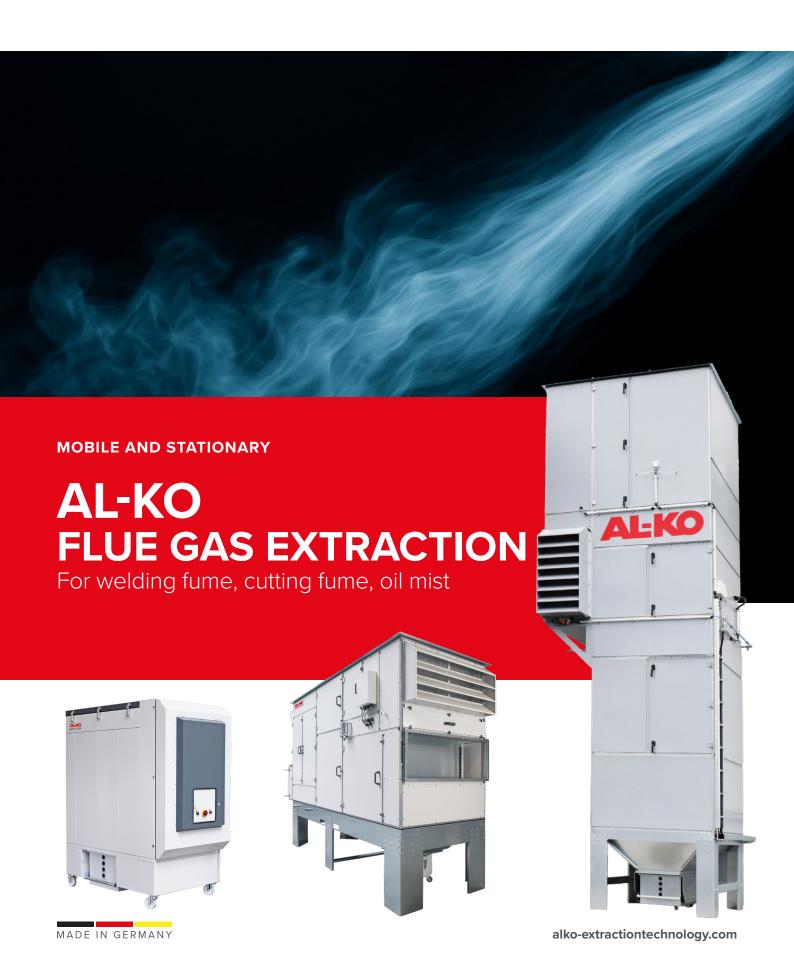
# **EXTRACTION TECHNOLOGY**





# WELDING FUME FILTER CLEAN UNIT F

Mobile welding fume filters with cartridge filters for extraction during welding and/or low-alloy steels.

### **Options**

- Patented dust compartment for dust-free emptying of container
- Frequency inverter for energy-efficient operation
- Various filter materials
- Noise-dampening hood and exhaust hoods
- Post-filters H13 and H14
- Pre-separator chamber, spark trap, extinguishing devices
- Extensive accessories



Тур	F 50-2.2	F 60-3.0	F 100-7.5	F 120-7.5
Device type	197 414	197 415	197 416	197 417
Suction Nozzle Ø	160 mm	200 mm	250 mm	300 mm
Motor rating	2.2 kW	3.0 kW	7.5 kW	7.5 kW
Supply voltage	400 V / 50 Hz			
Airflow	2,200 m <sup>3</sup> /h	3,200 m <sup>3</sup> /h	5,000 m <sup>3</sup> /h	6,000 m <sup>3</sup> /h
Vacuum	2,800 Pa	3,200 Pa	3,800 Pa	4,000 Pa
Filter area	50 m <sup>2</sup>	60 m <sup>2</sup>	100 m <sup>2</sup>	120 m <sup>2</sup>
Chip collection volume	150 L	150 L	150 L	150 L
Sound pressure level	70 dB (A)	72 dB (A)	72 dB (A)	72 dB (A)
Dimensions (W/D/H) in mm	1,670×1,106×2,075	1,660×1,106×2,075	1,910×1,106×2,075	1,915x1,106x2,075
Weight	450 kg	466 kg	612 kg	621 kg

#### **Application areas**

- Single and multi-station extraction
- Direct extraction at machines and workplaces
- Grinding, deburring, sawing, filling, and much more

## Suitable for

- Welding fume during welding of unalloyed/low-alloy steels
- Continuous operation

## **Features**

 Integrated pre-separation chamber with non-return flap

- High extraction power
- Long filter life
- Quiet and energy-efficient



AL-KO CLEAN AIR DUST COLLECTOR CLEAN UNIT F W3

Mobile welding fume filters with cartridge filters for extraction during welding of high-alloy steels and recirculation of the cleaned air back into the workspace.

### **Options**

- Patented dust compartment for dust-free emptying of container
- Frequency inverter for energy-efficient operation
- Various filter materials
- Noise-dampening hood and exhaust hoods
- Post-filters H13 and H14
- Pre-separator chamber, spark trap, extinguishing devices
- Extensive accessories



Тур	F 50-2.2W3*	F 60-3.0W3*	F 100-7.5W3*	F 120-7.5W3*
Device type	197 418	197 419	197 420	197 421
Suction Nozzle Ø	160 mm	200 mm	250 mm	300 mm
Motor rating	2.2 kW	3.0 kW	7.5 kW	7.5 kW
Supply voltage	400 V / 50 Hz			
Airflow	2,200 m <sup>3</sup> /h	3,200 m <sup>3</sup> /h	5,000 m <sup>3</sup> /h	6,000 m <sup>3</sup> /h
Vacuum	2,800 Pa	3,200 Pa	3,800 Pa	4,000 Pa
Filter area	50 m <sup>2</sup>	60 m <sup>2</sup>	100 m <sup>2</sup>	120 m <sup>2</sup>
Chip collection volume	150 L	150 L	150 L	150 L
Sound pressure level	70 dB (A)	72 dB (A)	72 dB (A)	72 dB (A)
Dimensions (W/D/H) in mm	1,660x1,106x2,075	1,650x1,106x2,075	1,910x1,106x2,075	1,915x1,106x2,075
Weight	450 kg	466 kg	612 kg	621 kg

#### **Application areas**

- Single and multi-station extraction
- Manual and automated welding
- Extraction at hoods, extraction arms, and cabins

#### Suitable for

 Extraction of flue gases during welding of high-alloy steels with air recirculation into the workspace

### **Features**

 Integrated pre-separation chamber with non-return flap-Filter cartridges with jet-pulse cleaning system





- Energy savings through recirculation operation
- No mandatory measurements to prove compliance with MAK values
- Low operating costs



## AL-KO STATIONARY EXTRACTION SYSTEMS FLEX UNIT F

Mobile welding fume filters with cartridge filters for extraction during welding of high-alloy steels and recirculation of the cleaned air back into the workspace. Modular extraction systems with cartridge filters for extraction of flue gases during welding, separating, and cutting. Standard systems available in 4 performance sizes. Customizable for air volume flows up to 150,000 m<sup>3</sup>/h.

#### **Options**

- Individually plant planning for air flow rates up to 150,000 m³/h
- Configuration for ST1 dusts
- Combination with AL-KO heat recovery
- Various filter materials
- Post-filters H13 and H14
- Complete solutions with capturing hoods, pipe system and installation



Тур	F 100-7.5	F 200-15	F 270-18.5	F 375-22
Device type	197 454	197 455	197 456	197 457
Suction Nozzle Ø	280 mm	400 mm	450 mm	560 mm
Motor rating	7.5 kW	15.0 kW	18.5 kW	22.0 kW
Supply voltage	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
Airflow	5,750 m <sup>3</sup> /h	10,600 m <sup>3</sup> /h	15,000 m <sup>3</sup> /h	20,000 m <sup>3</sup> /h
Vacuum	2,650 Pa	3,400 Pa	3,100 Pa	3,000 Pa
Filter area	100 m <sup>2</sup>	200 m <sup>2</sup>	270 m <sup>2</sup>	375 m <sup>2</sup>
Chip collection volume	160 L	160 L	160 L	2 x 160 L
Sound pressure level	65 dB (A)	67 dB (A)	65 dB (A)	66 dB (A)
Dimensions (W/D/H) in mm	1,110×1,723×3,423	1,606x1,606x4,493	1,736x1,736x5,181	2,730x1,736x5,487

#### **Application areas**

- Extraction during welding, cutting, and separating
- Plasma cutting, laser welding
- Single and multi-station extraction
- Direct extraction at extraction arms and hoods
- Hall extraction and spatial ventilation

## Suitable for

 Flue gases during welding, cutting, and separating of metal

#### **Features**

- Noise-dampening housing made of double walled AL-KO panels
- All system components integrated in the housing
- Additional sizes and custom solutions available upon request
- Complete solutions from consultation to installation and service

- High extraction power and optimal filtration
- Quiet and energy-efficient
- Compact design
- Short delivery times



# AL-KO EXTRACTION SYSTEMS WITH HEAT RECOVERY FLEX UNIT F ECO

AExtraction systems with cartridge filters and integrated heat recovery. For extraction of health-hazardous flue gases. Fresh air in the workspace with maximum energy efficiency and compact design.



## **Options**

- Various filter materials
- Heating and cooling coils
- Complete solutions with capturing hoods, pipe system and installation
- Larger air flow available on request

Тур	F ECO 150-7.5	F ECO 225-11	F ECO 300-15	F ECO 450-22	F ECO 450-22
Device type	197 450	197 451	197 452	197 453	196 007
Motor rating	7.5 kW	11.0 kW	2 x 7.5 kW	2 x 11.0 kW	2 x 15.0 kW
Rated motor power WRG	4.5 kW	4.5 kW	2 x 4.5 kW	2 x 4.5 kW	2 x 4.5 kW
Supply voltage	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
Airflow	5,200 m <sup>3</sup> /h	9,000 m <sup>3</sup> /h	10,400 m <sup>3</sup> /h	18,000 m <sup>3</sup> /h	18,000 m³/h
Vacuum	2,800 Pa	2,800 Pa	2,800 Pa	2,800 Pa	2,800 Pa
Filter area	150 m <sup>2</sup>	225 m <sup>2</sup>	300 m <sup>2</sup>	450 m <sup>2</sup>	450 m <sup>2</sup>
Sound pressure level	65 dB (A)	67 dB (A)	65 dB (A)	66 dB (A)	66 dB (A)
Dimensions (W/D/H) in mm	4,088x1,414x3,103	4,850x1,414x3,103	4,088x2,714x3,103	4,850x2,714x3,103	4,850x2,714x3,103

<sup>\*</sup> inclusive of filter and control unit

#### **Application areas**

- Single and multi-station extraction
- Processes and applications where health-hazardous dusts are generated
- Metalworking and metal processing
- Bulk material and recycling industry, and much more

### Suitable for

- Metal dust and chips
- Plastics and composites
- Bulk materials

### **Features**

 Extraction and filtration technology combined with efficient heat recovery

- Best air quality with maximum efficiency
- Quiet and compact
- Short installation time delivered fully assembled



# **OIL MIST SEPARATOR OIL-JET**

For efficient coolant and lubricant extraction directly at the machining tool.

## **Options**

- Pressure gauge for monitoring the filter resistance
- Potentiometer for adjusting the suction power
- H 13 post filter instead of the regular main filter stage
- Stand column
- 400 V connection voltage
- Oil-resistant suction hose



Тур	OIL JET 600	OIL JET 1200	
Device type	197 354	197 355	
Suction Nozzle Ø	150 mm	150 mm	
Motor rating	169 kW	500 kW	
Supply voltage	230 V / 50 Hz	230 V / 50 Hz	
Airflow	600 m <sup>3</sup> /h	1,200 m <sup>3</sup> /h	
CNC machining chamber volume	1 - 6 m <sup>3</sup>	4 - 8 m <sup>3</sup>	
Filtersystem	3-stage 1. Filter unit: Metal mesh 2. Filter unit: Filter mat (LoTex®) 3. Filter unit: Filter cassette (ePM1 80%)		
Sound pressure level	65 dB (A)	69 dB (A)	
Dimensions (W/D/H) in mm	625x500x580	685x500x580	
Weight	28 kg	33 kg	

All specifications are approximate. Subject to technical modifications and errors.

## **Application areas**

- Lathes
- Machine tools
- Chip-removing machines

#### Suitable for

all common coolants and lubricants

### **Features**

- for mounting on the machining tool
- 3-stage filtration system: 1. MetaL mesh
  - 2. Filter mat (LoTex®)
  - 3. Filter cassette (ePM1 80%)

- High separation efficiency through
- 3-stage filtration system
- energy-efficient EC motors
- tool-free filter replacement



# **AL-KO CLEAN UNIT F**

Extraction at a welding station





# **AL-KO CLEAN UNIT F with summer/winter switch**

Extraction at multiple welding stations with extraction arms and tables







# **AL-KO FLEX UNIT F ECO**

Extraction at multiple welding stations







# **AL-KO AIRTECH**

AL-KO Airtech is the specialist in the manufacturing and distribution of extraction and ventilation systems. Airtech includes AL-KO Extraction Technology and AL-KO Air **Technology**. These business units develop and produce customized air handling systems as well as a wide range of industrial extraction systems for various applications. What began in 1931 as a small village forge is now a global brand. Then and now, the brand promise "QUALITY FOR LIFE" stands for unique product and service quality.

# **AL-KO EXTRACTION TECHNOLOGY**

- Over 35 years of experience Competence & innovation in Extraction Technology
- ✓ Tested & certified highest safety and quality
- ▼ 5,000+ systems per year proven AL-KO quality in use
- ☑ Diverse solutions Standard devices & customized systems
- **⊘** Everything from a single source Planning, digital tools, control & service

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