



Duman

Smoke



Toz

Dust



Yağ  
Buharı

Oil mist

# akrokol

ENDÜSTRİYEL FİLTRE SİSTEMLERİ

Industrial Filtration Systems



*ITC ENGINEERING TAAH . SON. SAN. VE TİC. LTD. ŞTİ. was established in 2005. began its operations in the fields of engineering, durability, and industrial solutions. Since its inception, our company has embraced the principles of quality, reliability, and sustainability, quickly becoming a trusted brand in the sector with its engineering services, project implementations, and advanced system solutions for industrial products.*

*In 2014, in response to the increasing emphasis on occupational health and safety and sustainability in industrial production facilities, the production of industrial storage systems began under the AKROKOL brand.*

*AKROKOL has successfully built its foundation on ITC ENGINEERING's engineering practices and experience, developing highly efficient solutions, particularly for the filtration of welding fumes, dust, oil mist, and industrial gases.*

*With products such as ;*

- > Acrobat extraction arms*
- > Mobile fume extraction units*
- > Oil mist storage systems*
- > Industrial dust collection units*

*it aims to both protect operating systems and increase production standards.*

*Today, ITC ENGINEERING continues to offer reliable, advanced, and environmentally friendly solutions in the local market under the AKROKOL brand.*

## **KL / KLT Series Smoke and Dust Extraction Arms**

### **Flexible and Durable Design**

Acrobat suction arms are made of high-quality materials and offer long-lasting use. Thanks to their jointed structure, they offer 360° movement and can be easily positioned wherever you want. The gas spring mechanism ensures the arm is secure and allows the user to move it effortlessly.

### **High Efficiency**

Suction of smoke, gas, and particulates at their source prevents both airborne dispersion and inhalation exposure to workers. When used in conjunction with high-suction fans and filtration units, acrobat arms provide maximum performance even in the most challenging working conditions.

### **Ergonomic Use**

Its compact and flexible structure provides the user with comfortable operation. Thanks to its various length and diameter options, it adapts to all types of industrial applications. It takes up minimal space in the work area and, thanks to its easy installation feature, can be quickly integrated into the production line.



**KL Serisi**

### **Wide Areas of Use;**

- \* Welding Fume Extraction
- \* Soldering Processes
- \* Dust and Particle Suction
- \* Removal of Chemical Vapors

### **Technical Advantages ;**

- \* Flame retardant durable hose and pipe options
- \* Compatibility with different filtering units
- \* Ceiling, wall or table type mounting alternatives
- \* Aerodynamic suction nozzles for energy efficiency
- \* Minimum maintenance requirement and long service life



## KL / KLT Series Acrobat Smoke and Dust Extraction Arms



KLTB Serisi

Providing a safe working environment in industrial production areas is not only a requirement of occupational safety regulations, but also a critical factor in improving production quality and efficiency. Acrobat Fume Extraction Arms effectively extract smoke, dust, and gases generated at welding points, preventing them from mixing into the air.

### Externally Jointed Acrobat Suction Arms

In KLTB Series dust extraction applications, it is crucial that the inner surface of the extraction arm is free of

protrusions that could obstruct airflow. Therefore, externally articulated acrobat extraction arms are one of the most efficient solutions, especially for processes containing high levels of dust.

### Design Features

- \* **Externally Jointed Structure:** Because the joints are positioned on the outside of the hose, the inner surface is completely smooth. This ensures uninterrupted and highly efficient air flow.
- \* **Reducing the Risk of Clogging:** Since there are no mechanical connections on the inner surface, dust and particles are prevented from accumulating or narrowing the air duct.
- \* **Easy Cleaning and Maintenance:** Thanks to the smooth interior surface, dust adhesion or accumulation is minimized, maintenance times are shortened, and hygienic use is ensured.

### Performance Advantages

- \* **Effective Dust Extraction with High Flow Rate:** Works with industrial dust collection systems to provide maximum efficiency at the source.
- \* **Longer Service Life:** Reduces wear on hose and duct systems, lowering maintenance costs.
- \* **Ergonomic Use:** Thanks to its externally jointed structure, it can be easily positioned and fixed by the user, providing access to any point.



KLT Serisi

## KL / KLT Series Acrobat Smoke and Dust Extraction Arms

| Internally Jointed Acrobat Arms |          |                         |      |      |           |
|---------------------------------|----------|-------------------------|------|------|-----------|
| KL 200 / 160                    | ø 160 mm | 1.300 m <sup>3</sup> /h | 1900 | 2000 | Ha + 600  |
| KL 300 / 160                    | ø 160 mm | 1.300 m <sup>3</sup> /h | 2900 | 3100 | Ha + 1060 |
| KL 400 / 160                    | ø 160 mm | 1.300 m <sup>3</sup> /h | 3900 | 3800 | Ha + 1300 |
| KL 200 / 200                    | ø 200 mm | 2.000 m <sup>3</sup> /h | 1900 | 2000 | Ha + 600  |
| KL 300 / 200                    | ø 200 mm | 2.000 m <sup>3</sup> /h | 2900 | 3100 | Ha + 1060 |
| KL 400 / 200                    | ø 200 mm | 2.000 m <sup>3</sup> /h | 3900 | 3800 | Ha + 1300 |

| Externally Articulated Acrobat Arms |          |                         |      |      |           |
|-------------------------------------|----------|-------------------------|------|------|-----------|
| KLT/KLTB 200/105                    | ø 100 mm | 800 m <sup>3</sup> /h   | 1900 | 2000 | Ha + 600  |
| KLT/KLTB 300/105                    | ø 100 mm | 800 m <sup>3</sup> /h   | 2900 | 3100 | Ha + 1060 |
| KLT/KLTB 400/105                    | ø 100 mm | 800 m <sup>3</sup> /h   | 3900 | 3800 | Ha + 1300 |
| KLT/KLTB 200/160                    | ø 160 mm | 2.000 m <sup>3</sup> /h | 1900 | 2000 | Ha + 600  |
| KLT/KLTB 300/160                    | ø 160 mm | 2.000 m <sup>3</sup> /h | 2900 | 3100 | Ha + 1060 |
| KLT/KLTB 400/160                    | ø 160 mm | 2.000 m <sup>3</sup> /h | 3900 | 3800 | Ha + 1300 |
| KLT/KLTB 200/200                    | ø 200 mm | 3.000 m <sup>3</sup> /h | 1900 | 2000 | Ha + 600  |
| KLT/KLTB 300/200                    | ø 200 mm | 3.000 m <sup>3</sup> /h | 2900 | 3100 | Ha + 1060 |
| KLT/KLTB 400/200                    | ø 200 mm | 3.000 m <sup>3</sup> /h | 3900 | 3800 | Ha + 1300 |

L: Flexible hose length

La: Maximum operating distance

Ha: Console suspension height (Min. 200 cm height from the floor is recommended.)

Ht: Acrobat suction arm closed position height

### TECHNICAL DETAILS

**Operating Temperature:** -20 / +80 °C

**Flexible Material:** 0.70 mm steel wire-reinforced polyurethane hose,

**Diameters:** ø100, ø160, ø200 mm

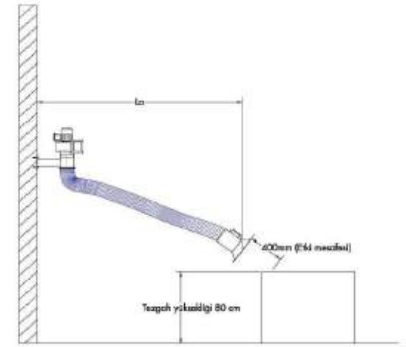
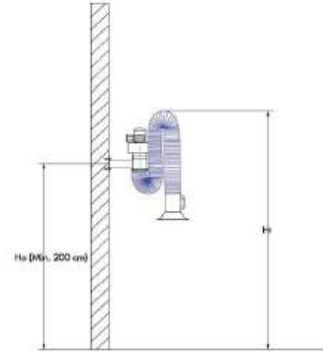
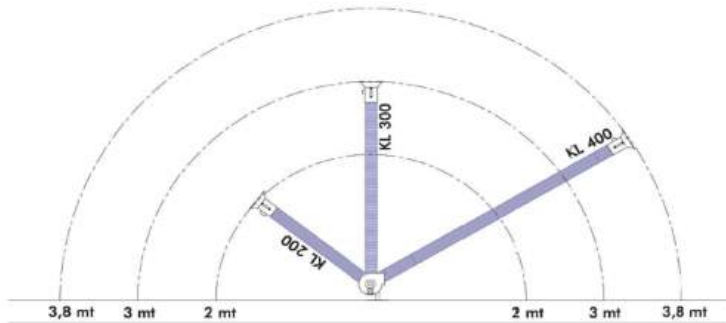
Can be replaced with 250°C and 900°C-resistant PVC hose up  
PVC hose upon request.

**Standard Lengths:** 2,0 - 3,0 - 4,0 mt

**Carrier System:** Galvanized steel profile

**Balance System:** Gas shock absorber

**Exhaust Hood:** PVC material with flow control valve



## KL / KLT Series Acrobat Smoke and Dust Extraction Arms - Accessories



### PVC Hood

With its lightweight construction and high durability, it provides maximum efficiency in industrial extraction applications. The built-in damper allows for easy air flow adjustment, preventing unnecessary energy and energy consumption.



### Aluminum Hood

Thanks to its aluminum material, it is long-lasting, stainless, and resistant to harsh industrial environments.



### Flexible Hose

With its high flexibility and abrasion resistance, it is an essential part of industrial suction systems. It can be used safely between -20°C and +80°C.



### Wall Mount Bracket

Safely supports the weight of the Acrobat arm, providing long-term stability. The powder-coated steel body provides corrosion protection. Easy to install.



### Gas Shock absorber

It allows the Acrobat arm to remain fixed in the desired position. It allows for easy positioning with one hand. It is durable and long-lasting.



### Ceiling Mounting Bracket

This special bracket, which allows Acrobat suction arms to be mounted to the ceiling, saves space in the work area and provides ample freedom of movement.

With its robust construction, it safely supports the weight of the arm.

It offers the most efficient or environments where wall mounting is not possible.



### High-Temperature Flexible Hose

With its high-temperature resistant structure, it offers safe use in harsh industrial conditions.

Two models are available: +250°C and +900°C.

## AK Series Radial Exhaust Fans

Acrobat smoke and dust extraction arms require a powerful and efficient suction source to operate effectively. Radial suction fans, designed to meet this need, are an essential component of industrial filtration solutions with their high flow and pressure ratings.

\* **High Pressure and Flow:** The radial fan design provides high performance with low energy consumption. It enables the dirty air coming from the suction arm to be transferred safely and quickly to the filtration unit.

\* **Durable Structure:** Long-lasting thanks to the steel body and balanced fan wheel, it operates long-lasting and without vibration.

\* **Easy Installation:** With its compact body and versatile connection options, it can be easily integrated into central systems or mobile filtration units.

\* **Continuous and stable suction:** No loss of performance in long-term operations.



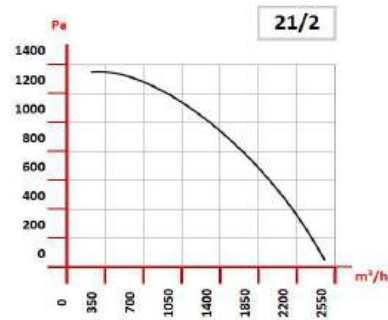
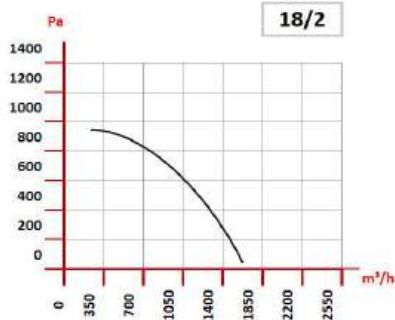
1



- > Radial body made of cold drawn high quality DKP sheet metal,
- > Highly resistant to corrosion with environmentally friendly electrostatic powder paint,
- > Production in accordance with EN 60335-2-80 standards,
- > High pressure and flow rates with suction nozzle application, High-quality production with high-tech CNC machines, without human touch,
- > Aluminum federated motor body with high heat transfer capacity,
- > Long bearing life with rotor balanced according to ISO 1940 standards,
- > High operating range for coils with Class F insulation: -40°C / +70°C \*

\* Operating range given for the coil only. For the motor: -20°C / +45°C

| Model   | Voltage (V)   | rpm  | W    | Maximum Air Volume |      | dB (A) | Box Dimensions     | Gross Weight |
|---------|---------------|------|------|--------------------|------|--------|--------------------|--------------|
|         |               |      |      | m³/h               | Pa   |        |                    |              |
| AK 18/2 | 220 V - 50 Hz | 2650 | 500  | 1350               | 900  | 68     | 295 * 350 * 350 mm | 10,1         |
| AK 21/2 | 220 V - 50 Hz | 2650 | 1000 | 2300               | 1300 | 83     | 360 * 360 * 450 mm | 13,7         |



## UKS/UKM Series Extension Consoles



In some production areas, the reach of standard extraction arms may not be sufficient. In such cases, extension consoles increase the reach of extraction arms, providing safe and effective fume, dust, and gas extraction even in larger work areas.

### Design and Construction Features

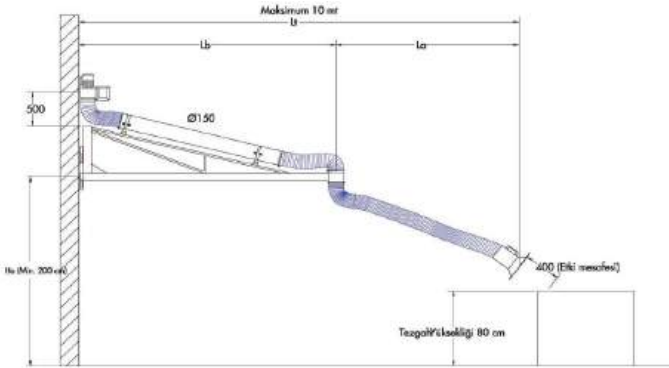
- \* **Durable Carrier System:** The steel construction body is designed to carry the acrobat arms safely.
- \* **Wide Range of Movement:** The extension console provides maximum flexibility to the operator by increasing the working radius of the acrobat arm.
- \* **Modular Structure:** It can be adapted to any work area with the possibility of being produced in different lengths.

### Performance Advantages

- \* **Increases Reach:** Provides access to points that standard acrobat arms cannot reach.
- \* **Flexible Working Area:** Provides solutions with a single suction system even on large surfaces in welding, grinding or chemical applications.
- \* **Long-Lasting Use:** Thanks to its robust bearings and durable structure, it works smoothly for years.
- \* **Compatible with Central Systems:** Can be used with radial fans and filtration systems.

| Model                                   | L (mm) |
|-----------------------------------------|--------|
| UKS100 Fixed Extension Console          | 1.000  |
| UKM200 Rotary jointed Extension Console | 2.000  |
| UKM300 Rotary jointed Extension Console | 3.000  |
| UKM400 Rotary jointed Extension Console | 4.000  |
| UKM500 Rotary jointed Extension Console | 5.000  |
| UKM600 Rotary jointed Extension Console | 6.000  |

\* Round galvanized air ducts are included in extension consoles of 2 meters and above.



- \* **Lt:** Working distance including the extension console.
- \* The acrobat suction arms mounted on the extension console can rotate 360° at the connection point to the console.
- \* The round air duct and flexible pipes on the extension console are included with the console.

## MTK / MCK / ECOMTK Series Mobile Smoke Filtering Units

**MTK / MCK / ECOMTK Series Mobile Smoke Filtering Units** ; thanks to their compact features and the cassette filters they contain, remove 99.9% of harmful substances found in welding smoke, providing the hygienic air conditions necessary for human health.

The mobile unit includes a washable metal pre-filter, G4 fiber filter, carbon-impregnated fiber filter, and HEPA filter.

The built-in filter warning system notifies you when the filter's fill level has reached its maximum level, helping you clean or replace it.

The unit is very easy to use thanks to its specially designed 360° rotating extraction arms with durable polyurethane hoses. A valve inside the hood, located on the extraction arm, allows for air flow adjustment and ensures high-quality welding.



MTK Series



MCK Series

\* **Portability:** Thanks to its compact design with wheels, it can be easily used in different production locations.

\* **High Filtration Capacity:** Effectively captures smoke, dust, and gases with its multi-stage filter system (pre-filter, HEPA, carbon filter, etc.).

\* **Quiet and Powerful Suction:** Thanks to its specially designed fan structure, it provides powerful suction performance while operating at low noise levels.

\* **Easy to Use:** Equipped with acrobat suction arms, the user can easily direct it to the smoke source.

\* **Low Maintenance:** Easy filter replacement and long service life reduce operating costs.

## MTK / MCK / ECOMTK Series Mobile Smoke Filtering Units



### Usage Advantages:

- \* Prevents workers from being exposed to harmful gases and particles.
- \* Complies with occupational health and safety standards.
- \* Its flexible structure offers faster solutions than fixed systems.
- \* With models in various capacities, it offers solutions for every need, from small workshops to large production facilities.

### Areas of Use:

- \* Welding and soldering workshops
- \* Grinding and cutting operations
- \* Chemical laboratories
- \* Educational institutions and vocational high school workshops
- \* Temporary or flexible production areas

Mobile smoke filtering units are manufactured with single and double arms to suit different needs and working environments.

### Single-Arm Model;

- \* Provides compact and practical use.
- \* Ideal for confined spaces or single-operator stations.
- \* Provides highly efficient suction power at a single welding, soldering, or grinding point.
- \* Provides economical solutions with lower energy consumption.

### Double Sleeve Model;

- \* Capable of simultaneously extracting smoke from two different workstations.
- \* Suitable for large workshops or production lines where multiple operators work simultaneously.
- \* Its high-capacity fan and filtration system provides powerful suction on both sides.
- \* Provides flexibility for businesses and increases production efficiency.

**HIGH SUCTION  
POWER**

**SPARK PREVENTIVE  
FILTER**

**H13 HEPA FILTERS**

**FILTER WARNING  
SYSTEM**

**G4 FIBER FILTER**

**3 JOINTS EXTRACTION ARM**

**DURABLE  
POLYURETHANE  
HOSE**

## MTK / MCK / ECOMTK Series Mobile Smoke Filtration Units

Not every business has the same needs. In some applications, simpler and more economical solutions may be sufficient instead of high-capacity, multi-stage filter systems. In this regard, economical mobile smoke filtration units offer a cost-effective and safe alternative.

Economical mobile units offer a practical, cost-effective, and reliable fume extraction solution for businesses with limited budgets. In small-scale applications, they protect employee health and provide a clean production environment.

### Featured Features ;

- \* **Economical Solution:** Meets basic smoke extraction needs with lower investment costs.
- \* **Compact Design:** Thanks to its small size, it can be easily used in tight spaces.
- \* **Practical Use:** With its easy-to-carry structure and single-arm design, it provides quick solutions for the operator.
- \* **Ease of Maintenance:** It has low maintenance costs thanks to its simple filter system.
- \* **Energy Efficiency:** Reduces operating costs with low power consumption.



ECOMTK Serisi

### Areas of Use ;

- \* Small workshops and individual workstations
- \* Educational institutions and vocational high school workshops
- \* Light welding and soldering applications
- \* Low-density smoke and dust applications

|                          | MTK                              | MCK                              | ECOMTK                           |
|--------------------------|----------------------------------|----------------------------------|----------------------------------|
| Fan Motor Power          | 1,00 kW                          | 1,50 kW                          | 0,50 kW                          |
| Mains Voltage            | 220V                             | 220V                             | 220V                             |
| Air Flow (Maximum)       | 2.150 m³/h                       | 3.000 m³/h                       | 2.000 m³/h                       |
| Air Flow (Intake)        | 1.250 m³/h                       | 2.500 m³/h                       | 1.250 m³/h                       |
| 1. Filter                | Spark arrester washable metal    | Spark arrester washable metal    | Spark arrester washable metal    |
| 2. Filter                | G4 fiber                         | G4 fiber                         | G4 fiber                         |
| 3. Filter                | Carbon impregnated fiber         | Carbon impregnated fiber         | Carbon impregnated fiber         |
| 4. Filter                | H13 Hepa                         | H13 Hepa                         | H13 Hepa (Opsiyonel)             |
| Extraction Arm           | 1 x Ø160mm 3,0 mt                | 2 x Ø160 mm 3,0 mt **            | 1 x Ø160 mm 2,0 mt               |
| Casing                   | rostatic powder coated DKP sheet | rostatic powder coated DKP sheet | rostatic powder coated DKP sheet |
| Sound Level              | 69 dbA                           | 69 dbA                           | 65 dbA                           |
| Unit Dimensions(WxLxH)   | 700 x 700 x 950 mm               | 700 x 800 x 1000 mm              | 530 x 500 x 810 mm               |
| Unit Weight (Except arm) | 80 Kg                            | 100 Kg                           | 70 Kg                            |

\*\*It can be supplied with a 4.0m acrobat arm upon request.

## AkroWall Series Wall Mounted Smoke Filtering Units



The wall-mounted smoke filter unit is an indispensable solution for modern businesses, thanks to its compact structure, high filtering capacity, and user-friendly design.

### Compact and Space-Saving Design

Thanks to its wall-mountable design, it doesn't take up space in production areas. Compared to mobile devices, it offers freedom of movement in the work area and provides optimal ease of use, especially in workshops with limited space.

The unit's ergonomic design offers a practical solution for both welding operators and maintenance personnel.

### Advanced Filtration Technology

The unit is equipped with three-stage filter options: high-efficiency fiber, carbon-impregnated fiber, and HEPA filters. Thanks to the multi-stage filtration system, it:

- > Pre-filters extend the life of the main filters by capturing large particles.
- > The main filter (Hepa) effectively retains fine metal particles and harmful gases generated during the welding process.

### Strong Suction Performance

It prevents the spread of contaminated air by suctioning close to the source. The high-flow fan system quickly directs smoke and particles to the filter. This protects the air the operator breathes and ensures a clean atmosphere throughout the facility.

### Application Areas

- > Metalworking shops
- > Welding production lines
- > Training workshops and vocational high schools
- > Laboratory environments
- > Confined-space industrial facilities



## AkroWall Series Wall Mounted Smoke Filtering Units



### User-Friendly Features

- > Its low-noise operating principle prevents noise pollution in the production area.
- > An easily accessible filter change compartment minimizes maintenance time.
- > A filter fill indicator allows for early determination of maintenance time.
- > Its long-lasting filters reduce operating costs.

### Safety and Durability

- > Powder-coated steel body
- > High-temperature and spark-resistant structure
- > Designed in accordance with CE and ISO standards
- > Motor overload protection system

#### AKROWALL-T

#### AKROWALL-C

|                                   |                                     |                                     |
|-----------------------------------|-------------------------------------|-------------------------------------|
| Fan Motor Power                   | 1,00 kW                             | 1,50 kW                             |
| Mains Voltage                     | 220V                                | 220V                                |
| Air Flow (Maximum)                | 2.150 m³/h                          | 3.000 m³/h                          |
| Air Flow (Intake)                 | 1.250 m³/h                          | 2.500 m³/h                          |
| 1. Filter                         | Kıvılcım önleyici yıkanabilir metal | Kıvılcım önleyici yıkanabilir metal |
| 2. Filter                         | G4 elyaf                            | G4 elyaf                            |
| 3. Filter                         | Karbon emdirilmiş elyaf             | Karbon emdirilmiş elyaf             |
| 4. Filter                         | H13 Hepa                            | H13 Hepa                            |
| Extraction Arm                    | 1 x Ø160mm 3,0 mt*                  | 2 x Ø160 mm 3,0 mt *                |
| Casing                            | Elektrostatik toz boyalı DKP sac    | Elektrostatik toz boyalı DKP sac    |
| Sound Level                       | 69 dbA                              | 69 dbA                              |
| Unit Dimensions (WxLxH)           | 700 x 700 x 950 mm                  | 700 x 800 x 1000 mm                 |
| Unit Weight (excluding Acrobat A) | 80 Kg                               | 100 Kg                              |

\* It can be supplied with a 4.0m acrobat arm upon request.

## Minimob Series Soldering Fume Filtering Unit

Breathing fumes and harmful gases produced during soldering in electronics manufacturing and repair applications poses serious risks to both worker health and occupational safety. Developed to eliminate these risks, the Minimob Soldering Fume Filtering Unit offers an ideal solution for small-scale workspaces thanks to its compact design, high filtering capacity, and easy portability.

### Compact and Portable Design

Thanks to its ergonomic dimensions and lightweight design, the unit can be easily used on a desktop or in confined spaces. Its mobile feature allows for easy transport to different workstations, allowing for flexible use without the need for a fixed system.

### Effective Smoke Suction Performance

Its high-efficiency fan system captures soldering fumes at their source, preventing them from spreading into the work environment. Its durable aluminum pipe and transparent hood direct airflow directly to the process area, ensuring rapid and effective removal of fumes.

### Advanced Filtering Technology

A multi-layered air purification process is achieved within the unit using a combination of pre-filters and HEPA filters. This effectively captures both visible particles and harmful gases and odors, creating a clean and safe breathing environment.

### Quiet and Energy-Efficient Operation

The unit, notable for its low noise level, operates without compromising user comfort, particularly in laboratory, workshop, or office environments. Its energy-efficient motor design minimizes energy consumption during extended periods of use.



#### TEKNİK DETAYLAR

|                             |                                  |
|-----------------------------|----------------------------------|
| Fan Motor Power             | 0,50 kW (220V)                   |
| Air Flow (Maximum)          | 800 m³/h                         |
| 1. Filter                   | G4 elyaf                         |
| 2. Filter                   | Karbon emdirilmiş elyaf          |
| 3. Filter                   | H13 Hepa                         |
| Extraction Arm              | ø70 * 1500 mm alüminyum boru     |
| Casing                      | Elektrostatik toz boyalı DKP sac |
| Sound Level                 | 69 dbA                           |
| Unit Dimensions (WxLxH)     | 410 x 415 x 600 mm               |
| Unit Weight (excluding Air) | 55 Kg                            |

#### Areas of Use:

- > Electronic circuit board manufacturing and repair tamiri
- > Soldering and welding processes
- > Small-scale laboratory applications
- > Training workshops and R&D centers
- > Training workshops and R&D centers

## AKRT Series Bench Type Welding Fume & Grinding Dust Filtering Unit

**Powerful, practical and portable solution for welding fumes and grinding dust**

Effective filtration of welding fumes and grinding dust in industrial production areas is critical for both employee health and equipment life. Our mobile and compact filtration unit is a highly efficient and portable air filtration solution designed to meet this need.

### Compact Design – Maximum Efficiency

This unit, easily positioned even in small spaces, offers high suction capacity despite its compact design. The integrated fan system ensures that smoke and dust are drawn directly from the source, keeping the ambient air clean. The unit's wheeled design allows for quick and easy transportation to different work areas.

### Advanced Filtration Technology

The unit effectively captures both fine welding fume particles and heavy grinding dust with its multi-stage filtration system.



### Optional filter options:

- > **Nanofiber filter:** For highest filtration precision.
- > **Teflon coated filter:** Provides resistance against oily and sticky particles.
- > **Antistatic filter:** Ideal for the safe suction of electrically conductive dust.

### Easy Maintenance and Longevity

Filter cleaning can be easily accomplished with the automatic or manual reverse air (pulse) system. This feature prevents the filter from clogging, ensuring long-term performance. Its durable metal body and high-quality components ensure reliable use for many years.

|                  | AKRT-1000            | AKRT-2000            |
|------------------|----------------------|----------------------|
| Fan Motor Power  | 1,0 kW               | 1,5 kW               |
| Mains Voltage    | 220V                 | 220V                 |
| Air Flow         | 2.000 m³/h           | 3.000 m³/h           |
| Bench Dimensions | 800 * 1000 mm        | 800 * 2000 mm        |
| 1. Filter        | Spark Arrester Metal | Spark Arrester Metal |
| 2. Filter        | Cartridge Filter     | Cartridge Filter     |

## MTK/MCK -3K Series Mobile Dust/Smoke Filtering Unit (With Cartridge Filter)

Designed to effectively filter harmful dust and fumes generated in industrial production areas, mobile cartridge filter dust and fume extraction units provide a safe working environment with their high-performance cartridge filters and portable design. Thanks to their mobile design, these systems can be easily moved to different workstations, ensuring clean air quality by capturing both fine particles such as dust and welding fumes with high efficiency.

### High Efficiency Cartridge Filter System

Special cartridge filters with large surface areas capture even the finest dust particles and welding fumes with high efficiency.

Optionally, automatic cleaning systems (with air pulses) can be equipped to easily remove dust accumulated on the filter surface.

### Single and Double Arm Options

> **Single-Arm Model:** Suitable for use on a single workstation or machine. Its compact design makes it easy to position in tight spaces.

> **Double-Arm Model:** Capable of extracting fumes and dust from two different points simultaneously. Designed for use in multiple welding or grinding stations, each arm can be controlled independently, providing flexible and versatile use.

### Advantages

- > Easy portability with mobile design
- > High efficiency with cartridge filter technology
- > Optional filter options (Nanofiber, Polyester Teflon, Antistatic)
- > Flexibility of single and double arm use
- > Low noise and energy saving motor system
- > Long filter life with optional automatic cleaning mechanism (jet-pulse)



## **MTK/MCK -3K Series Mobile Dust/Smoke Filtering Unit (With Cartridge Filter)**



### **Flexible use, high filtration and maximum mobility**

Mobile cartridge dust collection units are designed to provide highly efficient particulate filtration in welding, grinding, cutting, and surface treatment processes that require localized extraction. Double-arm models increase production efficiency by enabling simultaneous fume and dust extraction at two separate work points. Their mobile design allows these units to be easily moved between different machines or workstations, offering flexible use without the need for a centralized system installation.

### **Double Arm Structure – Flexible and Efficient Suction**

The two acrobat suction arms integrated into the unit, each 2 to 3 meters long, can rotate 360°. This allows simultaneous suction from two different welding or grinding stations. High-flow air ducts located within the arms internal structure provide maximum suction power with minimal pressure loss. Each arm is equipped with an independent damper system, allowing the desired arm to be closed to increase the flow rate of the other. This feature optimizes system performance in single or double-use scenarios.

### **Cartridge Filter System – High Efficiency, Long Life**

The high-surface-area cartridge filters used in the mobile unit capture all fine dust particles, ensuring clean air. Filter elements can be made of nanofiber, polyester Teflon, or antistatic material. This ensures high performance against various particle types, such as welding fumes and metal dust.

Filter cleaning is performed using an automatic jet pulse system.

The compressed air pulses push dust accumulated on the filter surface into the chamber, extending filter life and minimizing maintenance requirements.

### **Performance and Specifications**

Mobile double-arm cartridge dust collectors typically provide air flow rates between 2,000 and 3,000 m<sup>3</sup>/h. The powerful radial fan system, with a motor power of 2.2 to 4 kW, combines high suction capacity with quiet operation. The filter surface area is between 20 and 30 m<sup>2</sup>, and filtration efficiency exceeds 99%. The large-volume dust collection chamber allows for easy discharge of collected particles



## MTK/MCK -3K Series Mobile Dust/Smoke Filtering Unit (With Cartridge Filter)

### Optional Filter Options

Mobile cartridge filter dust and fume extraction units can be equipped with a variety of filter options to meet the specific needs of different industries. In addition to standard cartridge filters, nanofiber, polyester Teflon-coated, and antistatic filter options are available for more sensitive and demanding applications.

#### > Nanofiber Filter ;

- \* With its high surface coating technology, it can capture even finer particles.
- \* High air flow rate is maintained thanks to lower pressure loss.
- \* It is ideal for applications where fine smoke and submicron particles are concentrated.

#### > Polyester Teflon Coated Filter;

- \* Thanks to the Teflon coating, sticky and moist dust is prevented from adhering to the filter surface.
- \* Thanks to its easy-to-clean surface, the filter has a long life.
- \* Suitable for particles that tend to stick, such as wood dust, paint dust and the like.

#### > Antistatic Filter ;

- \* It provides safety against the risk of explosion by preventing static electricity charging.
- \* It is especially preferred in environments where aluminum dust, plastic dust and flammable particles are present.
- \* Recommended for ATEX compliant processes.

Mobile cartridge filter dust and smoke extraction units offer customizable solutions for a wide range of industries, not only with their portable and flexible structure but also with their various filter options.

|                                    | MTK-3K                              | MCK-3K                              |
|------------------------------------|-------------------------------------|-------------------------------------|
| Fan Motor Power                    | 1,5 kW                              | 2,2 kW                              |
| Mains Voltage                      | 220V                                | 220V                                |
| Air Flow (Maximum)                 | 2.150 m³/h                          | 3.000 m³/h                          |
| Air Flow (Intake)                  | 1.250 m³/h                          | 2.500 m³/h                          |
| 1. Filter                          | Kıvılcım önleyici yıkanabilir metal | Kıvılcım önleyici yıkanabilir metal |
| 2. Filter                          | Kartuş filtre                       | Kartuş filtre                       |
| Extraction arm                     | 1 x Ø160 mm                         | 2 x Ø160 mm                         |
| Casing                             | Elektrostatik toz boyalı DKP sac    | Elektrostatik toz boyalı DKP sac    |
| Sound level                        | 69 dbA                              | 71 dbA                              |
| Unit Dimensions (WxLxH)            | 670 x 810 x 910 mm                  | 800 x 1040 x 950 mm                 |
| Unit Weight (excluding Acrobat A1) | 80 Kg                               | 120 Kg                              |

## ECOT Series Mobile Dust/Sawdust Collection Units

and efficient collection of chip, dust, and light particles.

### High Suction Performance

Its powerful fan and motor structure allows it to extract chips and dust with high efficiency, while its compact wheeled chassis makes it easy to transport within the workshop or on the production line.

### Clean and Safe Working Environment

The bag filter, which provides a large filtering surface and high filtration efficiency, improves air quality and contributes to meeting occupational safety standards.

### Easy Maintenance and Fast Emptying

The sawdust collection bag or hopper can be easily emptied, allowing maintenance and cleaning processes to be completed in a minimum amount of time.

### With Optional Extraction Arm

An optional acrobat suction arm can be added. This provides more flexible and targeted suction in the work area. The acrobat arm allows for easy capture of dust and sawdust from various points, increasing operator comfort and suction efficiency. The adjustable arm structure ensures effective suction even in narrow or hard-to-reach areas.



### Flexible Use Opportunity

Optional acrobat suction arms and hose connections of different diameters allow for flexible use by creating single or multiple suction points.

### Cyclone Model Option

The optional cyclone separator model separates sawdust and large particles before they reach the fan and filter. This prolongs the time it takes for the filters to clog, maintains consistent suction performance, and significantly reduces maintenance intervals. Cyclone models are an ideal solution for CNC machines and carpentry shops, particularly those with high chip output.



Siklonlu Model

|                 | ECOT-1500                       | ECOT-2000S (Siklonlu)           |
|-----------------|---------------------------------|---------------------------------|
| Motor Power     | 1,5 kW (380V)                   | 2,2 kW (380V)                   |
| Air Flow        | 1.500 m³/h                      | 2.000 m³/h                      |
| 1. Filter       | Polyester Felt Bag Filter       | Polyester Felt Bag Filter       |
| 2. Filter       | PVC Coated Polyester            | PVC Kaplı Polyester             |
| Intake Ports    | ø70 mm & ø100 mm                | ø100 mm                         |
| Casing          | Electrostatic powder coated DKP | Electrostatic powder coated DKP |
| Sound Level     | 72 dbA                          | 72 dbA                          |
| Unit Dimensions | 700 x 1000 x 1600 mm            | 700 x 1250 x 1600 mm            |
| Unit Weight     | 85 kg                           | 100 kg                          |

## Central & Mobile System Dust Collector Units



### High Efficiency Dust Collection Solutions

Designed to improve air quality, enhance occupational safety, and protect production lines in industrial facilities, our dust collection units are an essential part of modern production processes. Their powerful suction capacity and optimized airflow design effectively capture even the finest dust particles, creating a healthier and safer work environment.

### Jet Pulse Cleaning Technology

The jet pulse filter cleaning system in our units prevents filter clogging, ensuring long-term, uninterrupted operation. The dust layer on the filter surface is automatically cleaned with compressed air pulses, thus maintaining filter performance at its highest level and significantly extending maintenance intervals.

### Different Filter Options

With cartridge filter, bag filter, and HEPA filter options available for various processes, the unit offers customized solutions for every application. Optional antistatic, high-temperature-resistant, or oil mist-absorbing filter options allow for safe use even in the most challenging industrial environments.

### Wide Range of Uses

They can be used in many industries, including metalworking, welding fume extraction, swarf extraction, plastics, chemicals, food, and pharmaceuticals. Designed in various capacities and sizes as both centralized systems and mobile units, these systems offer a wide range of solutions, from small workshops to large production facilities.

### Durable and Long-Lasting Design

Its industrial-grade steel body, easy maintenance, and modular structure ensure trouble-free operation for many years. Designed with energy efficiency in mind, the fan and motor systems provide maximum performance with minimal energy consumption.

### System Integration and Automation

Dust collection units can be easily integrated into existing production lines. The PLC-controlled jet pulse system monitors the filter contamination level using differential pressure sensors and optimizes energy consumption by cleaning only when necessary.



## Central & Mobile System **Dust Collector Units**

### Environmental Compliance and Sustainability

Modern dust collection systems make collected dust easily recyclable, in compliance with waste regulations. In some processes, recycling collected dust into production reduces raw material costs and supports zero-waste policies.

### Ease of Maintenance and Operation

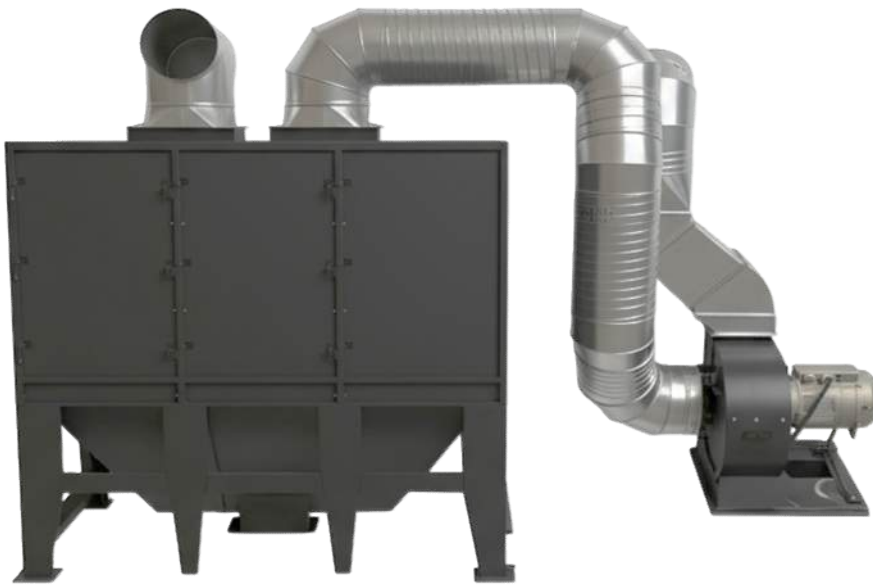
Compact design, easy-to-open covers, quick filter changes, and a pulse jet cleaning system minimize maintenance time. This minimizes planned maintenance downtime and prevents production loss.

### Occupational Health and Safety Perspective

Dust collection units directly impact not only production quality but also the health of employees. By reducing respirable dust concentrations in the environment, they contribute to the prevention of occupational diseases (silica exposure, respiratory illnesses, etc.). This eliminates the risk of workplace accidents and penalties that may arise from legal non-compliance.

### Flexible and Scalable Solutions

Whether it's a local connection to a single machine or a central dust collection line for the entire facility... Because the systems have a modular structure, they can easily adapt to capacity increases, line changes, or new machine additions.



### Advanced Filter Options

Different filter technologies can be chosen depending on the application requirements:

- > **PTFE-Coated Cartridge Filters:** Ideal for high dust loads and fine particles, providing low pressure drop.
- > **Bag Filter Systems:** Advantageous for capturing larger and more cohesive dust.
- > **HEPA Filters:** Up to 99.99% efficiency for areas requiring high sensitivity, such as clean rooms or the food/pharmaceutical industry.
- > **Antistatic Filters:** Provide safe operation in combustible dust environments, complying with ATEX standards.

## Central & Mobile System **Dust Collector Units**



### Mobile Dust Collector Units

In some industrial facilities, it may not always be possible to install a fixed dust collection line. In this regard, mobile dust collection units stand out with their flexible use and easy-to-carry structure. Designed for a limited capacity, these units offer a practical solution when a local connection to a single machine is required or in facilities with constantly changing production lines. Thanks to their compact body, high suction power, and wheeled chassis, they can be easily moved within the production area and positioned wherever needed.

### Compact Design – Maximum Efficiency

Mobile dust collection units offer significantly higher filtration performance than expected with their powerful fans and optimized filter surfaces. Equipped with a pulse jet filter cleaning system, these units provide consistent suction performance even during extended periods of use. Their compact design allows them to be easily positioned in workshops and production areas, taking up minimal space.

### Different Capacity Options

Mobile units are generally manufactured to provide air flow rates between 1,500 m<sup>3</sup>/h and 3,000 m<sup>3</sup>/h. This capacity range is ideal for dust and fume extraction when connected to a single machine or a small production cell. While centralized systems are preferred for applications requiring larger air flow rates, mobile units provide an economical and practical solution for smaller operations.

### Portability and Practical Use

The wheeled and braked chassis design allows the unit to be safely transported within the production area. Flexible hose connections and an easy-to-open filter cover allow the unit to be quickly moved and reactivated between different machines. Electrical connections are typically made via a plug-and-socket system, eliminating the need for additional installation by the operator.

### Energy Efficiency and Environmental Benefits

Mobile units optimize energy consumption because they are operated only when needed. This reduces both operating costs and environmental impact. The chambers where the filtered dust is collected can be easily emptied, and in some processes, the collected dust can be recycled.

## Central & Mobile System **Dust Collector Units**

### Mobile Dust Collector Unit

### Central Dust Collector Unit

|                           |                                                                                                                                            |                                                                                                                          |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Capacity</b>           | It typically provides air flow rates between 1,500 and 3,000 m <sup>3</sup> /h. It is suitable for small and medium-sized dust extraction. | It can range from 3,000 m <sup>3</sup> /h to 25,000 m <sup>3</sup> /h and above. It is ideal for large-scale facilities. |
| <b>Portability</b>        | It can be easily moved with its wheeled chassis and taken to wherever it is needed.                                                        | Requires fixed installation and is difficult to transport.                                                               |
| <b>Installation</b>       | It is activated with a ready-made plug-and-socket connection, and installation time is very short.                                         | It requires piping and infrastructure work, and installation time is long.                                               |
| <b>Flexibility</b>        | It can be quickly moved between different machines and easily repositioned as production patterns change.                                  | It is designed according to a fixed facility layout, and making changes is costly.                                       |
| <b>Filter Cleaning</b>    | It comes with jet pulse or manual cleaning options, and the filter is easy to change.                                                      | Jet pulse automatic cleaning is standard, and the filter life is generally longer.                                       |
| <b>Energy Consumption</b> | It is operated only when needed, saving energy.                                                                                            | It operates continuously, and energy consumption can be optimized with a frequency inverter.                             |
| <b>Investment Cost</b>    | The initial investment cost is low, making it an economical solution for small businesses.                                                 | It has a high initial cost, but provides low operating costs in the long run.                                            |
| <b>Maintenance</b>        | Easily accessible filter and dust container, enabling quick maintenance.                                                                   | It requires less maintenance, but maintenance can be more complex.                                                       |
| <b>Usage Area</b>         | Machines requiring local suction, laboratories, workshops, temporary production lines.                                                     | Large-scale production facilities, fixed production lines, and numerous suction points.                                  |



## **MST Series Mobile Shaking Dust Collector Unit**

Manual-shaking models are available to ensure long-term filter use without clogging. The shaking system easily removes dust adhering to the filter surface, extending the filter's lifespan and ensuring the machine operates at consistently high performance.

### **Areas of Use**

- > Woodworking workshops
- > Welding and grinding stations where metal powders are present.
- > Laboratory and small production facilities
- > Sensitive dust collection applications in the chemical and pharmaceutical industry

### **Advantages**

- > Compact size, easy carrying and practical use
- > Safe working environment with high filtration efficiency
- > Quiet and energy-saving motor structure
- > Long life and low maintenance cost with shake filter system



### **Contribution to the Areas of Use**

The shaker filter system is extremely advantageous in environments with high dust content, such as wood shavings, metal dust, and fine particles from grinding and polishing processes. This feature saves operators time and provides more reliable and uninterrupted dust control.

Mini mobile dust filtration units are an ideal option for businesses seeking small-volume yet effective solutions. Both economical and technically efficient, these systems make dust control on the production floor simple and reliable.



### **TEKNİK DETAYLAR**

|                         |                                       |
|-------------------------|---------------------------------------|
| Fan Motor Power         | 1,0 kW - 2650 rpm                     |
| Mains Voltage           | 220 V                                 |
| Air Flow Rate (Maximum) | 800 m³/h                              |
| Filter Material         | %100 Polyester Felt Filter            |
| Filter Surface Area     | 20 m²                                 |
| Suction Mouth           | ø100 mm                               |
| Casing                  | Electrostatic powder coated DKP sheet |
| Unit Dimensions (LxWxH) | 670 x 620 x 1250 mm                   |

## Minimob-T Series Mobile Dust Collector Unit

The Mini series dust collection unit, with its compact design and minimal dimensions, allows for the filtering and disposal of materials such as sawdust, dust, etc. generated during low-intensity production.

It provides high-performance and ease of use with its high-emission radial fan and polyester filter.

The container located at the bottom of the unit allows for the collection and easy cleaning of materials such as sawdust, dust, etc.

This compact mini dust collection unit features a filter fill warning system that indicates when the filter has reached its maximum fill level and needs to be cleaned.

Thanks to the braked casters, the unit can be operated in a fixed position and moved to the desired work area.



### Compact and Mobile Design

Mini mobile dust collectors can be easily positioned in workshops and narrow production areas. Their wheeled design allows for quick transport to different locations, allowing for use at multiple workstations with a single device.

### Optional Suction Connection Ports

It can be equipped with optional suction ports to adapt to different applications. In addition to standard single-inlet models, multiple suction port options are also available depending on need. This allows the same unit to simultaneously extract dust from multiple points, providing a wider range of applications.



### TEKNİK DETAYLAR

|                         |                                 |
|-------------------------|---------------------------------|
| Fan Motor Power         | 0,50 kW - 2650 rpm              |
| Mains Voltage           | 220 V                           |
| Air Flow Rate (Maximum) | 600 m³/h                        |
| Filter Material         | %100 Polyester Felt Filter      |
| Suction Mouth           | ø100 mm                         |
| Casing                  | Electrostatic powder coated DKP |
| Unit Dimensions (LxWxH) | 485 x 750 x 550 mm              |

## AKL Series Laboratory Type Suction Arms

Safely removing gases, fumes, vapors, and harmful particles generated during experimental studies, analyses, and production processes in laboratory environments is critical for both employee health and environmental safety. Laboratory-type extraction arms, specifically designed for this need, offer an effective local extraction solution with their high-performance, flexible, and ergonomic structures.

Made of anodized aluminum tubing and PP (polypropylene) joints.



It is easy to use and lightweight, and it is a good solution for protecting human health in many areas, especially in areas where movement is limited and visual quality is important.

### Structural Features;

- \* **Aluminum Tube Body:** Made of durable, lightweight, and long-lasting aluminum material. It provides high resistance to both corrosion and deformation.
- \* **Transparent Composite Hood:** Can be equipped with three different sizes of suction heads depending on the area of use. Its transparency increases visibility of the work area.
- \* **Articulated Structure:** Thanks to multi-point joints, the arm can be easily adjusted and fixed to the desired position.
- \* **360° Movement Ability:** Provides maximum flexibility within the work area, allowing for suction at different points.



### Areas of Use:

- \* **Chemistry Laboratories:** Removal of harmful gases and vapors released from chemical reactions.
- \* **Pharmacy and the Pharmaceutical Industry:** Providing a healthy environment for dust and particle-based work.
- \* **Education and Research Institutions:** Creating a safe experimental environment in application laboratories at universities and research centers.
- \* **Food and Biotechnology Laboratories:** Effective absorption of organic vapors, fumes, and odors.



## AKL Series Laboratory Type Suction Arms

Laboratory-grade aluminum suction arms are the ideal localized suction solution for laboratory environments where worker safety, hygiene, and efficiency are paramount. Their light weight, durability, and flexible use ensure maximum safety and comfort during scientific work.

### Advantages;

- \* **Ergonomic Use:** Its lightweight design makes it easy for users to maneuver.
- \* **Hygiene and Safety:** Designed to meet high cleaning standards, aluminum surfaces can be easily disinfected.
- \* **Aesthetic Appearance:** Provides visual integrity with a modern and compact design that fits the laboratory environment.

It is manufactured as standard with a diameter of Ø70 mm and a length of 1500 mm, but can also be manufactured as 700 and 1000 mm upon request.



### \* User-Friendly Design

The arm structure is lightweight yet sturdy, allowing users to easily position it with one hand. The joints' friction balance is optimally adjusted, ensuring the arms remain fixed in the desired position. The operator experiences no discomfort due to arm movement during operation.

### \* Low Operating Costs

Thanks to its durable structure, it requires no maintenance for many years;  
The materials used and the joint system are resistant to deformation. This keeps costs to a minimum and contributes to the operating budget.

### \* High Safety Standard

The aluminum material used is safe from sparks, excessive heat, or chemical reactions. Its chemical-resistant structure ensures long-term and reliable use. This feature is particularly advantageous when working with volatile and flammable gases.

### \* Ergonomic and Aesthetic Appearance

In laboratory environments, not only performance but also visual harmony is important. Its slim tubular structure, aesthetic form, and modern aluminum appearance make it a stylish addition to any environment.



## AKL Series Laboratory Type Suction Arms

### Flexible Use with 3 Different Mounting Options

Laboratory-grade aluminum extraction arms are available in three different mounting options to suit different workspaces and user needs. This allows for the most suitable solution for each laboratory's physical conditions to be easily implemented.

#### 1 - Wall Mounting;

- > This is done by securing the suction arm to the wall.
- > Ideal for workstations located at the edge of workbenches.
- > It doesn't take up extra space on the desk and keeps the work area tidy.
- > This is the most commonly used mounting type for medium and long-length suction arms.



#### 2 - Ceiling Mounting ;

- > The suction arm is mounted by hanging it from the ceiling using a specially designed aluminum bracket.
- > It provides complete freedom of desktop space.
- > It is suitable for workstations in large laboratories or in the center of desks.
- > Its 360° rotating structure covers a large area and allows for versatile work.



#### 3 - Table Mounting;

- > This method involves securing the suction arm directly to the workbench.
- > It is particularly ideal for individual test benches or compact laboratory spaces.
- > It provides maximum suction efficiency by offering the shortest connection distance.
- > It is widely preferred in educational laboratories and small-scale applications.



Wall, ceiling, and table mounting options allow for efficient use of workspace in laboratories. Users can create a suction system that is both safe and ergonomic by selecting the most appropriate mounting method based on their needs and the physical structure of the environment.

*Single-sided adjustment lever for comfortable positioning*

## AKL Series Laboratory Type Local Suction Arms

### Technical Data

| Feature                             | Description                                                                                                                                                                                                      |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type                                | Laboratory-type local extraction arm                                                                                                                                                                             |
| Pipe Outer Diameter                 | 70 mm                                                                                                                                                                                                            |
| Pipe Inner Diameter                 | 67 mm                                                                                                                                                                                                            |
| Total Length                        | 1,50 mt                                                                                                                                                                                                          |
| Material                            | Pipe; Anodized aluminum<br>Elbow; Polypropylene with seal<br>Hood; Transparent composite                                                                                                                         |
| Weight (excluding mounting bracket) | 2,00 Kg                                                                                                                                                                                                          |
| Recommended Fan Capacity            | Minimum flow rate 250–300 m <sup>3</sup> /h                                                                                                                                                                      |
| Joint/Equipment Type                | 3-degree joint; 360° swivel arm connection; Stainless spring balancing                                                                                                                                           |
| Maximum Service Temperature         | ≤ 80°C recommended for continuous use                                                                                                                                                                            |
| Corrosion Resistance                | Aluminum has inherent corrosion resistance; if aggressive chemicals are present, a suitable coating is recommended.                                                                                              |
| Warranty                            | 12–24 months against manufacturing defects (depending on conditions)                                                                                                                                             |
| Application Note                    | Measured flow rates should be recalculated based on fan duct, joints, hose resistance, and filter drop<br>Quiet, low-vibration joints and smooth movement (balancing) are preferred for laboratory applications. |
| Maintenance                         | Periodic visual inspection (3–6 months), checking of seals                                                                                                                                                       |

## AKS Series High Vacuum Industrial Vacuum Cleaner



### Maximum Performance in the Most Difficult Conditions

The high-vacuum industrial vacuum cleaner is a powerful and durable solution designed for heavy-duty industrial cleaning needs. It provides safe and rapid collection of swarf, dust, and even heavy particles in the metalworking, food, chemical, automotive, and energy sectors.

#### Main Features;

- \* **High Vacuum Power:** Thanks to its powerful industrial fan and high vacuum capacity, it easily sucks up even the heaviest particles.
- \* **Durable Body:** Impact-resistant steel or optional stainless steel body suitable for industrial conditions.
- \* **Continuous Operation:** Designed for 24/7 operation.
- \* **Filtration System:** Minimizes the release of dust and particles with a specially designed high-efficiency polyester felt filter.
- \* **Versatile Use:** Capable of collecting dust, sawdust, and granular materials in the same system.

### TECHNICAL DETAILS

|                          |                                              |
|--------------------------|----------------------------------------------|
| Motor Power              | 3,0 kW (Optional olarak 5,5 kW ve 7,5 kW)    |
| Mains Voltage            | 380 V                                        |
| Vacuum Capacity          | 320 m <sup>3</sup> /h - 270 mbar             |
| Tank Volume              | 100 Lt                                       |
| Hose                     | ø70 mm , L: 5,0 mt                           |
| Filter                   | 1 µ - 26000 cm <sup>2</sup> Polyester Filter |
| Filter Cylinder Diameter | ø460 mm                                      |
| Casing                   | Electrostatic powder coated DKP sheet metal  |
| Sound Level              | 72 db (A)                                    |
| Unit Dimensions (WxLxH)  | 700 x 1250 x 1500 mm                         |
| Unit Weight              | 120 Kg                                       |



## **AKS Series High Vacuum Industrial Vacuum Cleaner**

High-vacuum industrial vacuum cleaners are used in industrial facilities to clean machinery, equipment, and idle parts (dust, burrs, etc.) generated during production.

They clean machinery and equipment and provide a clean environment for workers in the production area

Thanks to their high suction power, they are ergonomically designed to meet cleaning needs in various areas of industrial facilities.

They ensure efficient operation of machinery for many years.

This powerful system maximizes cleanliness, safety, and efficiency in your production areas. Thanks to blower technology, they provide continuous and stable vacuum power, minimize maintenance costs, and provide a long-lasting solution.



### **Durable and Long-Lasting Structure**

The device's body is manufactured from durable materials suitable for industrial use. It offers maximum resistance to impact, te ensure both long-lasting use and hygienic cleaning.

### **Easy to Use and Mobility**

Its ergonomic design makes it user-friendly. Its mobile chassis and sturdy wheels allow for easy movement in challenging industrial environments. Its large hopper capacity ensures uninterrupted operation, while its rapid discharge systems minimize maintenance time.

## Oil Mist Filtration Units



### Clean Air, Safe Working Environment

Metalworking equipment such as CNC lathes, lathes, and milling machines release large amounts of oil vapor and fumes during the use of coolants. Over time, these vapors accumulate inside the machine, shortening the life of the equipment and negatively impacting operator health by reducing the quality of air in the work environment. Oil vapor extraction units capture and filter these harmful vapors at their source, providing clean air for the environment, creating a safer, healthier, and more efficient production environment.

### Multi-Stage Filtration Technology

Oil mist units effectively capture vapor, smoke, and liquid particles with their high-efficiency, multi-stage filter structure. A pre-filter separates large particles and liquid droplets, while a second-stage metal mesh filter collects finer particles. In the final stage, high-efficiency HEPA or similar filters capture even the smallest vapor particles with up to 99% efficiency. This ensures clean and safe air returns to the unit outlet.

### TECHNICAL DETAILS

|                |                                                            |
|----------------|------------------------------------------------------------|
| Capacity Range | Between 3,000 m <sup>3</sup> /h - 25,000 m <sup>3</sup> /h |
| 1. Filter      | Droplet eliminator                                         |
| 2. Filter      | 100% Polyester felt filter                                 |
| 3. Filter      | Cylindrical Hydrophobic oil trap filter                    |
| 4. Filter      | Hepa filter (Optional)                                     |
| Casing         | Electrostatic powder coated DKP sheet metal                |



## ClearMist Oil Mist Filtration Unit (Cutting Oil & Boron Oil)

Oil mist generated in industrial production environments poses serious risks to both employee health and machine performance. Fine oil particles produced in CNC lathes, metalworking machines, and plastic injection molding machines can harm the respiratory tract when inhaled, and when accumulated on machine surfaces, they can lead to corrosion, malfunctions, and loss of efficiency.

This is where the **CLEARMIST** Oil Mist Filtration Unit comes in. Specially developed to meet the needs of modern production facilities, its powerful motor, multi-stage filtration system, and compact design ensure both high performance and long-term benefits for businesses.

Its compact and ergonomic design doesn't take up much space in the production area. Its low energy consumption also offers businesses an economic advantage. Furthermore, its quiet operation eliminates any additional noise from the factory.

CLEARMIST is not just a filtering device; it is also a solution that improves production quality, contributes to occupational safety, and reduces maintenance costs.

The unit's two-stage special filter captures even the smallest oil particles, making the work a healthier environment for employees and extends the life of production machinery.



5



### Areas of use:

- ☒ CNC Machines
- ☒ Metalworking Machines
- ☒ Plastic Injection Molding Machines
- ☒ Oil Machining Processes



The unit is designed with a highly efficient fan-motor system, providing constant air flow with low energy consumption. Its aerodynamic airflow structure minimizes pressure loss in the system, ensuring consistent performance even during long-term operation.

## ClearMist Oil Mist Filtration Unit (Cutting Oil & Boron Oil)



Cutting fluids and oils used in industrial manufacturing processes evaporate during high-speed machining and become airborne. The resulting oil mist and aerosols contain particles as small as 0.1 microns. These particles pose critical risks to both employee health and machine performance.

The **CLEARMIST** Oil Mist Filtration Unit offers an engineering-based solution to these problems. The device is designed using the multi-stage filtration principle.

This effectively captures both visible oil vapor and harmful particles that cannot be detected by the naked eye.

Thanks to these engineering solutions, CLEARMIST not only provides air purification, but also:

- ✓ Increases operational safety in the production area,
- ✓ Extends machine life and reduces maintenance costs,
- ✓ Maintains process efficiency.

The compact design and modular filter structure allow for easy integration into the production area. Filter maintenance and replacement processes are simple, minimizing downtime.

As a result, the CLEARMIST Oil Mist Filtration Unit offers a reliable, efficient, and sustainable filtration solution in industrial facilities.



Optional High-Precision Filter  
(Recommended for cutting oil filtration)



The filtering unit condenses the absorbed oil vapor into liquid using a special filtration system. The condensed oil is then discharged through an integrated drain line. This extends the life of the filters, reduces maintenance requirements, and ensures uninterrupted system operation.

## ClearMist Oil Mist Filtration Unit (Cutting Oil & Boron Oil)

### Side Mounted Model – Flexible Installation, Maximum Efficiency

The layout and airflow direction of each machine in production areas are different. Therefore, the installation location of the filtration unit is also crucial for efficiency. The side-mounted oil mist extraction unit, developed to meet this need, easily adapts to different machine layouts thanks to its flexible connection structure.

The device's air inlet is positioned on the side of the body. This design offers a significant advantage, especially in production lines with limited space above the counter. Airflow is directed directly toward the suction with a shorter line length, reducing pressure losses and increasing filtration efficiency.

#### Main advantages of the side-mounted model:

- > Easy installation in limited spaces
- > Higher suction efficiency with shorter ductwork
- > Flexible orientation – right or left connection options
- > Easy maintenance access and service advantages
- > Compact design takes up minimal space



In oil mist filtration units, the connection direction is an important criterion for system layout and suction performance. Choosing the correct connection type based on the physical conditions of the production site ensures both ease of installation and filtration efficiency.

As a result, both models offer the same high filtration efficiency and reliable performance.

When making a selection, the layout of the production area, the length of the duct line, and the installation area should be taken into consideration:

> For areas with high ceilings and vertical installation possibilities;

→ Top-mounted model

> For areas with limited overhead space, near walls, or in compact production areas;

→ Side-mounted model



## ClearMist Oil Mist Filtration Unit (Cutting Oil & Boron Oil)

### Working Principle

#### 1- Dirty Air Suction

- > The oil vapor and air mixture is sucked in from the bottom or side inlet of the unit.
- > Thanks to the high vacuum power, all oily mist inside the machine cabin is directed to the suction line.

#### 2- Filtration

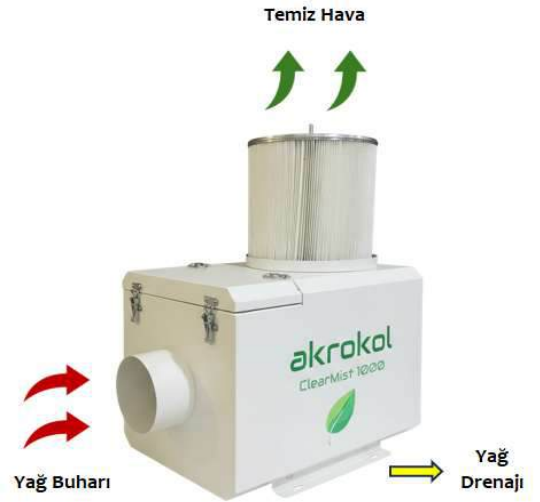
- > Large droplets and dense particles in the air are captured in the filters.
- > > Oil droplets combine in the filters and form larger droplets.
- > These droplets filter downward and are collected within the unit body.
- > Filtration up to 99.97% can be achieved by adding an optional High-Precision Filter.

#### 3- Oil Mist Drainage

- > The collected oil is collected in a special chamber within the unit.
- > It can be automatically or manually removed through the drain line and recycled back into the system.

#### 4- Clean Air Outlet

- > Air passing through the filters is released into the atmosphere, free of residual oil particles.
- > In this way, the working environment becomes clean, healthy and safe.



### Contributions to Employee Health and the Environment

- > Preventing respiratory illnesses
- > Reducing the risk of slippery floors
- > Improving indoor air quality
- > Preventing oil vapor release into the environment

## ClearMist 800

## ClearMist 1000

|                    |                                                   |                                                   |
|--------------------|---------------------------------------------------|---------------------------------------------------|
| Fan Motor Power    | 0,50 kW                                           | 1,00 kW                                           |
| Mains Voltage      | 380 V                                             | 380 V                                             |
| Air Flow           | 800 m³/h                                          | 1.000 m³/h                                        |
| Filter             | G4 Fiber + Polyurethane + Hydrophobic Cartridge * | G4 Fiber + Polyurethane + Hydrophobic Cartridge * |
| Casing             | Electrostatic Powder Coated DKP                   | Electrostatic Powder Coated DKP                   |
| Dimensions (ø x h) | ø400 x x 540 mm **                                | ø400 x x 540 mm **                                |
| Weight             | 30 kg                                             | 32 kg                                             |

\* It is optional and provided upon request.

\*\* It is the height measurement of the unit excluding the cartridge filter.

**ITC MÜHENDİSLİK TAAHHÜT ENDÜSTRİYEL SAN. ve TİC. LTD. ŞTİ.**  
Osmangazi Mah. Ayasofya Cad. No: 49 Esenyurt - İstanbul / TÜRKİYE  
Tel: +90 212 671 70 97 - 98  
itc@itcmuhendislik.com - info@akrokol.com

*\* Firmamız her türlü değişiklik yapma hakkını saklı tutar.*