GMARK

Evaporative Cooling

Sustainable Environmental Revalution

In addtition to reducing the temperature, we also stand out with the mission of protecting the environment

We adopt an environmentally friendly production approach by using recyclable materials in our products. Thanks to smart control systems, we keep energy efficiency at maximum and save money with temperature control.
In this way, we take responsibility for a clean environment by reducing our carbon footprint.

We are next to you for sustainable coolness!

About Us

The increasing need for energy along with the increasing population, the decrease in energy resources, the widespread use of vehicles and equipment, necessitates the countries of the world to make innovations in their energy policies. Effective use of existing energy resources, development of environmentally friendly energy supply systems and efficient consumption of produced energy are the greatest gifts we will leave to new generations.

Both the development and dissemination of nature-friendly technologies in energy production and the efficient use of the produced energy by end consumers are the most important steps to reduce the greenhouse gas effect, which currently corresponds to 80% of the world›s carbon emissions.

With this awareness, on this path we set out to leave a better world to future generations, as Gmark, we produce healthy cooling systems that are widely used today, working with the evaporative working principle and low energy consumption. By producing products that are frequently mentioned in the field of refrigeration, we carry out innovation - discovery - application - after-sales services.

Offering unique unparalleled innovation and air cooling expertise, Gmark was established in Turkey.

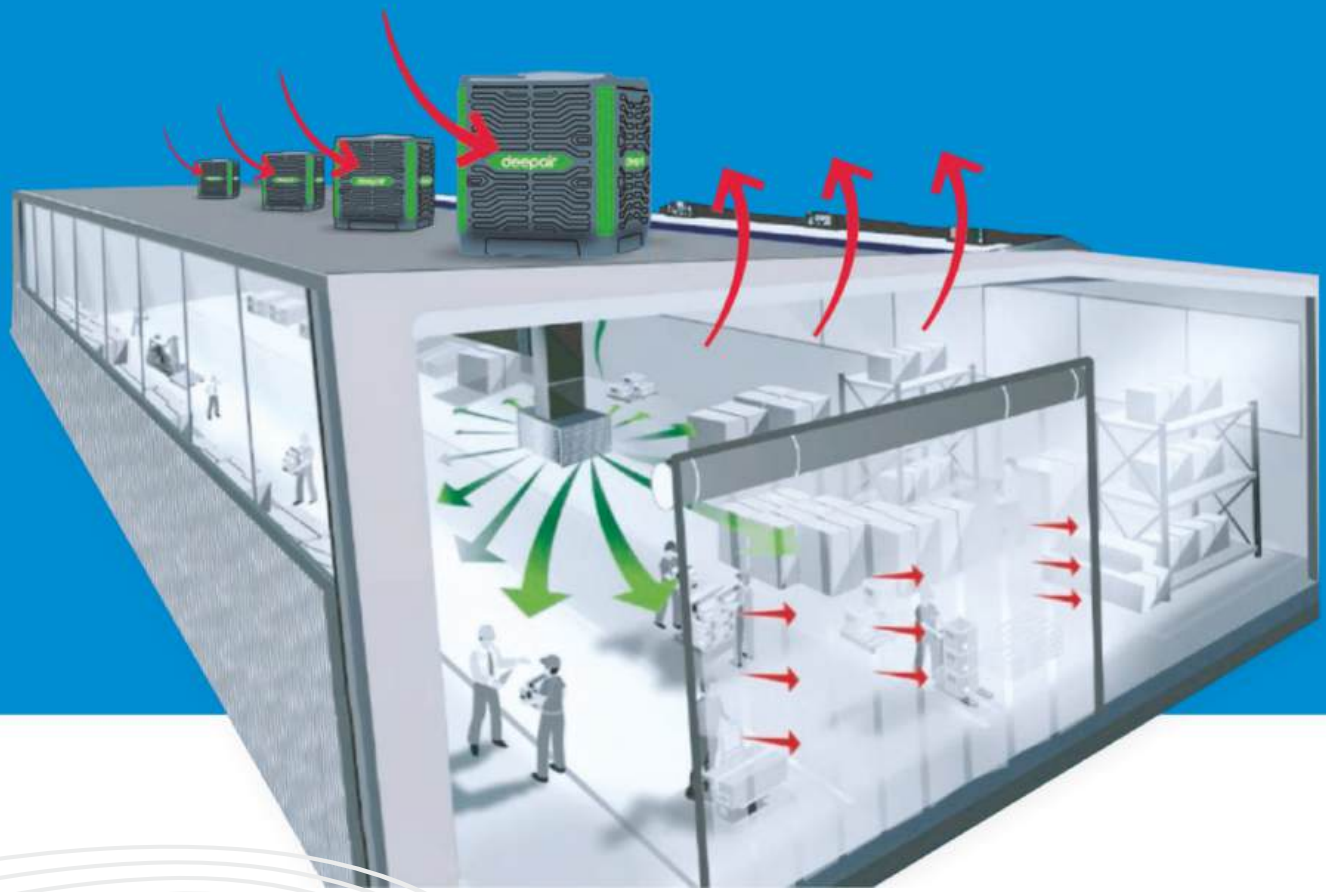
We offer useful services and solutions to our customers, from innovation to energy efficiency, from innovation to environmental management. The benefits that our products in the residential, industrial, agricultural and commercial segments provide to our customers have integrated us with the word cooling.

Our Vision;

To offer our customers innovative, first-class quality and energy efficient cooling and heating systems.

We are next to you for sustainable coolness!

EVAPORATIVE COOLING SYSTEMS



What is Evaporative Cooling System?

Evaporative cooling is based on the principle of retrieving heat from the air by evaporating water. As water evaporates, it absorbs heat from the air and causes the air to cool.

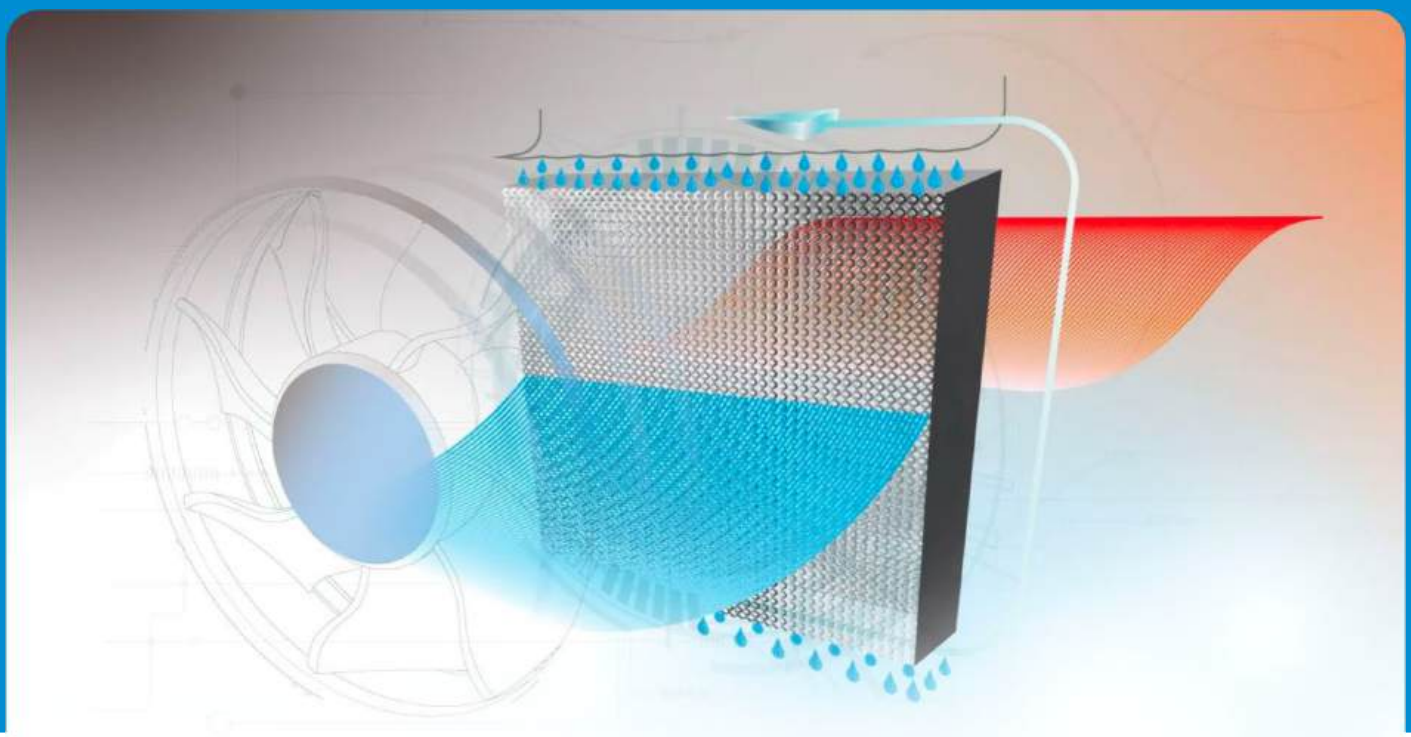
Evaporative Cooling System is the most preferred system to always breathe 100% fresh and clean air, to feel cooler than the ambient temperature, and to be protected from the negative effects of air conditioning.

Evaporative Cooling Systems

- Provides 100% fresh and cool air to the environment.
- Consumes low energy.
- Provides up to 80% savings compared to traditional cooling methods.
- With regional and spot area cooling, it is possible to cool only the desired area and point, especially in very large factory areas.

Production | Yarn | Greenhouse | Weaving | Twisting Workshop | Textile

WORKING PRINCIPLE



Working Principle

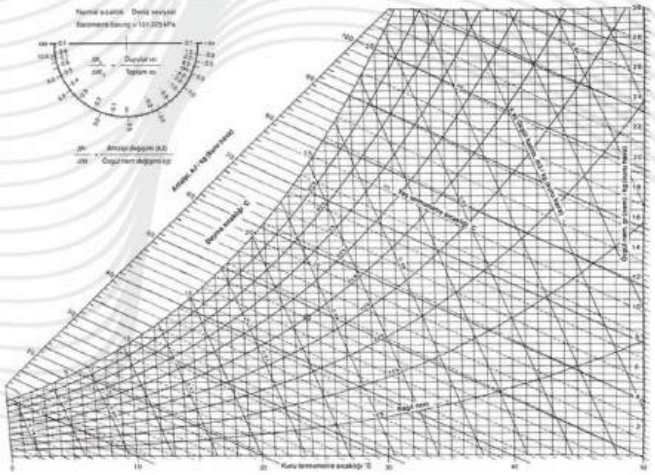
Thanks to the large surface pads inside the evaporative cooler, the water in the pool of the cooling unit is distributed over the pads with the help of a pump and ensures that the pads are constantly wet. The hot air sucked into the device by the fan is passed over the cooling pads and cooled by flowing water, and thanks to this process, **fresh and cool air** is supplied.

Since fresh and cold air will be constantly pumped into the environment, a positive air pressure is created in the environment and as a result, it removes the hot and bad air present inside from open areas. The Evaporative Cooling system provides cooling depending on the temperature and relative humidity it receives from the external environment.

How effectively the system can cool the environment is determined by means of a psychometric diagram.

What is a Psychometric Diagram?

The psychometric diagram, which is widely used in engineering sector, is a diagram that graphically represents the physical properties of moist air. With this diagram, you can find the properties of the air and calculate how much the air present inside can be cooled depending on the outdoor conditions in the area to be cooled.



Automotive | Compressor | Shoe | Wedding Hall | Apparel | Printing Press

COOLIZER MAXI

ALWAYS FRESH AND COOL AIR, WITH COOLIZER!

LESS CONSUMPTION FOR LARGE AREAS!

Technical Specifications

Air Capacity	30.000 m 3/h	Fan Type	Axial	Cabin Dimensions	1200x1200x1320 mm
Motor Power	2,2 kW	Fan Diameter	Ø615 mm	Weight	80 kg
Fan Pressure	285 Pa	Fan rpm	1410 rpm	Usage Weight	120 kg
Motor Current	7,8 A	Tank Capacity	40 L	Channel Dimensions	Ø660 mm
Voltage	380 V	Pad Dimensions	1000x880x100 mm	Fan Speed	12 Stages
Drainage	Automatic	Pad Area	3,52 m2	Water Consumption	60 - 100 Liters/h

Unfortunately, our customers work in hot and sultry weather conditions in their businesses. But now, thanks to Gmark Industrial coolers, the room temperature is brought to comfort conditions, thus increasing working efficiency and providing a happy working environment!

Benefits

- Provides ambient cooling with 100% fresh air. Does not dry the ambient air.
- Carbon emission is “0” and it does not emit harmful gases.
- Maintenance cost is low.
- It consumes 80% less energy compared to traditional air conditioning systems.
- The installation cost is 80% cheaper than traditional air conditioning systems.
- It creates a natural air circulation as it constantly provides fresh air to the interior environment.
- Installation is simple. It can be easily moved when desired.
- Variety of installations suitable for the environment.

COOLIZER

ALWAYS FRESH AND COOL AIR, WITH COOLIZER!

LESS CONSUMPTION FOR LARGE AREAS!

Technical Specifications

Air Capacity	25.000 m3/h	Fan Type	Axial	Cabin Dimensions	1200x1200x1320 mm
Motor Power	1,5 kW	Fan Diameter	Ø615 mm	Weight	70 kg
Fan Pressure	230 Pa	Fan rpm	1390 rpm	Usage Weight	110 kg
Motor Current	6,81 A	Tank Capacity	40 L	Channel Dimensions	Ø660 mm
Voltage	220 V	Pad Dimensions	1000x880x100 mm	Fan Speed	12 Stages
Drainage	Automatic	Pad Area	3,52 m2	Water Consumption	50 - 80 Liters/h

It is the most economical and comfortable option for your cooling needs for medium or large size commercial businesses, industrial facilities or large areas! The key to effective evaporative cooling is to ensure saturation of all cooling pads during operation and to size and design the system's fan and motor to provide appropriate airflow for the space.

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- Variety of installations suitable for the environment

Nature Friendly

It does not emit harmful gases to the environment and does not dry the air while cooling, thus providing high indoor air quality.

Fresh Air and Comfort

İçerideki hava sürekli devir daim ettiği için, doğal soğutma sağlar.

Low Operating Cost

It consumes 80% less energy than conventional gas air-conditioners.

COOLIZER PLUS

QUALITY IN EVERY BREATH, SAVINGS IN EVERY SECOND!

PREFERENCE FOR COOLNESS OF WORK ENVIRONMENTS

Technical Specifications

Air Capacity	40.000 m 3/h	Fan Type	Axial	Cabin Dimensions	1200x1200x1320 mm
Motor Power	4 kW	Fan Diameter	Ø685 mm	Weight	80 kg
Fan Pressure	360 Pa	Fan rpm	1560 rpm	Usage Weight	120 kg
Motor Current	10,5 A	Tank Capacity	40 L	Channel Dimensions	Ø720 mm
Voltage	380 V	Pad Dimensions	1000x880x100 mm	Fan Speed	12 Stages
Drainage	Automatic	Pad Area	3,52 m2	Water Consumption	80 - 120 Liters/h

Environmental requirements are different for all our customers and their demands vary accordingly. Gmark cares about what its customers want and implements its projects in line with the incoming demands.

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Fresh Air and Comfort

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Low Operating Cost

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ECOMASTER

HEALTHY INTERIORS, EFFECTIVE COOLING!

Technical Specifications

Air Capacity	20.000 m3/h	Fan Type	Axial	Cabin Dimensions	1200x1200x1177 mm
Motor Power	1,5 kW	Fan Diameter	Ø630 mm	Weight	70 kg
Fan Pressure	230 Pa	Fan rpm	1390 rpm	Usage Weight	110 kg
Motor Current	6,81 A	Tank Capacity	40 L	Channel Dimensions	670x670 mm
Voltage	220 V	Pad Dimensions	780x840x100 mm	Fan Speed	12 Stages
Drainage	Automatic	Pad Area	2,65 m2	Water Consumption	40 - 70 Liters/h

It filters bacteria, dust, pollen and smoke incoming from the outside environment, making the indoor air cleaner and healthier, while also providing cooled and 100% fresh air to the environment. Evaporative coolers draw fresh air from outside and deliver it to the indoor environment. This provides a significant advantage in creating a healthy living space compared to refrigerated air conditioners that constantly circulate the same stale air.

Moreover, direct evaporative cooling units humidify the air, preventing the nose and throat from drying out and relieving asthma symptoms. And this helps you breathe easier.

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Fresh Air and Comfort

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Low Operating Cost

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GMARK

ECOMASTER PLUS

INDUSTRIAL COOLNESS, EFFICIENT WORKING ENVIRONMENT!

Technical Specifications

Air Capacity	30.000 / 40.000 m 3/h	Fan Type	Axial	Cabin Dimensions	1350x1350x1250 mm
Motor Power	3 kW / 4 kW	Fan Diameter	Ø690 mm	Weight	80 kg
Fan Pressure	285 / 360 Pa	Fan rpm	1410 / 1560 rpm	Usage Weight	120 kg
Motor Current	7,8 A / 10,5 A	Tank Capacity	40 L	Channel Dimensions	790x790 mm
Voltage	380 V	Pad Dimensions	950x880x100 mm	Fan Speed	12 Stages
Drainage	Automatic	Pad Area	3,4 m2	Water Consumption	60 - 120 Liters/h

Unfortunately, most industries with high heat loads, such as printing, ceramics, glass, rubber or electronics, do not have an installed cooling system. And, therefore, this has a negative impact on employee morale, working performance and productivity, and also affects their health and well-being.

In many industrial areas, certain work areas, especially those affected by the high heat emitted by machines and ovens, can reach uncomfortable temperatures. However, it is obvious that, there is no need to cool the entire area. Evaporative cooling units provide a comfortable working environment by covering these hot spots with a stream of fresh and cooled air.

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EVAPORATIVE PRE-COOLING

Why Evaporative Pre-Cooling

Today, air-cooled condensers are used in the majority of air conditioners, dry coolers and chiller units used in comfort and industrial facilities.

Ambient air is used in order to cool the condenser. The performance of air-cooled air conditioners, dry coolers and chillers is dependent on the dry-bulb temperature of the ambient air. So, when the outdoor temperature rises, the capacity of air-cooled air conditioners, dry coolers and chillers decreases.

A significant loss occurs in heat transfer from the refrigerant to the outside air. This causes high electrical energy consumption and reduced cooling capacity. As a result, air conditioning, dry cooler and chiller units consume more electricity and operate longer to meet the cooling requirements of the space.

This problem can be solved by using additional pre-cooling in front of the air-cooled condenser. This technology is known as evaporative pre-cooler. The evaporative pre-cooler reduces the load on the air conditioner, dry cooler and chiller units by cooling the air surrounding the condensers of the air conditioner, dry cooler and chiller units.

Evaporative pre-coolers allow air conditioner, dry cooler and chiller unit condensers to operate more efficiently at high temperatures, thus providing an increase in cooling capacity, a decrease in electricity consumption as well as an increase in compressor life.

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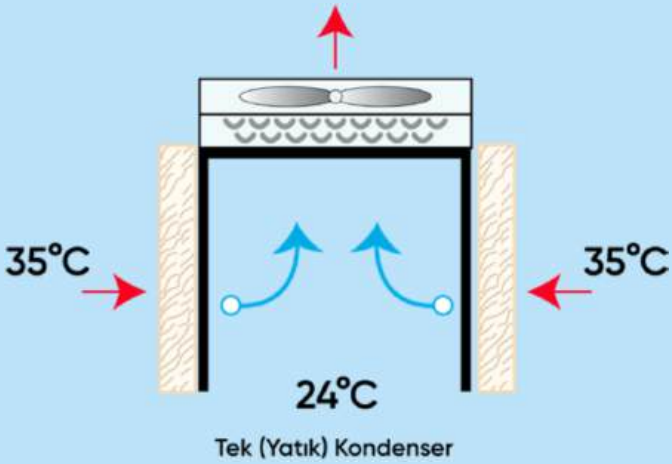
İçerideki hava sürekli devir daim ettiği için, doğal soğutma sağlar.

Low Operating Cost

It consumes 80% less energy than conventional gas air-conditioners.

Increase in Cooling Capacity

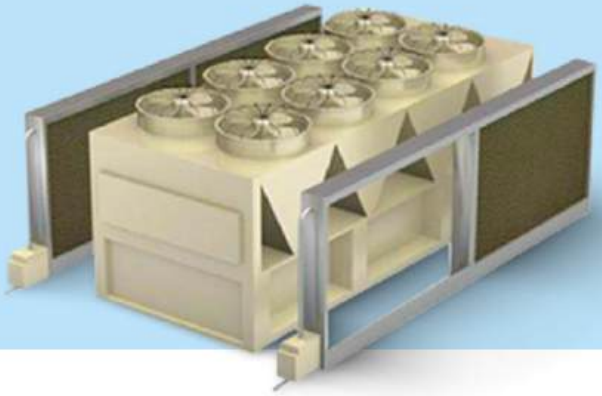
- Every 1°C decrease in the air temperature entering the condenser provides a 1% increase in cooling capacity. And, a 10°C difference provides a 10% capacity increase.
- Increase in cooling capacity.
- Reduction in electricity consumption.
- Increase in compressor life.

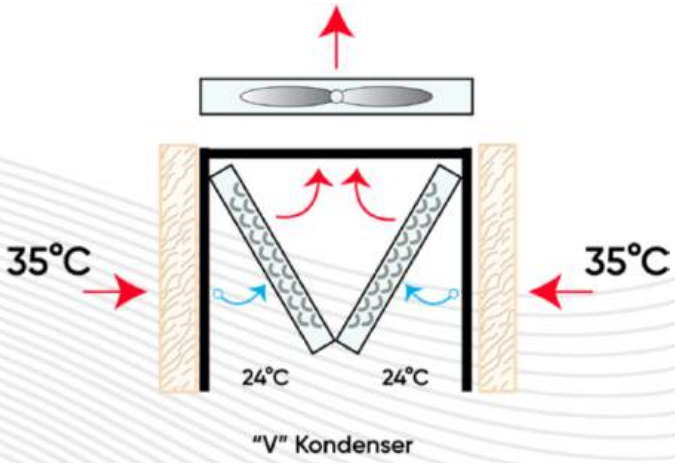


Tek (Yatık) Kondenser

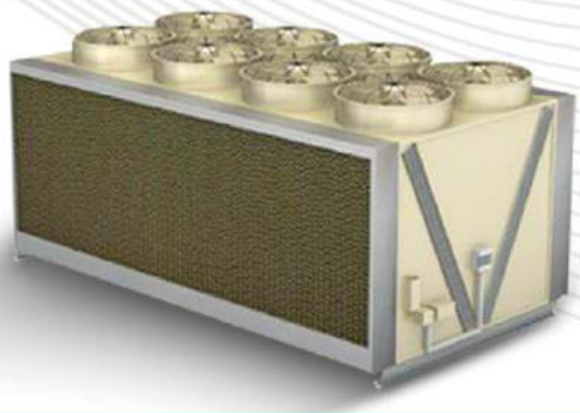
Increase in Compressor Life

- The compressor to operate at lower pressure, extends compressor life.





"V" Kondenser



Decrease in Energy Consumption

- Every 1°C decrease in the air temperature entering the condenser provides a 2% reduction in energy consumption.
- *A 10°C difference provides a 20% energy savings.
- *Reduction in electricity consumption.
- *Increase in compressor life.

Total Earnings

- *10°C temperature difference
- *10% increase in capacity
- *19% savings in energy consumption
- *25% increase in COP is provided.

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Fresh Air and Comfort

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Low Operating Cost

It consumes 80% less energy than conventional gas air-conditioners.

GMARK

COOLUXE Mini

THE QUIETEST, COOLEST IN ITS CLASS!

The working principle of Cooluxe Mini is based on the evaporative cooling system. With its simple design and stylish appearance, it is the most suitable solution for cooling offices and homes. It provides easy use thanks to its touch screen. Thanks to the timer feature, it is turned off at any time you want. Cooluxe Mini, which has easy access to the water filling tank, can be easily moved to the desired area thanks to its wheels.

Technical Specifications			
Motor Power	110 W	Weight	11,5 kg
Voltage	220 V	Cooling Area	30 m^2
Air Flow rate	2500 m^3/h	Waterr Tank Capacity	42 L
Fan Speed	4 Stages	Noise	56 Decibel
Current (Amp)	0,5 A	Product Dimensions	430x340x970 mm
		Water Consumption	5 - 8 Liters/h

Areas Of Use

- Houses
- Offices
- Office Style Spaces

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GMARK

COOLUXE

NATURAL SOURCE OF COOLNESS!

Cooluxe's working principle is based on the evaporative cooling system, it is the best solution for the environment you want to cool. Thanks to its technology, it provides cooling by reducing the relative humidity of the air, and the powerful fan inside immediately spreads the cold air around at a wide angle. It provides easy use thanks to its touch screen. The water filling tank is also easy to access. Thanks to the timer feature, it is turned off at any time you want.

Technical Specifications

Motor Power	180 W	Weight	21 kg
Voltage	220 V	Cooling Area	50 m^2
Air Flow rate	5000 m^3/h	Waterr Tank Capacity	40 L
Fan Speed	3 Stages	Noise	56 Decibel
Current (Amp)	0,9 A	Product Dimensions	610x415x1280 mm
		Water Consumption	10 - 15 Liters/h

Areas Of Use

- Houses
- Cafes
- Beach Areas
- Hotels
- Workshops
- Mosques
- Large Rooms
- Production Lines
- Public institutions
- Waiting Rooms

Nature Friendly

It does not emit harmful gases to the environment and does not dry the air while cooling, thus providing high indoor air quality.

Fresh Air and Comfort

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Low Operating Cost

It consumes 80% less energy than conventional gas air-conditioners.

GMARK

COOLEVO

THE PEAK OF PORTABLE COOLNESS!

Coolevo's working principle is based on the evaporative cooling system. Using the principle of natural evaporation, unlike conventional air conditioners, it does not release harmful chlorofluorocarbon emissions or other greenhouse gases into the air. It provides healthy and cold air while being suitable for use in open areas. The fresh air coming out of the cooler is extremely beneficial for the general health of the respiratory systems of humans and other living creatures. Thanks to the timer feature, it is turned off at any time you want.

Technical Specifications

Motor Power	350 W	Weight	37 kg
Voltage	220 V	Cooling Area	80 m^2
Air Flow rate	7000 m^3/h	Waterr Tank Capacity	100 L
Fan Speed	3 Stages	Noise	60 Decibel
Current (Amp)	1,59 A	Product Dimensions	790x520x1350 mm
		Water Consumption	15 - 20 Liters/h

Areas Of Use

- Cafes
- Houses
- Pool Sides
- Wedding Halls
- Boats
- Masjids
- Repair Shops
- Malls & Stores
- Waiting Rooms
- Gyms, Sport Halls

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Low Operating Cost

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GMARK

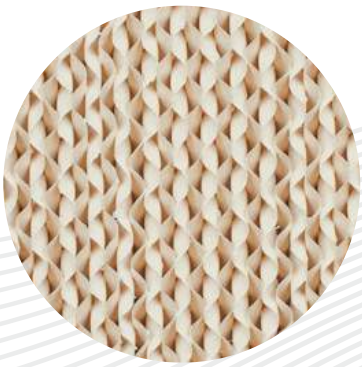
COOLING PAD

IDEAL COOLNESS IS WITH YOU WITH WATER ABSORPTION AT MAXIMUM PERFORMANCE!

PRODUCTION IN DESIRED SIZES!

General Decription

Our Evaporative Cooling Pads are made of virgin corrugated kraft paper, offering high absorption, water resistance, corrosion resistance, and mold prevention. Utilizing spatial cross-linking technology, the pads have a large evaporation area, delivering 80% cooling efficiency. The product naturally absorbs and disperses water quickly, with a single drop spreading in 4-5 seconds. It also provides a long-lasting cooling effect. The absorption height meets international standards



Pad Type 5090

Areas Of Use

- Greenhouses
- Animal Farms
- Chiller Pre-Cooling in Air Handling Units

Pad Type 7090

Nature Friendly

It does not emit harmful gases to the environment and does not dry the air while cooling, thus providing high indoor air quality.

Fresh Air and Comfort

Since the air inside constantly recirculates, it provides natural cooling.

Low Maintenance Cost

While minimizing your operating expenses, it maximizes efficiency with its innovative design.

GMARK

MECHGALE
MAKİNA DIŞ TİCARET VE SANAYİ LTD. ŞTİ.

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