



EURUS AIR FILTRATION SYSTEMS

EURUS *Electrostatic Air Cleaners*



ESP Series

*Let **EURUS** clean your air.*



EURUS IS THE EAST WIND IN ANCIENT AGES

WITH TAILORED SOLUTIONS FLEXIBILITY

DUCTED SYSTEMS

These can also be termed as source capture systems, a technique by which particulate created by various processes are collected directly at the point of generation. In doing this, the particles are prevented from entering the operator's breathing zone and dispersing into workshop air. Due to its high collection efficiency, this system is preferable where very hazardous emissions are being created.

An effective source capture system consists of four main components;

- 1 – Capture Device
- 2 – Ducts
- 3 – Inlet Plenum
- 4 – EURUS Air Cleaner.

When each of these elements are correctly specified, health and safety, productivity and housekeeping concerns are all alleviated.



FREE HANGING OR UNDUCTED SYSTEMS



One or more EURUS units can comprise a free hanging system when positioned in the overhead workshop space to create a planned re-circulatory air pattern. Whilst not as efficient as a source capture system, they do offer a substantial level of particulate reduction across their entire design area. Free hanging systems come into their own when source capture is impractical due to diverse component size, operator resistance to moving hoods, overhead cranes prevent ducting installation or workshop layout revisions are possible. Furthermore, free hanging systems can work well in conjunction with source capture arrangement when tackling «afterburn» emission. This occurs when the operator moves to another position of the component and results in welding smoke being discharged into the rest of the workshop.

FACE COMPLIANCE ISSUES HEAD ON

ESP units ensure compliance with even the strictest federal, state and local environmental standards. These systems work hard to stop contaminants before they settle on neighboring parking lots and buildings — helping you and your company maintain a positive image and avoid costly compliance fines. Visible industrial process emissions are eliminated, and odors are reduced!



EURUS ESP ... TYPICAL APPLICATIONS



Manufacturing Processes

- Furnaces
- Laser etching and cutting
- Metal sintering
- Oil mist or smoke
- Soldering
- Wax vapors
- Wire drawing
- Die Casting

Textile

- Tenter frame ovens
- Yarn coating and extrusion

Industrial Cooking

- Coffee/Peanut roasters
- Hot oil fryers
- Smoke house
- Grill, Barbecue
- Food court exhaust

Plasticizers

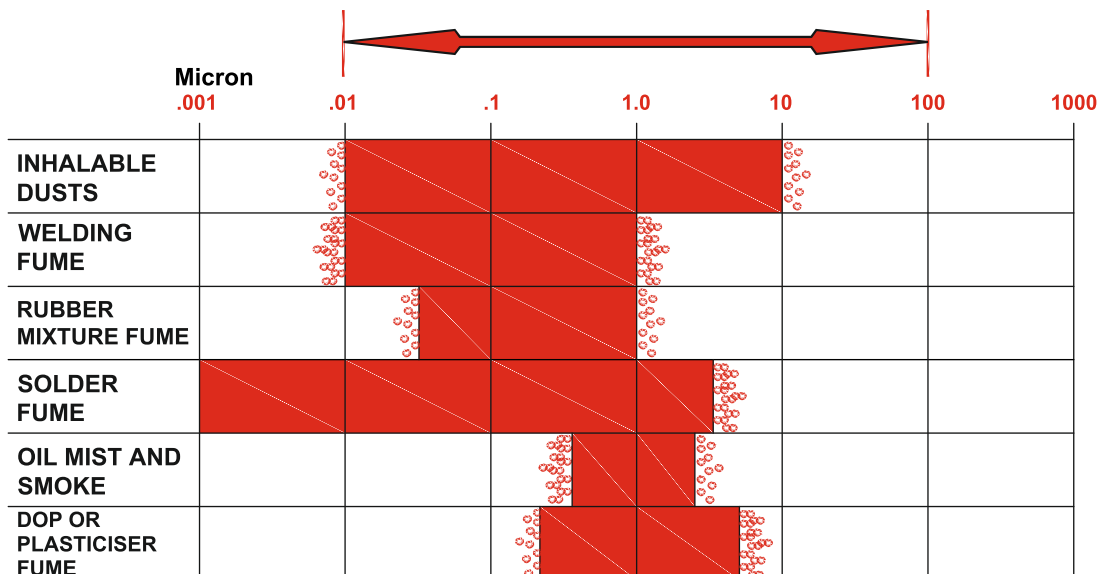
- Blown film
- Calendering
- Curing oven
- Coatings
- Extrusion
- Nylon
- Plastics
- Polyethylene
- Polystyrene
- Texturizing

Rubber

- Buffing
- Curing
- Grinding
- Recycling



EURUS ESP EFFICIENCY RANGE

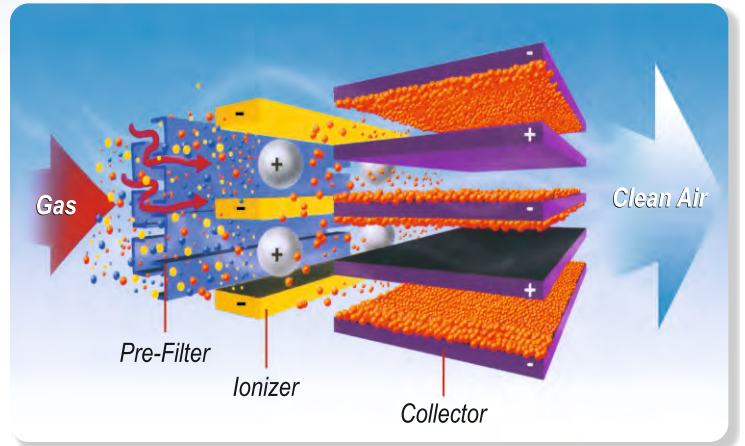


EURUS ESP ... HOW IT WORKS

The EURUS ESP is a two stage, electrostatic precipitator which operates on the principle of charging contaminants electrostatically and then collecting the charged particles on oppositely charged plates.

As contaminated air is drawn into the ESP, it is first screened by a mechanical prefilter which removes large particles.

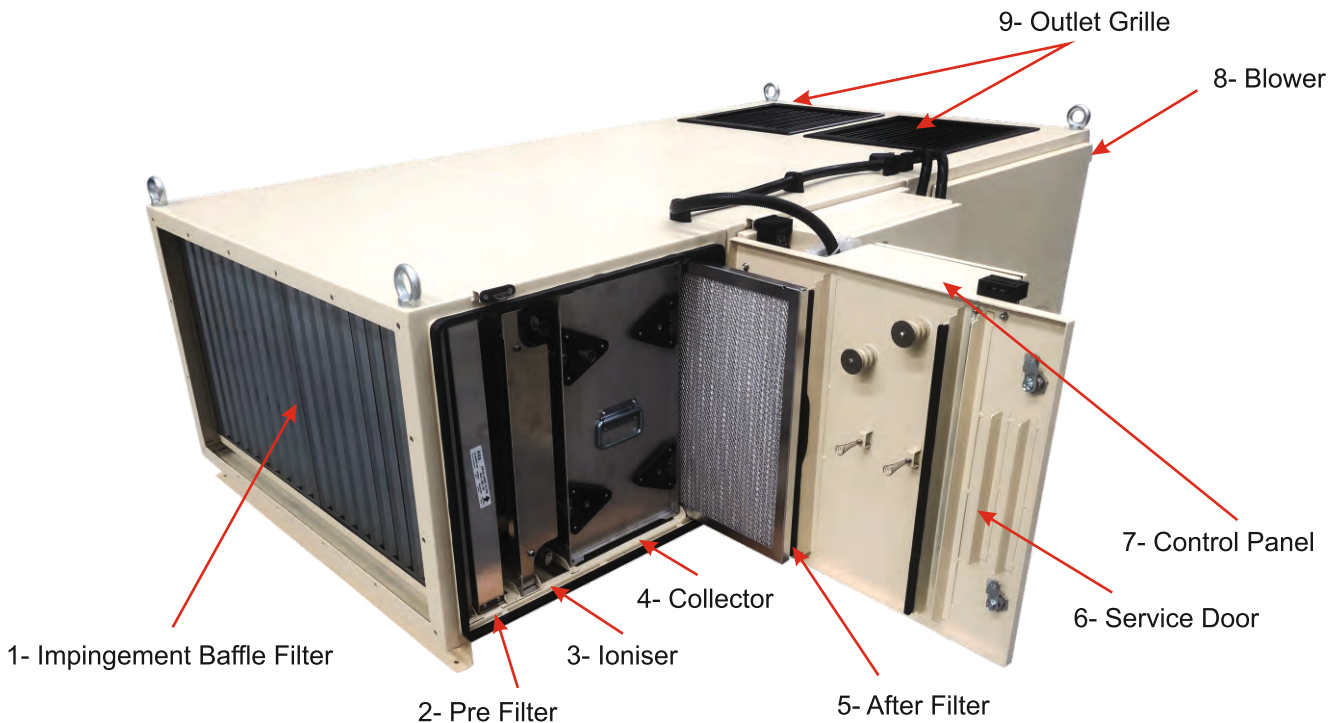
Then, the air passes through the uniquely designed aerofoil ioniser where it is subjected to an intense electrostatic field which charges the particles in the airstream.



These charged particles then enter the collecting cell where oppositely charged plates collect the particles.

An afterfilter improves air distribution and collection efficiency by trapping any agglomerated contaminants which might become dislodged from the cell.

Power for the EURUS ESP is provided by a state of the art power supply. IEC safety switch fitted to all models. Low-energy, self-regulating power supplies adjust the voltage according to pollution density and ensure safe and continuous operation at the highest efficiency level. Having low energy consumption, these power supplies are extremely safe in terms of operation and maintenance.

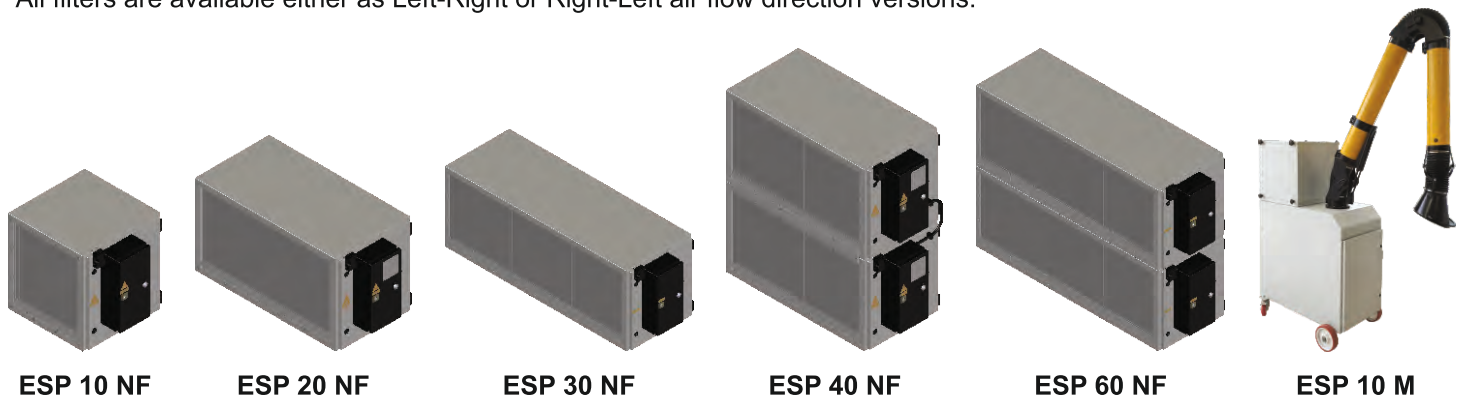


EURUS ESP ... TECHNICAL SPECIFICATIONS

Filter Model	Nominal Capacity (m ³ /h)	Supply Voltage 3 faz – 50Hz (V)	Standard Fan Pressure (Pa)	Power Consumption (kW)
ESP 10 LP	1700 - 2300	400	250	0.375
ESP 10 HP	1700 - 2300	400	650	0.75
ESP 20 LP	3400 - 4500	400	250	0.75
ESP 20 HP	3400 - 4500	400	650	1.5
ESP 40 LP	6800 - 9000	400	300	2.2
ESP 40 HP	6800 - 9000	400	600	4
ESP 50 – S	8500	400	Unducted Only	1.5
ESP 50 – T	8500	400	Unducted Only	1.5
ESP 30 *	5100 - 6800			
ESP NF Series *	1275 - 36000			
ESP OD Series *	1275 - 56000			

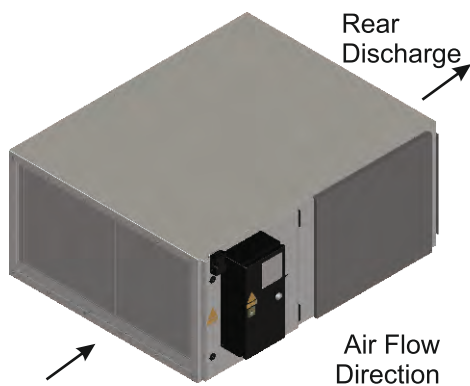
* ESP 30 & ESP OD & NF series exclude fans.

65°C maximum operating temperature.
All filters are available either as Left-Right or Right-Left air flow direction versions.



Single Stage

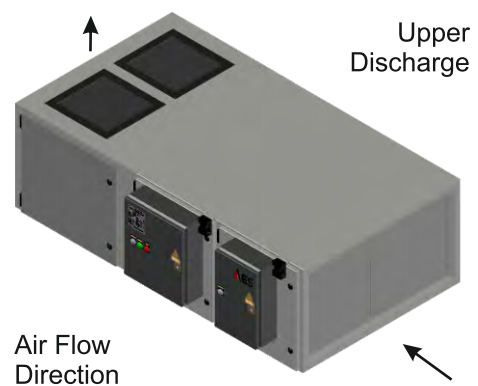
Filtration Efficiency Above 96%



E.G.: ESP 20 LP/HP single stage, left-right flow

Two Stage

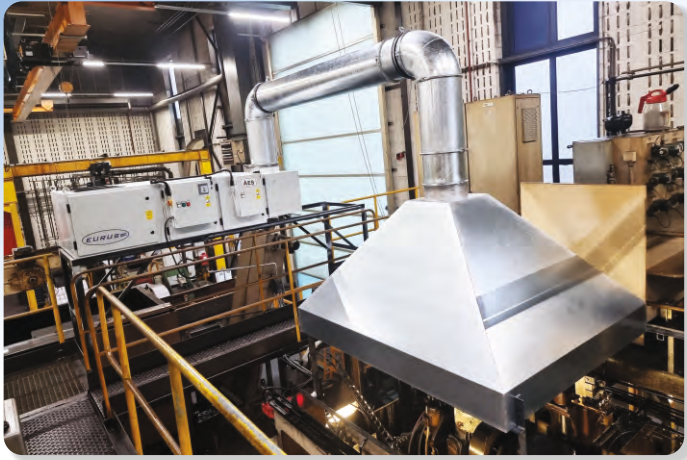
Filtration Efficiency Above 99%



E.G.: ESP 20 RP/HP two stage, right-left flow



ENSURE EMPLOYEE SAFETY WHILE MINIMISING COSTS



EURUS ESP's can help to protect employees health by removing dangerous airborne contaminants that can cause respiratory problems. These powerful units eliminate dirty airborne particles before they settle on floors, land on expensive machinery or are inhaled situations that can lead to accidents, workers compensation claims, Health & Safety compliance violations and expensive machine repairs.

EURUS ESP series can also improve your company's profitability by reducing energy and housekeeping costs. These systems recirculate air into your plant and reduce exhaust air make-up requirements up to 80%! Thousands of litres of valuable resources such as cutting oils, lubricants, coolants and plasticisers can be recycled each year by customers using AES - EURUS series.



WHY *EURUS* ?

LARGE RANGE

The *EURUS* range consists of packaged and modular units, which can be incorporated into an air cleaning system to suit each application.

These features allow *EURUS* to tackle a wide variety of air quality applications emanating from processes such as machining, welding, heat treatment, injection moulding, EDM, vacuum pumping plus many more. Therefore if your emission is solid, liquid or sticky *EURUS* can provide the solution you need.

IN-DEPTH COMPANY EXPERIENCE

AES introduced ESP to the Turkish market in 1992. Since then, a large number of industrial companies such as Mercedes Benz, Ford, M.A.N., Isuzu, Federal Mogul, Bosch to name but a few, have benefited from ESP installations. The experience gained with customers of this calibre and the shared knowledge resulting from our multi-national partner company activities ensure the best advice is available..

FULL “TURNKEY” PACKAGES AVAILABLE

If required, AES can handle any *EURUS* project from initial consultation through to final installation and commissioning. Should the customer require liaison with a nominated sub-contractor regarding ducting design and/or installation, then our full co-operation is guaranteed. In either instance, the correct application of the *EURUS* to ensure optimum performance is our goal.

AFTER SALES SERVICE

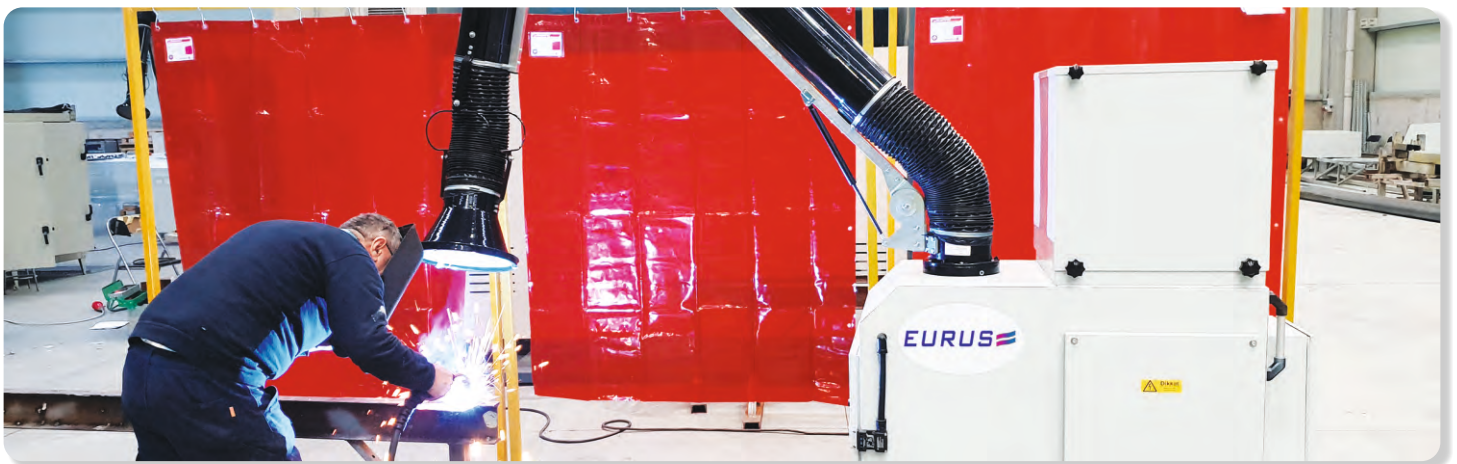
Our own team of factory-trained Service Engineers can provide preventative maintenance programmes incorporating service, inspection and cleaning of *EURUS* units. We can also offer filter change service on cartridge and bag filter equipment irrespective of manufacturer origin. Reports can also be incorporated into any maintenance programme, which can be tailored to suit your particular requirements. Full guidance and spares back-up is available to those customers who prefer to conduct their own maintenance.

BIG ENERGY SAVINGS

The efficiency of the *EURUS* usually enables the cleaned air to be re-circulated back into the workshop area thus resulting in considerable heat savings. With conventional extract systems, assuming a 20°C temperature rise requirement, every 1700 m³/h of air extracted would represent a 40,000 BTU heat loss.

ULTIMATE COST EFFECTIVENESS

Your investment in a cleaner working environment is safe with *EURUS*. Our unrivalled build quality, operational efficiency and after sales service ensure that you will enjoy the undoubted benefits of cleaner air for many years to come. We would be more than happy to provide case history evidence or arrange an installation visit to highlight all these important factors.



Let **EURUS** clean your air for a healthier work atmosphere and a cleaner world. We are at your service for optimized solutions reflecting **AES** expertise and experience.



Single Source Solution

At AES we understand the need for an exceptional partner – from concept to installation. That's why AES offers a single-source solution from conceptual design to after sales service. Our capabilities include;

- Consultancy,
- System design,
- Engineering development,
- Production,
- Installation,
- Commissioning and training,
- Aftersales services and supply of spares.

Contact us for our wide product range from a single emission to plant wide solutions for oil mist, fume and dust filtration.

Head Office and Plant

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