thanks to the load-bearing performance and superior performance of polyurethane insulated roof panels against moisture. It can be produced in different forms according to your wishes, allowing you to choose the most economical form. It has high resistance to heat and does not sustain the flame when ignition occurs.

✓ Panel Width: 1000 mm✓ Panel Thickness: 40 - 200 mm✓ Sheet Thickness: 0,30 mm - 0,45 mm✓ Thermal Conductivity:  $\leq 0,023$  W/m.K✓ Sound Insulation: 21,5 dB✓ Density: 30 - 36 kg/m3

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### **40HC Container Cold Storage**

**Maintenance Cost** 

Thermal Insulation

Provides minimal heat leakage

Sound Insulation

What's outside stays outside

What happens inside stays inside,

Economical price



Container cold storages are delivered ready for use, installed and tested. Optionally, it can be produced with generator and / or solar energy systems.

The most important feature of the container cold rooms that we offer for production as Tunelgroup is that they are cold rooms that can be used in domestic and international transportation with all the installed documents. It is aesthetic and economical. Our customers who want to utilize open spaces in their facilities can use container cold storages without any construction work.

- √ Container Dimensions
- Volume
- √ Operating Temperature
- ✓ Panel Thickness
- √ Cooling Devices
- Door
- √ Lighting System

- : 12,00\*2,40\*2,60(h)
- : 74.90m<sup>3</sup>
- : -5/+5°C & -18/-22°C & -40°C
- : Between 80mm and 180mm
- : Tecumseh & Dorin & Bitzer
- : Hinged Cold Room Door
- : Including LED Lighting

### **Fireproof**

High quality sheet metal delivers performance



#### Waterproof 6.6

The only liquid inside you may have products



#### Easy Setup \

Even amateurs can feel expert It has a setup that will make you



### **20DC Container Cold Storage**



20Dc Container cold storages are delivered ready for use, installed and tested. Optionally, it can be produced with generator and / or solar energy

The biggest advantage of 20Dc container cold rooms is that they can be used in smaller spaces thanks to their more compact structure and can be easily transported and used wherever desired. It is aesthetic and economical. Since they are compact and ready to use, they can be used without the need for additional construction work.

- √ Container Dimensions
- √ Volume
- √ Operating Temperature
- ✓ Panel Thickness
- √ Cooling Devices
- √ Door
- √ Lighting System

- : 6,00\*2,40\*2,40(h)
- : 34.55m<sup>3</sup>
- : -5/+5°C & -18/-22°C & -40°C
- : Between 80mm and 180mm
- : Tecumseh & Dorin & Bitzer
- : Hinged Cold Room Door
- : Including LED Lighting

### **10DC Container Cold Storage**



10Dc Container cold storages are delivered ready for use, installed and tested. Optionally, it can be produced with generator and / or solar energy systems.

The biggest advantage of 10Dc container cold rooms is that, thanks to their much smaller structure, they can be stacked as desired and can be easily transported and used wherever desired. It is aesthetic and economical. Since they are compact and ready to use, they can be used without the need for additional construction work.

- √ Container Dimensions
- √ Volume
- √ Operating Temperature
- ✓ Panel Thickness
- √ Cooling Devices
- √ Door
- ✓ Lighting System

- : 3,00\*2,40\*2,40(h)
- : 17,30m<sup>3</sup>
- : -5/+5°C & -18/-22°C
- : Between 80mm and 180mm
- : Tecumseh & Dorin & Bitzer
- : Hinged Cold Room Door
- : Including LED Lighting





### **Cold Room Doors**



- European standards. It does not contain any organic products.
- ✓ It does not undergo any deformation when washed with all kinds of chemical disinfectants.
- ✓ There are 3 different case options: aluminum, PVC and stainless
- ✓ Our door frames can be mounted on panels or walls of any
- ✓ Support sheets are applied inside the case for all apparatus mounted on the case.
- ✓ All thermal bridges in our aluminum and stainless cases are ✓ An optional oil threshold heater is recommended for frozen prevented thanks to the special design of the cases.
- ✓ The desired thermostat, pressure valve, instrument panel, etc. to be applied on the case. Collaborative work can be carried out with  $\sqrt{\phantom{a}}$ the project for applications such as.
- ✓ Door wings are produced as monoblock. Frame anodized ✓ aluminum profiles, sheet metal and all internal support sheets are combined and polyurethane is injected into this structure to ensure holistic strength.
- ✓ Cold room door leaf thicknesses are 70mm, 90mm and 120mm in terms of the temperature value to be protected. Frozen depending on the temperature to be protected.
- √ Door wings are filled with polyurethane foam with a density of 40-43 kg/m3.
- ✓ The inner surfaces of all sheets used in door wings are produced with a primer to ensure the adhesion of polyurethane.

- √ It is manufactured using hygienic materials in accordance with √ For all parts mounted on the wing, 2-3mm thick support sheets are used on the inner surface of the wing. Optionally, a utility window, observation window or door of desired dimensions can be applied to the wing. Transport apparatus consists of hygienic reinforced composite plastic or stainless steel materials.
  - ✓ A single row of gaskets is used on all 4 sides of the cold storage doors. In our 90 mm thick frozen storage doors, a single row of gaskets and resistance inside the gasket are used on all 4 sides, and in our 120mm and 150mm thick doors, a double seal and a single row of resistance are used.
  - storage doors. Dia thermal oil in 50×50mm profile is heated by
  - Optionally, a sliding door lock (internal safety release lever) or an automatic lock system can be added to our doors.
  - The motor system used in sliding doors that are opened and closed frequently provides complete insulation and enables the process to be carried out quickly.
  - √ Polyethylene or stainless kick plates can be added to the interior. and exterior surfaces to protect the door surfaces from impacts due to operating conditions.
  - preservation door leaf thicknesses are 90mm, 120mm and 150mm, √ In cold air conditioning applications, a single row of gaskets is placed on all four sides of the door. However, in freezer air conditioners, there is an additional heater inside the gasket.

### **\* Hinged Cold Room Door**



It works as a single wing with the principle of opening to the right or left. Hinge systems facilitate operation by providing a height of 12 mm in the open position. External locking system and internal opening handles with panic buttons are standard. The door leaf is produced as a monoblock. Frame anodized aluminum profiles, sheet metal and all internal support sheets are combined in a way that does not create a thermal bridge, and polyurethane is injected into this structure to ensure holistic strength.

It is manufactured using hygienic materials in accordance with European standards. It does not contain any organic products. It does not undergo any deformation when washed with all kinds of chemical disinfectants.

### Sliding Cold Room Door



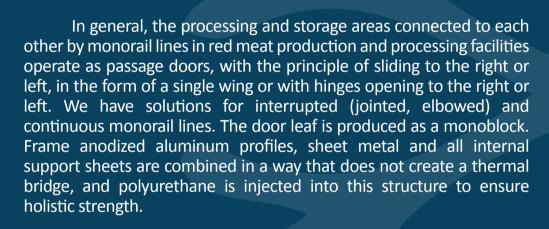
Sliding cold room doors operate as a single wing with the principle of sliding to the right or left. Door wings are produced as monoblock. Frame anodized aluminum profiles, sheet metal and all internal support sheets are combined in a way that does not create a thermal bridge, and polyurethane is injected into this structure to ensure holistic strength. It is manufactured using hygienic materials in accordance with European standards. It does not contain any organic products. It does not undergo any deformation when washed with all kinds of chemical disinfectants.

Cold room doors are used for storing red meat, fish, white meat, vegetables, fruits, etc. that need to be stored at plus room temperature. Frozen storage room doors are used to preserve food products that need to be stored at minus degrees room temperature.



### Monorail Cold Room Door













### Flip-Flap (Bar Type) Service Door



It is used as a passage between production, processing, corridors and work areas with little or no temperature difference between them. It is in the semi-insulated door class. Forklift, pallet truck etc. It is suitable for separating areas where transport and freight vehicles pass. The door leaf is produced as a monoblock. Frame anodized aluminum profiles, sheet metal and all internal support sheets are combined in a way that does not create a thermal bridge, and polyurethane is injected into this structure to ensure holistic strength.

It is manufactured using hygienic materials in accordance with European standards. It does not contain any organic products. It does not undergo any deformation when washed with all kinds of chemical disinfectants.

### Sectional Transfering Door



Sectional door systems are designed for factory, warehouse and car park entrances. It is also used at material and vehicle entry and exit points. Our sectional doors, produced from steel polyurethane filled sandwich panels, provide the highest level of security and energy saving. Sectional doors, which can also be manufactured using transparent plexiglass, are preferred in showroom and service entrances thanks to the transparency they provide.

Industrial sectional doors are the most suitable door system that prioritizes insulation for loading and unloading operations that require medium speed in your facility. It is extremely durable and long-lasting, with polyurethane filling on the inside and steel or optional aluminum coated panels on the outside. Sectional doors with increased insulation with rubber seals are very leak-proof.

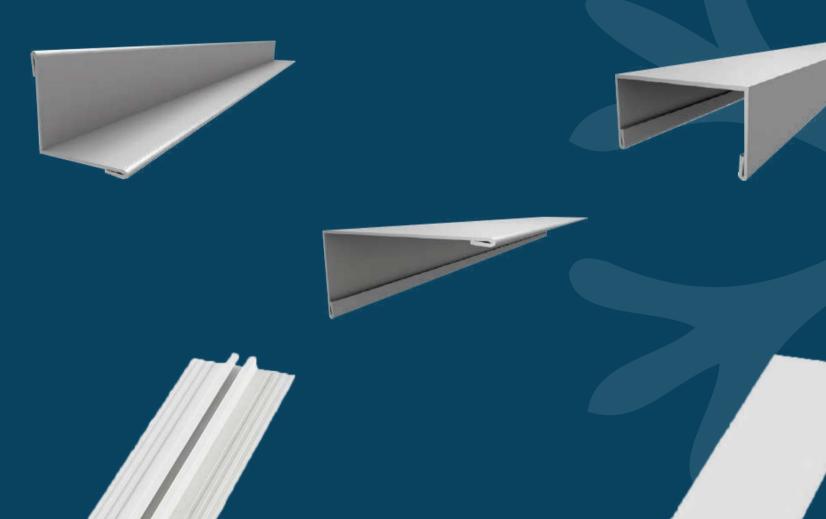
Sectional doors with standard speed (0.25 mt/sec) have a very solid body and provide maximum security.

### **Accessories and Assembly Products**

Hygienic cold room accessories are products that economically respond to customer needs with high performance in environmental conditions with a design that prioritizes quality and hygiene in cold rooms. These are the products that food businesses should use to provide a more hygienic environment in product processing and storage areas and to meet HACCP requirements. It provides a hygienic environment in the assembly of floor, wall and ceiling panels in cold rooms and in the created area.

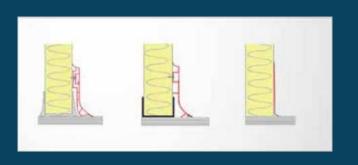
The materials used in cold room hygienic profiles can be used easily at low temperatures.

Mounting profiles are accessories of various sizes and features developed to adjust the floor seating arrangement of the panels in cold room installation, to eliminate visual pollution that may occur at edge and corner joints, to ensure hygiene and to mount ceiling panels.









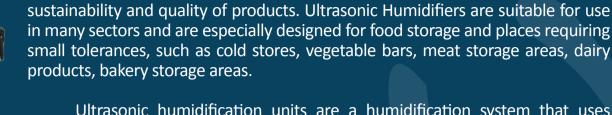




✓ info@tunelgroup.com.tr

#### **\*\* Ultrasonic Humidification Devices**





Ultrasonic humidification units are a humidification system that uses ultrasonic sound waves to transform water from liquid to cold vapor. Ultrasonic sound propagating in the liquid gives a certain energy and movement to the liquid molecules. The humidity obtained by this process is distributed throughout the room via an internal fan. With the help of the oscillator it uses, it releases water particles smaller than 10 µm (3-5 µm on average) into the air to increase the ambient humidity by creating a more balanced humidity area. It has a compact appearance with its stainless steel case and digital control screen.

Ensuring the correct humidity level increases production efficiency,



### **O**OO Advantages

- √ Compliance with standards
- √ Quality equipment
- √ Cabin resistant to external factors
- √ Easy installation-assembly
- ✓ Electronic control system
- √ Automatic water level control
- √ Complete ready-to-install unit
- ✓ Special models depending on the area of use
- √ Low sound level
- √ Ease of maintenance



#### **TECHNICAL SPECIFICATIONS**

- ✓ Digital control LED display
- $\checkmark$  Droplet size less than 10 µm (3-5 µm on average)
- √ 25%-95% humidity control
- √ Automatic water level alert
- √ Automatic water filling

- √ 8000 hours oscillator life
- √ 1 °C-50 °C operating temperature
- √ Dry contact connection
- √ MODBUS communication (TWH Premium)

### Chrome (Stainless Steel) Shelf Systems



Cold room shelves are among the indispensable fixtures in the warehouse cooling systems of our age. They provide a great advantage for the continuity of cooling systems and to prevent heat loss from the cold air in the area. These specially produced shelf models are designed by calculating each point.

It is important to distribute and maintain the coldness evenly in cold storages. These shelves are produced based on the maximum use of cold air in the warehouse and provide equal distribution everywhere. Its most important feature is that it is stainless. They have a structure that is resistant to oxidation and possible bacterial formation that may occur in humid environments.



### **O**OO Advantages

- √ Compliance with standards
- √ High efficiency
- ✓ Durable material suitable for outdoor environments
- √ Reliable quality equipment
- √ Low initial investment cost
- ✓ Easy assembly and installation
- √ Easy maintenance
- ✓ Product variety
- √ Special model design opportunity



#### **TECHNICAL SPECIFICATIONS**

- ✓ It has a hygienic structure.
- √ It does not harbor bacteria.
- ✓ It is easy to clean.
- ✓ Disassembly and assembly are simple.

- √ It is long lasting.
- ✓ It can be produced in different sizes.
- ✓ Provides healthy storage.
- ✓ It does not cause heat loss due to its structure.





### **Some of Our References**;







































# WE DESIGN AND PRODUCE COLD ROOMS FOR YOU





Office: Gültepe St. Maqam Offices B Block Floor: 9 No: 904 Centrum/Sivas Factory: Dudullu O.S.B Nato Way St. No: 39 Dudullu/Ümraniye/İstanbul

www.tunelgroup.com.tr

**\** +90 850 557 45 74 / +90 850 557 45 75



#### CERTIFICATE

The Certification Body of TÜV SÜD Industrie Service GmbH, a Notified Body of the Pressure Equipment Directive (PED),

certifies that

IBS ISITMA SOĞUTMA HAVALANDIRMA
TAAH. SAN. VE TIC. A.Ş.
Dudullu Organize Sanayi Bölgesi 2. Cad. No: 39
Yukarı Dudullu
Ümraniye / Istanbul / TÜRKİYE

implemented, operates and maintains a quality assurance system as described in the Pressure Equipment Directive 2014/68/EU Annex III, Module D

for the scope of

Manufacturing and assembly of cooling units, Central System, Split Type Unit and Chiller Unit with PS 30 bar and 33 bar pneumatic test

acc. to EU-type examinations - production type (specified in attachment)

The audit with the report number Q-TR-PED-5010389662-01-19 proves that the quality assurance system fulfils the PED requirements.

The manufacturer is authorized to provide the pressure equipment produced within the scope of the assessed quality assurance system with the following Notified Body number:

**C € 0036** 

Certificate No.: DGR-0036-QS-1234-19

valid until November 29<sup>th</sup>, 2022 provided that annual surveillance audits have been performed successfully

Filderstadt, December 17th, 2019

TÜV SÜD Industrie Service GmbH Westendstraße 199 80686 München Germany Martina John

Notified Body No.: 0036 +49 711 70 05 289

Tel.: +49 711 70 05 289 Fax: +49 711 70 05 582 e-mail: martina.john@tuev-sued.de



#### SERTİFİKA CERTIFICATE OF REGISTRATION

Bu sertifika aşağıdaki kuruluşa This certificate has been awarded to the company

## IBS ISITMA SOĞUTMA HAVALANDIRMA TAAHHÜT SANAYİ VE TİCARET ANONİM ŞİRKETİ

Dudullu Organize Sanayi Bölgesi 2. Cadde No:39 Y.Dudullu, Ümraniye, İSTANBUL

Uygulanmakta olan Kalite yönetim sisteminin
To certify that the implemented Quality management system complies with

ISO 9001:2015

Standardına uygunluğunu belgelendirmek amacı ile aşağıdaki kapsamda verilmiştir. For the activities described below

ISITMA, SOĞUTMA, HAVALANDIRMA SİSTEMLERİNİN TASARIM, ÜRETİM, SATIŞ, TAAHHÜT, SERVİS VE BAKIMI

DESIGN, MANUFACTURING, TRADING, CONTRACTING, SERVICE AND MAINTENANCE OF HEATING, COOLING AND VENTILATION SYSTEMS

Sertifika No. / Certificate No.: 1840214

İlk Belgelendirme Tarihi / Initial Certification Date: 22.03.2018 Sertifika Tarihi / Date of Certificate: 21.06.2022

Bitis Tarihi / Expiry Date: 21.03.2023

Belgelendirme Periyodu / Certification Period: 3 Yıl / Years



TÜRKAK BDS NO YS-2236-612F



İstanbul, 21.06.2022 (Rev.04)

İşbu sertifika, Naviga'nın prosedür, talimatlarına ve yukarıdaki standardın gerekliliklerine ve düzenli olarak yapılacak gözetim denetimlerinin başarı ile tamamlarımasına bağlı olarak, yukarıdaki adres ve kapsam dahilinde geçerlidir.

This certificate is valid for above address(es) and scope upon compliance with Naviga procedure(s), instruction(s) and the above mentioned standard and successfull completion of regular surveillance audits.

Bu sertifikanın geçerliliği, TÜRKAK veritabanına bağlantı sağlayan QR kodu ile veya QR kodu altındaki TBDS sertifika numarası ile <a href="https://tbds.turkak.org.tr">https://tbds.turkak.org.tr</a> adresinden doğrulanabilir.

The validity of this certificate can be checked through QR code by TURKAK database or TBDS certificate no. under QR code on https://tbds.turkak.org.tr.webpage.



NAVIGA ULUSLARARASI BELGELENDİRME VE EĞİTİM HİZMETLERİ LTD. ŞTİ. Yenibosna Merkez Mah. 29 Ekim Cad. No:35 Kat:1 Bahçelievler-İSTANBUL Tel: 0212 482 9656 Fax: 0212 482 9424 www.navigaltd.com - info@navigaltd.com Ann tan ofmadan cogatulamaz | The reproduction of this document is subject to the approval by NAVIGA



#### T.C. TÜRK PATENT ENSTİTÜSÜ

### MARKA TESCİL BELGESİ

Marka No : 2013 03826 - Ticaret - Hizmet



Marka Sahibi : IBS ISITMA SOĞUTMA HAVALANDIRMA

TAAHHÜT SANAYI VE TİCARET ANONİM

SİRKETİ

TÜRKİYE CUMHURİYETİ

**DUDULLU ORGANIZE SAN. BÖLG. 2.CAD. NO:39** 

Y.DUDULLU ÜMRANİYE İSTANBUL

Emtiası

: 11,37,42 İlişiktedir.

Markaların Korunması Hakkında 556 Sayılı Kanun Hükmünde Kararnameye göre 15/01/2013 tarihinden itibaren ON YIL müddetle 31/10/2014 tarihinde tescil edilmiştir.

Prof. Dr. Habip ASAN Enstitü Başkanı





# Certificate

#### ATTESTATION OF CONFORMITY

Manufacture Name / İmalatçı Adı: TIRASCIOĞLU ISITMA SOĞUTMA HAVALANDIRMA İNŞAAT ELEKTRİK ELEKTRONIK MEKANIK TESISAT SISTEMLERI MIMARLIK MÜHENDISLİK SANAYI VE TİCARET LİMİTED ŞİRKETİ

#### Address / Adres: KAYAPA MAHALLESI 10. SOKAK NO:6 NİLÜFER / BURSA / TÜRKİYE

The product groups defined below have been fulfilled and the responsibility of the applicable requirements of Low Voltage Directive 2014/35/EU and Machinery Safety Directive 2006/42/EC has been accepted by TIRAŞCIOĞLU ISITMA SOĞUTMA HAVALANDIRMA İNŞAAT ELEKTRİK ELEKTRONİK MEKANİK TESİSAT SİSTEMLERİ MİMARLIK MÜHENDİSLİK SANAYI VE TICARET LIMITED SIRKETI. The product groups defined below are subject to internal production controls. depending on Tiraşcioğlu İsitma soğutma havalandırma İnşaat elektrik elektronik mekanik tesisat sistemleri MIMARLIK MÜHENDİSLİK SANAYİ VE TİCARET LİMİTED ŞİRKETİ. İt has been checked by. In this context, it belongs to the company where the responsibility is fulfilled.

Asağıda tanımlanmış olan ürün grupları Alçak Gerilim Yönetmeliği 2014/35/AB ve Makina Emniyeti Yönetmeliği 2006/42/AT'nin uygulanabilen gerekliliklerinin yerine getirildiği ve sorumluluğunun alınmış olunduğu TIRAŞCIOĞLU ISITMA SOĞUTMA HAVALANDIRMA İNŞAAT ELEKTRİK ELEKTRONİK MEKANİK TESİSAT SİSTEMLERİ MİMARLIK MÜHENDİSLİK SANAYİ VE TİCARET LİMİTED ŞİRKETİ tarafından kabul edilmiştir. Aşağıda tanımlanan ürün grüpları, iç üretim kontrollerine bağlı olarak TIRASCIOĞLU ISITMA SOĞUTMA HAVALANDIRMA İNSAAT ELEKTRİK ELEKTRONİK MEKANİK TESISAT SISTEMLERI MIMARLIK MÜHENDISLIK SANAYI VE TICARET LIMITED SIRKETI tarafından kontrol edilmiştir. Bu kapsamda sorumluluğun yerine getirildiği firmaya aittir.

#### Description of Product / Ürün Tanımı:

COOLING UNIT / SOĞUTMA ÜNİTESİ

#### Product Model / Ürün Modeli:

CONDENSING UNITS (SPLIT TYPE, INDUSTRIAL TYPE), CENTRAL SYSTEM COOLING UNIT (STANDARD) ECONOMIC, SCREW, MINIPACK, MIDIPACK, MAXIPACK), CHILLER UNITS (MINICHILL, MIDICHILL, ULTRACHILL)

#### Trade Mark / Ticari Marka:

#### Related Directives / İlgili Yönetmelikler:

MACHINERY SAFETY DIRECTIVE 2006/42/EC --- MAKINA EMNIYETI YÖNETMELİĞİ 2006/42/AT LOW VOLTAGE DIRECTIVE 2014/35/EU ---- 2014/35/AB ALÇAK GERİLİM YÖNETMELİĞİ

Regulations Applied acc. To Harmonized Standards / Uygulanan Uyumlaştırılmış Standartlar: EN ISO 12100, EN 60204-1

Certificate Number : CE/24201 Certificate Issue Date: 09.07.2021

Certificate Validity : 08.07.2024





# SINGLE-DOUBLE DOOR BOTTLE COOLERS







#### **USS 374 DTK**

Temperature Range °C	+1/+10
Climate Class	4
Gross/Net Volume (It)	372/345
Gross/Net Weight (kg)	81/74
Dimensions (WxDxH) (mm)	
Internal	505x462x1555
Extarnal	595x640x1840
With Packing	665x685x2010
Loadability (pc)	
20ft DC	24
40ft DC	54
80 m³ Truck	60
Shelves/Baskets (pcs)	5
Capacity	
Can (330 ml)	399
Pet Bottle (500 ml)	259
Input Power (W)	350/250
Energy Cons. (kWh/24h)	4,8/2,2
Type of cooling	Mechanical
Power supply (V/Hz)	230/50
Refrigerant	R134a/R600a
Noise Level (dB(A))	46,8

#### **USS 374 DTK BK**

Temperature Range °C	+1/+10
Climate Class	4
Gross/Net Volume (It)	372/345
Gross/Net Weight (kg)	70/64
Dimensions (WxDxH) (mm)	
Internal	505x462x1555
Extarnal	595x640x1840
With Packing	665x685x2010
Loadability (pc)	
20ft DC	24
40ft DC	54
80 m³ Truck	60
Shelves/Baskets (pcs)	5
Capacity	
Can (330 ml)	399
Pet Bottle (500 ml)	259
Input Power (W)	350/225
Energy Cons. (kWh/24h)	4,3/1,94
Type of cooling	Mechanical
Power supply (V/Hz)	230/50
Refrigerant	R134a/R600a
Noise Level (dB(A))	46,8

#### USS 380 DTKL

Temperature Range °C	+1/+10
Climate Class	4
Gross/Net Volume (It)	388/372
Gross/Net Weight (kg)	100/92
Dimensions (WxDxH) (mm)	
Internal	505X462X1555
Extarnal	595X640X1980
With Packing	666X685X2150
Loadability (pc)	
20ft DC	24
40ft DC	51
80 m³ Truck	60
Shelves/Baskets (pcs)	5
Capacity	
Can (330 ml)	378
Pet Bottle (500 ml)	186
Input Power (W)	450
Energy Cons. (kWh/24h)	3,648
Type of cooling	Electronic
Power supply (V/Hz)	230/50
Refrigerant	R290
Noise Level (dB(A))	48





#### **EU DECLARATION OF CONFORMITY**

#### We: UGUR Sogutma Makinaları Sanayi ve Ticaret A.S.

Yeni Sanayi Mahallesi Devlet Karayolu Caddesi no:127/C - 09900 Nazilli - Aydin - TURKEY Declare under our own responsibility that the product:

#### **USS 374 DTK BK**

To which the declaration refers is in compliance with the following:

MACHINERY SAFETY-DIRECTIVES 2006/42/CE (Machine) and IC 087, 2014/35/UE (Low Voltage)		
EN 60335-1:2012/A1:2019	Safety of household and similar electrical appliances – Part 1 – General requirements	
EN 60335-2-89:2010+A1:2016+A2:2017	Safety of household and similar electrical appliances – Part 2-89 – Specific requirements for Commercial refrigerator and freezers	
EN 62233:2008	Measurements method for Electromagnetic Field (EMF) of Household Appliances and similar apparatus with regard to Human exposure	
EN 62471:2009	Photo biological safety of lamps and lamp system	

ELECTROMAGNETIC COMPABILITY (EMC)-DIRECTIVE 2014/30/UE (harmonisation of the laws relating to EMC)		
EN 55014-1:2017	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus. Part 1: Emission	
EN 55014-2:2015	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus. Part 2: Immunity	
EN IEC 61000-3-2:2019	Electromagnetic Compatibility (EMC) - Part 3-2: Limits for harmonic current emissions (equipment input current ≤ 16A per phase	
EN 61000-3-3:2013	Electromagnetic Compatibility (EMC) - Part 3: Limits. Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current ≤ 16A	

#### PRESSURE EQUIPMENT DIRECTIVE (PED) 2014/68/UE

As the equipment falls into a class lower than I, this directive does not apply to the product (art.1 par.3.6)

	ECODESIGN- ErP DIRECTIVE 2009/125/CE
Reg. (EU) 2017/1369	Energy Consumption Labelling Indications by Energy-related products
Reg. (EU) 2019/2018	Supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances with a direct sales function
Reg. (EU) 2019/2024	Laying down ecodesign requirements for refrigerating appliances with a direct sales function pursuant to Directive 2009/125/EC of the European Parliament and of the Council

FOODSTAFF COMPATIBILITY				
Regulation (CE) Nr. 10/2011	Plastics intended to come into contact with food			
Regulation (CE) Nr. 1935/2004	Materials and articles intended to come into contact with food			
Regulation (CE) Nr. 2023/2006 (amending reg. 1935/2004)	Good manufacturing practise for materials and articles intended to come into contact with food			
Regulation (CE) Nr. 282/2008 (amending reg. 2023/2006)	Recycled plastic Materials and articles intended to come into contact with food			

	ROHS AND WEEE
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
Directive 2011/65	EC of the European Parliament and of the Council of 8th June 2011
Directive 2002/96	EC of the European Parliament and of the Council of 27th January 2003

REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)	
Regulation (CE) Nr. 1907/2006	Registration, Evaluation, Authorisation and restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending dir. 1999/45 and replacing the following: Reg. CEE nr. 793/93 - Reg. CEE nr. 1488/94 - dir. 76/769/CEE - dir. 91/155/CEE - dir. 93/67/CEE - dir. 93/105/CE - dir. 2000/21/CE.

SUBSTANCES THAT DEPLETE THE OZONE LAYER	
Regulation (CE) Nr. 1005/2009	Rules on the production, import, export, placing on the market, use recovery, recycling, reclamation and destruction of substances that deplete the ozone layer and of equipment containing those substances.

The person authorized to draw up the Technical Possumental Date: 2023.11.13 11:38:46 EET

Reason: MoldSign Signature

Location: Moldova

( a sim

Bora DEVRİM (R&D DIRECTOR)

Nazilli: 20.01.2023