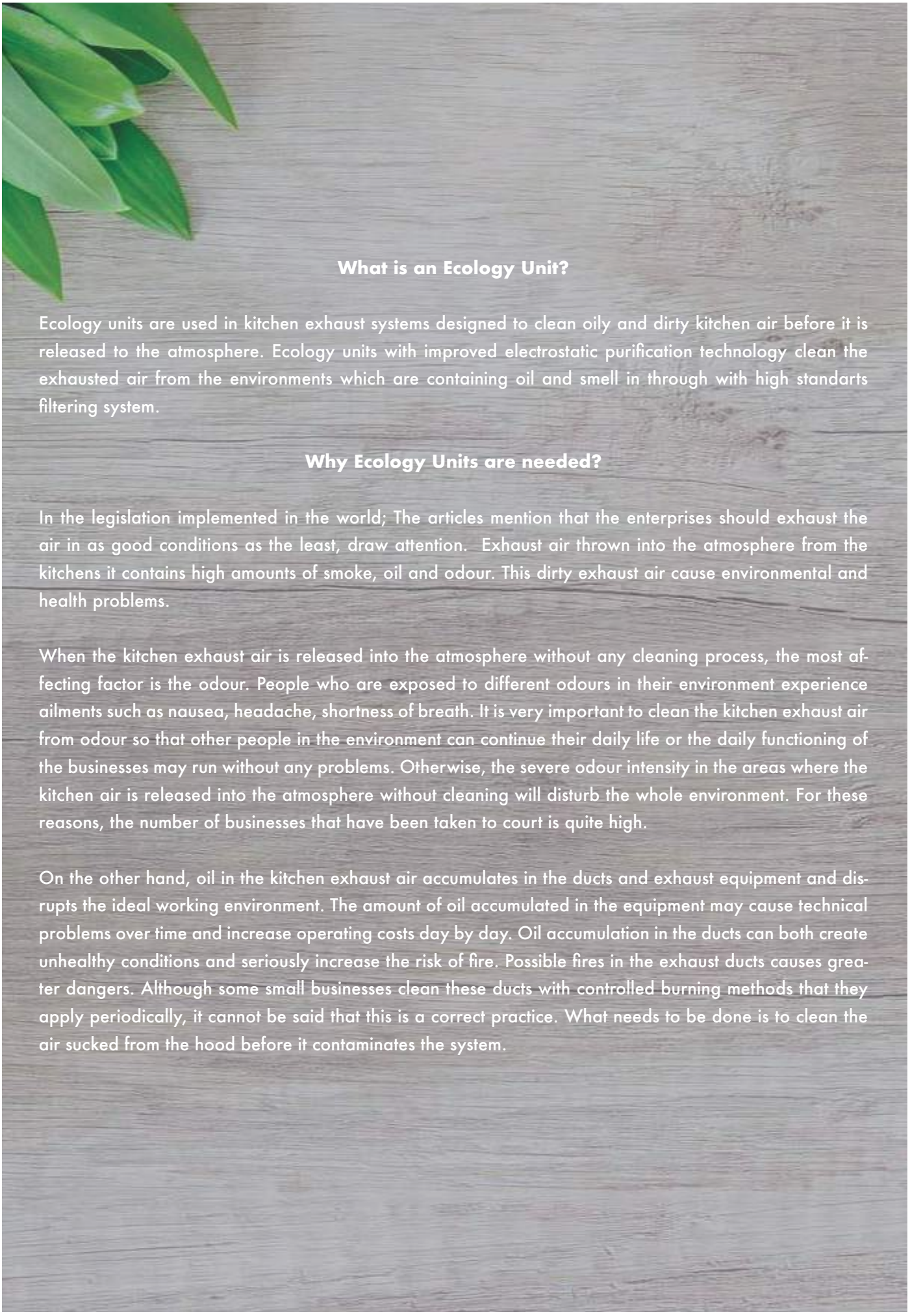
EKO

ECOLOGY UNITS

eneko®



What is an Ecology Unit?

Ecology units are used in kitchen exhaust systems designed to clean oily and dirty kitchen air before it is released to the atmosphere. Ecology units with improved electrostatic purification technology clean the exhausted air from the environments which are containing oil and smell in through with high standarts filtering system.

Why Ecology Units are needed?

In the legislation implemented in the world; The articles mention that the enterprises should exhaust the air in as good conditions as the least, draw attention. Exhaust air thrown into the atmosphere from the kitchens it contains high amounts of smoke, oil and odour. This dirty exhaust air cause environmental and health problems.

When the kitchen exhaust air is released into the atmosphere without any cleaning process, the most affecting factor is the odour. People who are exposed to different odours in their environment experience ailments such as nausea, headache, shortness of breath. It is very important to clean the kitchen exhaust air from odour so that other people in the environment can continue their daily life or the daily functioning of the businesses may run without any problems. Otherwise, the severe odour intensity in the areas where the kitchen air is released into the atmosphere without cleaning will disturb the whole environment. For these reasons, the number of businesses that have been taken to court is quite high.

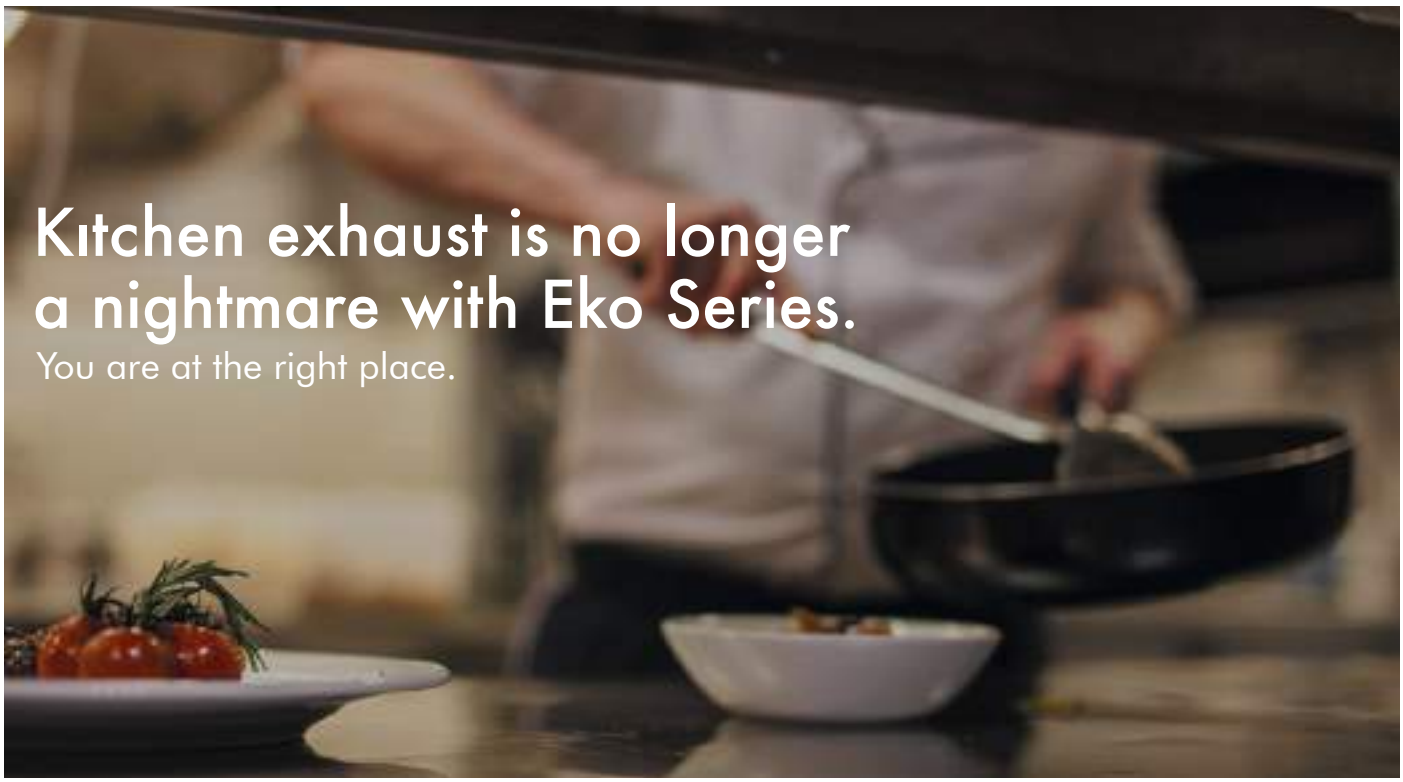
On the other hand, oil in the kitchen exhaust air accumulates in the ducts and exhaust equipment and disrupts the ideal working environment. The amount of oil accumulated in the equipment may cause technical problems over time and increase operating costs day by day. Oil accumulation in the ducts can both create unhealthy conditions and seriously increase the risk of fire. Possible fires in the exhaust ducts causes greater dangers. Although some small businesses clean these ducts with controlled burning methods that they apply periodically, it cannot be said that this is a correct practice. What needs to be done is to clean the air sucked from the hood before it contaminates the system.

Ecology Units

Eneko ecological units, with the electrostatic and active carbon filters inside, use the electrostatic acceleration principle to remove particles such as odour, soot, smoke, oil and dust from the kitchen. Thus, businesses release exhaust air more environmental and suitable for human health.

Areas In Use

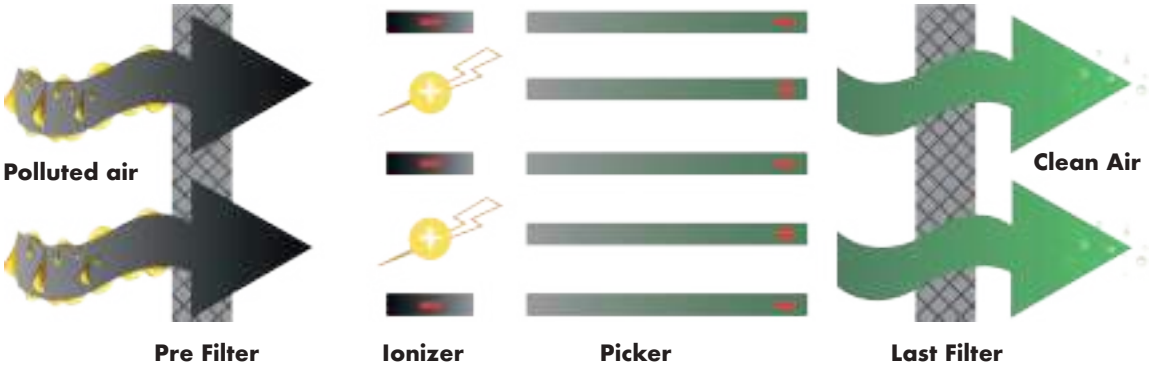
- Food Factories,
- Restaurants,
- Catering Industry,
- Hotels,
- A la Carte,
- Malls & Food Courts,
- Cafes.



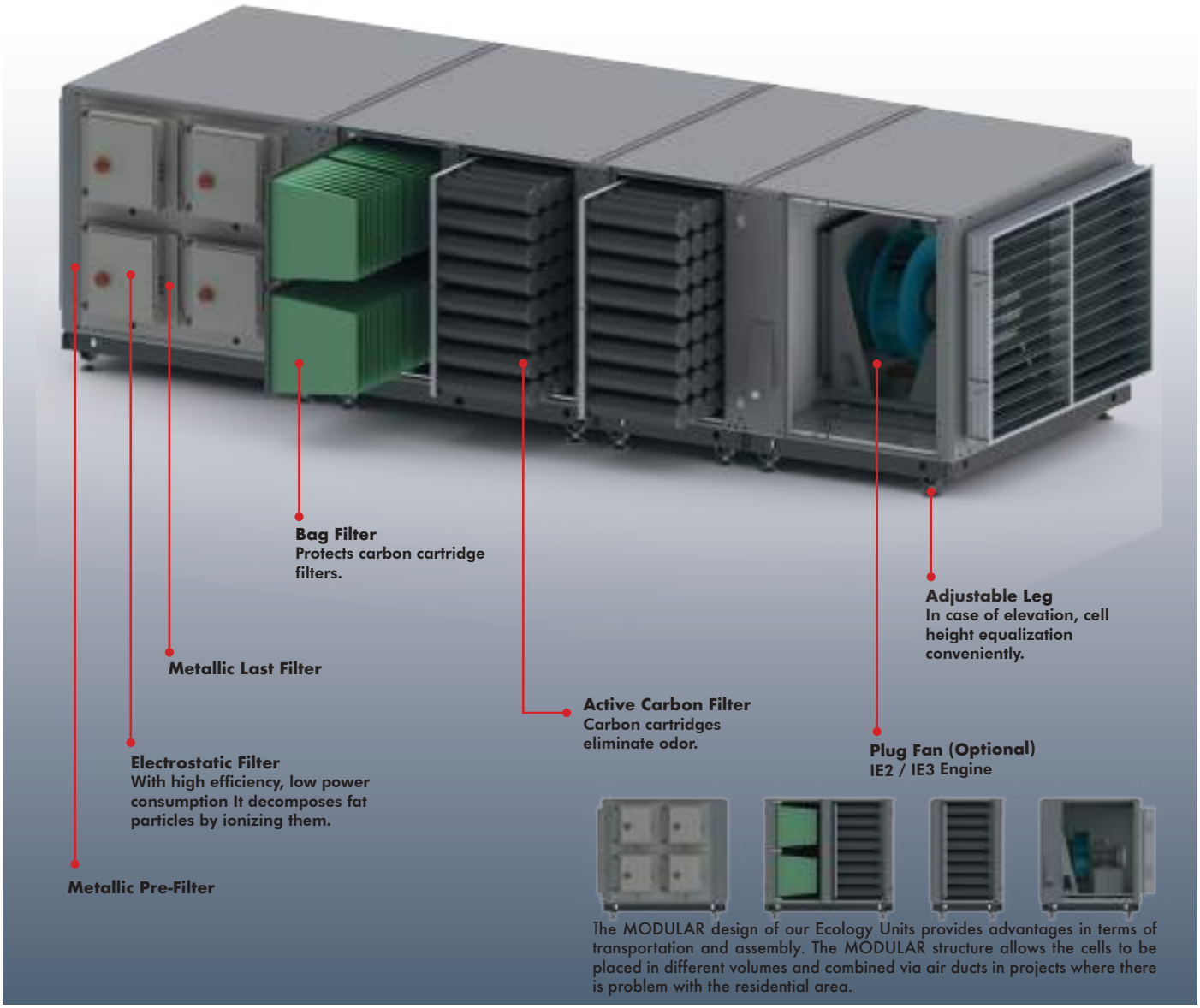
	KITCHEN TYPE	AFRICA	CHINA	GRILL& STEAKHO	FISH& CHIPS	FRIED CHICKEN	INDIAN	MEXICA	PIZZA	BAR FOODS	SEA FOODS	TURK	CAFE
SPESIFICATIONS	SMOKE	✓	✓	✓✓✓✓	✓	✓	✓	✓	✓	✓✓	✓	✓✓✓	✓✓✓
	OIL	✓✓	✓✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓	✓✓	✓	✓✓	–
	ODOUR	✓✓	✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓✓	✓✓✓	✓	✓✓	✓✓✓	✓✓✓	✓✓✓

*LOW ✓ , MEDIUM ✓✓ , HIGH ✓✓✓ , VERY HIGH ✓✓✓✓

• ELECTROSTATIC FILTER OPERATING PRINCIPLE



1. The air first passes through a washable metallic pre-filter. The excessive oil particles are captured and collected in an oil pan.
2. The air then passes into the combined Collector Cell/ Ioniser section where the particulates in the air stream are charged to a negative potential.
3. The negatively ionised air then passes between the Collector Cell's plates, which are alternatively negatively charged or earthed.
4. The negatively charged particulates passing through the plates are then simultaneously repelled away from the negatively charged plates and attracted to the earthed plates, where they stick effectively filtering them from the airflow.
5. The particulates remain on the plates or drain down in to the sump (hence the need for regular cleaning).
6. The degreased air exists from ESP and enters to a fine filter stage. High efficient fine filters collects the dust from air and therefore protects the rest of the ventilation system from dust contamination.
7. Last stage filtration includes activated carbon filters which eliminate the odour in the air.



The MODULAR design of our Ecology Units provides advantages in terms of transportation and assembly. The MODULAR structure allows the cells to be placed in different volumes and combined via air ducts in projects where there is problem with the residential area.

ELECTROSTATIC FILTER

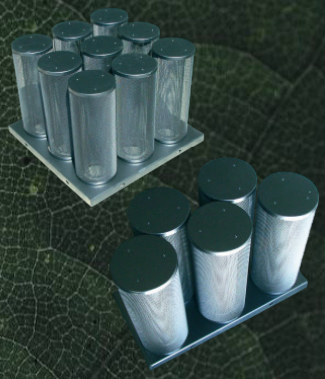
Our ESPs are specially designed for kitchen evacuation and a modified design for industrial use.
Because they are not, they have an internal sump to collect smoke, oil and fat particles filtered from the exhaust system, which not only facilitates service but also reduces potential in the lower parts of the units.
It also completely eliminates dangerous spills that may occur. All variants are compatible with the kitchen duct system and can be configured modularly to handle all evacuation requirements.

PLUG FAN (IE2/IE3)

Sheet steel impeller with powder-coated surface protection. Rotating, paddle-free for high efficiency and convenient acoustic behavior plug fan with diffuser. AC technology external rotor motor.

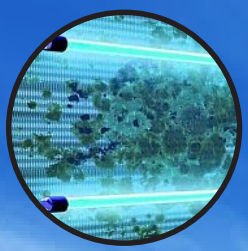
ACTIVATED CARBON FILTER

Activated carbon filter has the ability to capture and hold gas molecules. Active granular carbon filters are used as odor arresting filters in places where heavy odors occur (kitchen, etc.).

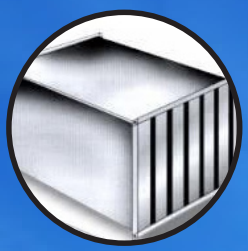


OPTIONAL ACCESSORIES

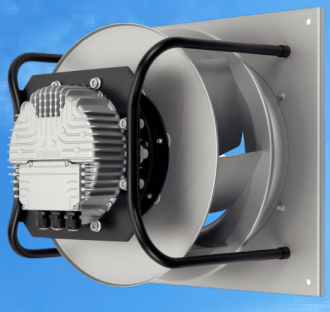
UV Light



Silencer

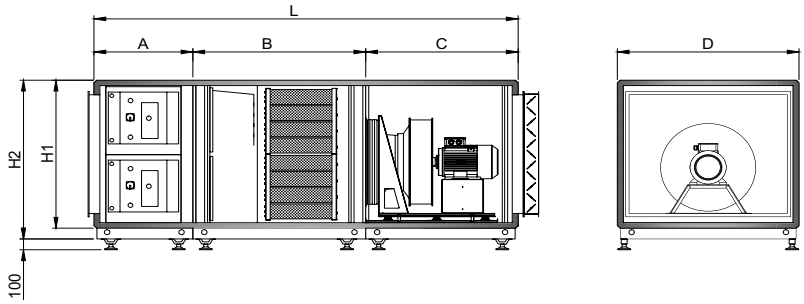


EC Plug Fan



Low Energy Consumption (IE4)

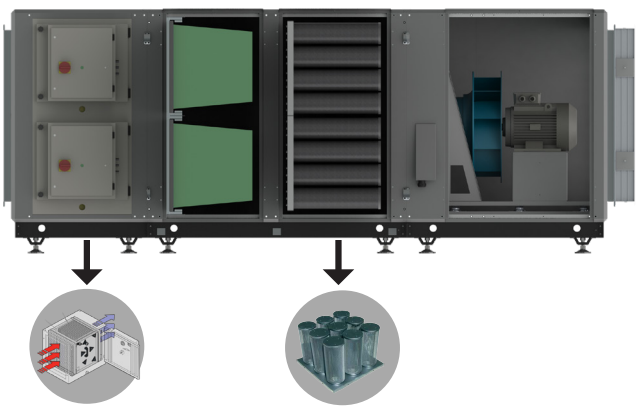
- **SINGLE MODEL**



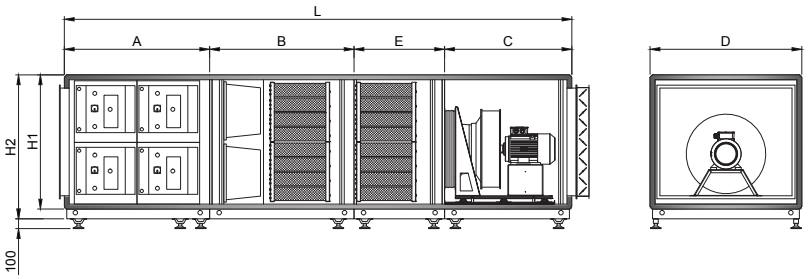
	L*	A*	B	C	D	H1	H2
EKO2500S	3675	845	1680	1150	600	735	835
EKO5000S	3675	845	1680	1150	1050	735	835
EKO7500S	3675	845	1680	1150	1500	735	835
EKO10000S	3675	845	1680	1150	1050	1370	1470
EKO15000S	3825	845	1680	1300	1500	1370	1470
EKO20000S	3825	845	1680	1300	1950	1370	1470
EKO22500S	3825	845	1680	1300	1500	2005	2105
EKO30000S	3825	845	1680	1300	1950	2005	2105
EKO40000S	3825	845	1680	1300	1950	2640	2740

* In models with automatic washing, L and A dimensions increase by 250mm.
* Dimensions are given in mm.

	EKO2500S	EKO5000S	EKO7500S	EKO10000S	EKO15000S	EKO20000S	EKO22500S	EKO30000S	EKO40000S
VOLUME	2,500 (m³/h)	5,000 (m³/h)	7,500 (m³/h)	10,000 (m³/h)	15,000 (m³/h)	20,000 (m³/h)	22,500 (m³/h)	30,000 (m³/h)	40,000 (m³/h)
F7 BAG FILTER	✓	✓	✓	✓	✓	✓	✓	✓	✓
CARBON FILTER	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı
CARBON FILTER CARTRIDGE NUMBER	12	24	40	48	72	96	108	144	192
CARBON FILTER DEPTH	600	600	600	600	600	600	600	600	600
CARBON FILTER CONTACT TIME	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ESP CELL	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı	1 Sıralı
NUMBER of ESP	1	1	2	2	2	2	3	3	4
ESP POWER CONSUPTION	20 Watt	30 Watt	60 Watt	60 Watt	80 Watt	100 Watt	120 Watt	150 Watt	200 Watt
FAN/MOTOR POWER	1.50 kW	3.00 kW	4.00 kW	5.50 kW	7.50 kW	7.50 kW	11.00 kW	15.00 kW	15.00 kW
VOLTAGE /PHASE / FREQUENCY	400V / 3Ph / 50 Hz								



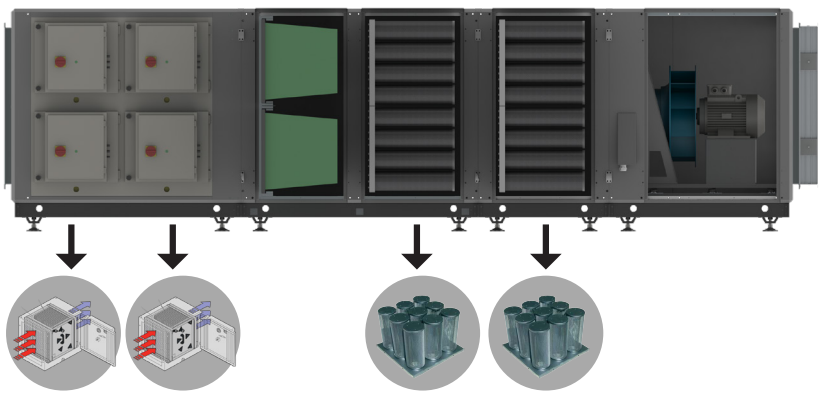
- **DOUBLE MODEL**



	L*	A*	B	C	D	E	H1	H2
EKO2500D	5270	1485	1680	1150	600	955	735	835
EKO5000D	5270	1485	1680	1150	1050	955	735	835
EKO7500D	5270	1485	1680	1150	1500	955	1370	1470
EKO10000D	5270	1485	1680	1150	1050	955	1370	1470
EKO15000D	5420	1485	1680	1300	1500	955	1370	1470
EKO20000D	5420	1485	1680	1300	1950	955	1370	1470
EKO22500D	5420	1485	1680	1300	1500	955	2005	2105
EKO30000D	5420	1485	1680	1300	1950	955	2005	2105
EKO40000D	5420	1485	1680	1300	1950	955	2640	2740

* In models with automatic washing, L and A dimensions increase by 250mm.
* Dimensions are given in mm.

	EKO2500S	EKO5000S	EKO7500S	EKO10000S	EKO15000S	EKO20000S	EKO22500S	EKO30000S	EKO40000S
VOLUME	2,500 (m³/h)	5,000 (m³/h)	7,500 (m³/h)	10,000 (m³/h)	15,000 (m³/h)	20,000 (m³/h)	22,500 (m³/h)	30,000 (m³/h)	40,000 (m³/h)
F7 BAG FILTER	✓	✓	✓	✓	✓	✓	✓	✓	✓
CARBON FILTER	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı
CARBON FILTER CARTRIDGE NUMBER	24	48	80	96	144	192	216	288	384
CARBON FILTER DEPTH	600	600	600	600	600	600	600	600	600
CARBON FILTER CONTACT TIME	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
ESP CELL	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı	2 Sıralı
NUMBER of ESP	2	2	4	4	4	4	6	6	8
ESP POWER CONSUPTION	40 Watt	60 Watt	120 Watt	120 Watt	160 Watt	200 Watt	240 Watt	300 Watt	400 Watt
FAN/MOTOR POWER	2.20 kW	3.00 kW	5.50 kW	7.50 kW	11.00 kW	11.00 kW	15.00 kW	22.00 kW	22.00 kW
VOLTAGE /PHASE / FREQUENCY	400V / 3Ph / 50 Hz								



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