

**alp**<sup>®</sup> INDUSTRIAL  
ELECTROSTATIC  
FILTER SYSTEMS  
“for the comfort of your air”



**ALP RXC**

**alperen**<sup>®</sup>  
ENGINEERING

**ALP RXC SERIES**  
PRODUCT CATALOGUE

[alperen.com.tr](http://alperen.com.tr)

## About Us

### Alperen Mühendislik Heating and Cooling Systems Industry and Trade Limited Company

Starting its commercial business in January 2000, Alperen Mühendislik has been manufacturing air-conditioning and HVAC filtration products.

Our company manufactures standard and hygienic air conditioning plants, water cooling systems, clean room ventilation equipment, rooftop air conditioning systems, electrostatic filter systems and customized production solutions depending on your needs.

Along with hygienically climatizing places classified as clean rooms such as operation rooms, intensive care units, laboratories, electronic industry and food institute, Alperen Mühendislik manufactures the needs of air conditioning and ventilation for all kinds of closed areas such as shopping malls, factories, hotels, offices, educational institutions and production facilities as well.

Thanks to its r&d studies, our company has led the way in Turkey by manufacturing specially designed concrete cooling systems based on cooling concrete in mold.

Our company meticulously fulfills the phases of exploration, informing, project designing, quoting, manufacturing, installation, implementation and service.

We aim to be closer and offer better service to you with our meticulously prepared and always up-to-date web sites. Through online data sharing, you can have information about our products, brands and models, calculate capacity, receive quote, order, buy or ask for service.

Our work is based on aesthetic appearance, high performance, economic use, durability, fast service and your pleasure.

Our company works to offer you the most qualified, the most economic and the least energy consuming devices with the best performance by furnishing its products with high technology systems.

Alperen Mühendislik works nonstop to increase domestic production through following the latest innovations in rapidly emerging heating, cooling, ventilation, air conditioning and HVAC filtration industries.

### Our Products:

- Electrostatic Filter Systems
- Standard Air Conditioning Plants
- Hygienic Air Conditioning Plants
- Package Type Hygienic Air Conditioning Plants
- Dehumidification Plants
- Air Conditioning Plants with Sensitive Control
- Rooftop Air Conditioning Systems
- Water Cooling Systems
- Concrete Cooling Systems
- Fan coil Systems
- Convector Systems
- Ventilation Equipment
- Air-Ducts
- Air Filters

## ALP RXC Series Electrostatic Filtered Air Cleaning Units



Good news for those suffering from smoke and odor in their work place!

A production age without smoke and odor rises!

Don't fear pollution out of extreme smoke and odor, get rid of the complaints you have, keep your production going, and don't lose your working license!

We guarantee you to get rid of your smoke and odor troubles immediately!

- ▶ It can be used in all types of places in order to filter smoke and odor,
- ▶ Effectively filters fuzz, oil, oil particles, smoke, dust and odor,
- ▶ Destroys VOC and similar pollutants,
- ▶ Prevents oil accumulation in ventilation canals and chimneys,
- ▶ Enables high capacity production without disturbing the environment,
- ▶ Removes effects of pollution on human beings and environment,
- ▶ Recovers the ejaculated heat energy to the process,
- ▶ Recovers the ejaculated oil energy to the process,
- ▶ Increases the work security and employee satisfaction,
- ▶ The filter can be used for years without need for replacement.
- ▶ Pays off in a short notice, thanks to its heat energy and oil recovery,
- ▶ Has very low operating cost comparing to its high performance,
- ▶ Corresponds to the technical terms required by the official institutions,
- ▶ Has the certificates of CE, TSEHYB, ISO 9001:2015, TM, TPE and SSB.

-  **Absolute Solution**
-  **Ready for Use**
-  **High Energy Saving**
-  **Simple Use**
-  **Home Production**

## ALP RXC Series Electrostatic Filtered Air Cleaning Units

Designed and produced to remove the smoke and odor problems in your work place, Alp RXC series electrostatic filtered air cleaning systems are 99% effective on cleaning the air.

Our air cleaning units has been designed to purify the air from any kind of smoke, odor, soot, dust and oil.

Alperen Muhendislik offers an absolute solution with electrostatic filtered air cleaning units that can be adapted into your current system and correspond to official criteria to all customers who are craving a workplace without smoke and odor.

You will immediately get rid of smoke and oil with specially designed electrostatic filters and



You can safely use our electrostatic filtered air cleaning units that have strong static structure and that are modular in all sort of places where dust, oil and smoke are unwelcome.

From now on you will be able to keep up your production without smoke and odor problems thanks to Alp Air Cleaning Units produced by Alperen Muhendislik in Turkey and have Mikro Kurairil system.

remove unwanted odors with UVC filter with long life span and active ozone filters that are used in ALP RXC series air cleanings plants.

The plate system used in Alp electrostatic filters is designed, planned and produced and patent by Alperen Muhendislik. It can be easily installed to your current ventilation system thanks to its modular structure.

## ALP RXC Series Electrostatic Filtered Air Cleaning Units

Alp active electrostatic filtered air cleaning units have active drainage system and simple periodic care. When it gets dirty, it can be used for years by washing, without replacing with a new one.

Thanks to the controlled led system illuminating all surfaces of the unit, you can use it during the day time without the effects of the low light and enjoy the ease of service.

You will be able to see for how long your machine works thanks to high-tolerance hour meter and keep regular track of the care periods.

You will recover the ejaculated warm air with the chimney gas as warm air or hot water.

You will recover ejaculated textile oils with chimney gas that are used in warping, application, cone, textured and gimping process.

When the air temperature that flows into the air cleaning unit exceeds the adjusted working temperature, the unit automatically runs the by-pass system and prevents a possible fire from occurring.

RXC series air cleaning units have a fire distinguishing system that is surrounded by wide angle nozzles with high pressure, special solution, alarm and double thermocouple.

RXC series air cleaning units are effective up to 99% with its front filter units, moist capture units, heat recovery units, mid-filter units, electrostatic filter units, ozone filter units, plasm filter units, mixer units, active drainage installment unit, automatic fire protection and distinguishing unit and automatic damper units.

Designed according to your needs, our air cleaning units are produced in our Istanbul factory with 100% domestic capital, correspond to the technical terms required by the official institutions and have the certificates of CE, TSE Service Competence, ISO 9001:2015, Made in Turkey, Industrial Registry and Turkish Patent Institute.

Exported to many foreign countries, our air cleaning units have simple installment that has been granted during the planning and production. Our air cleaning units are delivered to you as a package. You can run it right after you install the air duct and connect the power. In order to run, all you have to do is to turn the switch.

You can keep up your work without any problems while your Alp air cleaning unit is working regularly.

Exported to many foreign **countries**, our air cleaning units have simple installment that has been **granted during** the planning and production. Our air cleaning units are delivered to **you as a package**.

You can run it right after you install the air duct and connect the power. In order to run, **all you have to do is to turn the switch**.



## ALP RXC Series Electrostatic Filtered Air Cleaning Units



and the fabric is dried with the assistance of a special vacuum device. Later, the dried fabric is sent to the printing process, checked in the quality checking machines, packaged and got ready for delivery.

The part where extreme smoke, high temperature, moisture and odor occur in the stenter is the part where fixing and dyeing processes take place.

Alp RXC series air cleaning units are designed considering the extreme oil smoke, odor, high temperature and pollutants like VOC that occur in the poliester and poliester elastane fabrics.

### Get rid of stenter chimney smoke for good!

You will immediately get rid of the extreme smoke and oil occurring in the stenters during fixing processes, thanks to front filter units, mid-filter units and specially designed Micro Kurairil system electrostatic filter units. Moreover, you will recover the textile oil that cause smoke. You can use the filter group filtering smoke and oil for years by just washing and without replacing it with a new one.

### Get rid of stenter chimney odor for good!

After the drying phase in stenters, pollutants in the exhaust air such as CO carbon monoxide, NOX nitrogen oxides, SO2 sulphur dioxide, VOC dust and volatile organic compounds creates air emission that must be filtered.

Primer polluting causes of odor emission are compounds such as VOC and so on.

Ozone filter and plasm filter units that are used in ALP RXC series air cleaning units destroys VOC and similar compounds that occur in stenter chimneys and saves you from odor completely.

The filtration system which is based on the refining chimney gas provided with Alp air cleaning units is eco-friendly.

### Smoke and odor caused from poliester fabric has been considered during designing

In fabric factories, pre-soak and desizing processes are conducted while working on viscon and cotton fabrics. Pre-soak is a part and the prior condition of a healthy dyeing process. First, piece goods are pre-soaked, gotten through the raw cloth spread machine and sent to the dyeing machine by added to each other. Fabric are dyed in two different methods, disperse and reactive dyeing. Reactive dyeing is used for cellulosic fabrics while disperse dyeing is used for non-cellulosic ones. Poliester fabrics that will be dyed in the factory are desized. After dyeing, fabric is soaked and spread on the rope opener.

Then it is transported to the stenter, fitted on the edges widthwise for drying. Moist and hot air is sprayed to both surfaces of the stretched fabric

## ALP RXC Series Electrostatic Filtered Air Cleaning Units



### Recover the energy ejected through the stenter chimney!

The pressured hot air is sprayed to the both surfaces of the fabric in the stenters and the fabric is dried with the assistance of a special vacuum device.

Polluted air and high temperatures occurring during the processes such as shining, dyeing and abrasion applied on fabrics poses risks for work places. Fabric is processed with high temperatures during pretreatment. The high temperature which is provided by high costs is thrown out with the exhausting of unwanted smell and odor. This situation costs the factories a lot financially.

The exhausted heat energy can be recovered as either hot water or hot air according to your option and offered to the factory use with the heat recovery system in ALP RXC series air cleaning units.

The temperature provided from the exhausted air in the stenter chimney can be used in four different

ways optionally.

- a. Hot water provided from air-to-water heat exchanger is used in dye houses or any place that require hot water,
- b. Hot air provided from water-to-air heat exchanger is used for pre-heating the air by returning to the stenter,
- c. Hot air provided from air-to-air heat exchanger is used for pre-heating by returning to the stenter,
- d. Hot water provided from air-to-water heat exchanger is used in any area requiring hot water by using plated exchanger or used for pre-heating air by returning to the stenter.

Thanks to the energy recovery future, ALP RXC series air cleaning units regains you your capital cost in a very short notice.

## ALP RXC Series Electrostatic Filtered Air Cleaning Units

### Recover the oils exhausted through the stenter chimney!

ALP RXC series air cleaning units are designed in order to filter textile oils, especially paraffin oil. You can recover the VOC oils and paraffin oil, store them in a different place and send them to a licensed recycling plants with the active drainage and collecting units even in the coldest days of winter.

You can recover approximately 200 l oil from a stenter working 24 hours.

The oil recovery future offered to you by Alp RXC series air cleaning units, has an important contribution on decreasing operating costs.

If the temperature exceeds the programmed value, the fire warning system will make a vocal warning about this situation. If the temperature keeps rising, the fire extinguishing system will activates itself and discharges the high pressured fire extinguishing liquid with special solution. In the meantime, hot air coming from the stenter is exhausted through the by-pass line.

### You can keep producing without any trouble!

The moment you start Alp RXC series air cleaning units, emission problems caused by smoke and odor will be removed so that you can keep producing and even rapidly expand your production capacity.

### No consumables cost!

There is no consumables cost in Alp RXC series air cleaning units. You can wash the front filter units, moisture separator filter units, heat recovery unit, mid-filter units and electrostatic filter units used in the system when they get dirty and use for years without the need for replacing them with new ones.

Lifespan of ozone filter and plasm filters is 9.000 hours. They can be replaced with new ones when their lifespan finish.

### No more fear of fire!

Precaution for fire has been taken with the automatic fire warning and fire extinction systems used in Alp RXC series air cleaning units.

Potential temperature of the hot air coming from the stenter is measured with thermocouple after is passes through heat recovery unit. If the temperature value of the air passing through the heat recovery device is below the programmed value, the system will continue filtration.

### Includes Micro Kurairil system!

Micro Kurairil is a system that increases the impact area in electrostatic filters, patented after it was developed by the r&d department of Alperen Muhendislik. There are not tube or wire in the ionizer part of the electrostatic filters with Micro Kurairil System. Ionization occurs between specially designed plates. Micro Kurairil is a highly efficient plate system which has been developed in electrostatic filter area.





## ALP RXC Series Electrostatic Filtered Air Cleaning Units

### User Friendly Installation and Start-up

During the planning and producing of Alp RXC series air cleaning units all sorts of easings of installation have been provided. It has a very simple installation and start-up. There is no need to attach the modular pieces into one another during installation. Your air cleaning device is delivered to you as a package, ready to use.

You can run the device right after you finish the installation of water, air duct and power connection. In order to run it, all you have to do is to turn the switch. Optionally, you can contact our professional technical service for installation and start-up.

- You can use the electrostatic filters for years as well. In order to clean, pull them out of the sliding compartment, wash them and put them back in their places after drying.
- You can clean the heat recovery unit by opening the cell gates on the right and left sides.
- You can use the moisture separator filter unit for years. In order to clean, pull it out of the sliding compartment, wash it and put it back in its places after drying.
- There is no need any type of cleaning for ozone plasm filters. After 9.000 working hours, they will be replaced.

### Low Energy Consumption

Alp RXC series air cleaning units have high voltage units developed with special design. The most important feature of these units is that they consume very low energy despite of being highly efficient. Alp electrostatic filters run with only 300 W electric power.

Electronic module used in the electrostatic filters has also a special design, developed by Alperen Muhendislik r&d department.

Versatile maximum security has been provided in Alp electrostatic filters. There is no electrical danger risk while using our electrostatic filters.

### Long Lifespan

The cage of Alp RXC series air cleaning units have been manufactured with electrostatically painted DKP supply. In order to provide high resistance, all joints are joined with TIG welding. They have tear-proof, impenetrable, unwarpable, unbreakable and shatter-proof structure.

As long as they don't expose to physical impact, you can use them for years without any trouble.



### Simple Periodical Care

Alp RXC series air cleaning units have very simple periodical care. You can easily manage care, cleaning and filter change on your own or ask for technical support from our company.

- You can use the front and mid-filters by washing them. In order to clean, pull them out of the sliding compartment, wash them and put them back in their places after drying.

## ALP RXC Series Electrostatic Filtered Air Cleaning Units

### 100% Domestic Production

Alp RXC series air cleaning units are produced in our Istanbul factory with 100% domestic capital. The plate designs of our electrostatic filters are patented by the name of Alperen Muhendislik. The domestic high voltage units and the software are also developed by the r&d crew of Alperen Muhendislik. Alp electrostatic filters are exported to numerous countries in the world.

### Delivered Ready for Use

We deliver Alp RXC series air cleaning units as a package ready to use. All you have to do is the installation of water, the air duct and power connection in order to run your device.

### How do RXC series air cleaning units work?

- First, extremely hot dense oil smoke coming from the stenter and smelly chimney gas pass through moisture decreasing and fuzz collecting filter units. During this process the air gets cleaned from extreme moisture and big fuzz.
- The air cleaned from extreme moisture and big fuzz passes through heat recovery unit. In the meantime, hot water or hot air, according to the need of your factory, is recovered to be used while the temperature of the extremely hot air gets decreased until the unit's working value.
- The air gets to the electrostatic filter units with Micro Kurairiril system and there, it gets to purified from all of the oil particles, carbon compounds and smoke it has. During this process, oil recovery is provided from the collecting and drainage units.
- After the electrostatic filter units, the air passes through the ozone and plasm filter units and gets exhausted as completely purified from smoke, odor and VOC.
- First, the temperature of the extremely hot chimney gas coming from the stenter is measured. Then if the measured temperature value exceeds the adjusted value, by-pass line gets activated and the hot air gets exhausted before it enters the unit.

- In case of any sense of fire, the fire warning system vocally warns. If the temperature keeps rising, the fire extinguish system steps in and discharges the highly pressured, extinguishing solution into the unit. In the meantime, the air coming from the stenter gets exhausted from the by-pass line.

### When Alp RXC series air cleaning units are used in the stenters:

- a. Clean production plan is accomplished by filtering the emissions mixed into the air, water and soil as a consequence of the industrial activities taking place with the use of natural sources, raw material, water and energy.
- b. Energy use and wastes will enormously decrease.
- c. Important amount of environmental contribution will be made in terms of smoke and odor emission.
- d. Odor emissions will reduce up to 99% by decreasing the values of VOC and similar compounds in the stenter waste air.
- e. Thanks to the heat recovery unit, it is estimated that there will be natural gas saving up to 15%.
- f. Comparing to other filtration techniques, it is estimated that there will be 42-52% decrease in water consumption, 11-25% decrease in energy consumption, 15-38% decrease in chemical consumption, 40-53% decrease in waste water, 24-46% decrease in weight of chemical oxygen need, 17-48% decrease in waste chimney gas emissions, and 9-21% decrease in solid waste.
- g. Comparing to other filtration systems, it is estimated that pay off period will decrease down to 12-24 months.
- h. Waste oils occurring during the fixing of the fabrics will be recovered as usable waste oil for industrial purposes.
- i. It will create high amount of efficiency for the environment.

## ALP RXC Series Electrostatic Filtered Air Cleaning Units

### The futures of Alp RXC series air cleaning units:

- ▶ Specially designed, closely textured front filter units,
- ▶ Turbulent metal filter units,
- ▶ Moist separator filter units,
- ▶ Highly efficient heat recovery unit,
- ▶ Specially designed, closely textured mid filter units,
- ▶ Patented industrial electrostatic filter units,
- ▶ High voltage units,
- ▶ Security switches,
- ▶ Panel cooling systems,
- ▶ Micro Kurairil filtration system,
- ▶ Active drainage system,
- ▶ Heating system providing oil flow in cold days,
- ▶ Plated ozone filter units,
- ▶ UVC plasm filter units,
- ▶ Air mixer,
- ▶ Emergency stop button,
- ▶ Clean and dirty air test probes,
- ▶ Automatic air adjustment dampers,
- ▶ Carbon filter-free design,
- ▶ Fire warning system,
- ▶ Fire extinguish system,
- ▶ Working hours indicator,
- ▶ Resistant carcass made of Dkp metal sheet,
- ▶ Electrostatically painted inner and outer surfaces,
- ▶ Designing that is suitable for outdoor works,
- ▶ Lifting lug for simple carrying,
- ▶ Façade enlightenment system,
- ▶ Washable filter system,
- ▶ 2 years of guarantee,
- ▶ 10 years of lifetime.



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