

PRODUCT CATALOG EXTRACTION TECHNOLOGY

MOBILE AND STATIONARY EXTRACTION SYSTEMS





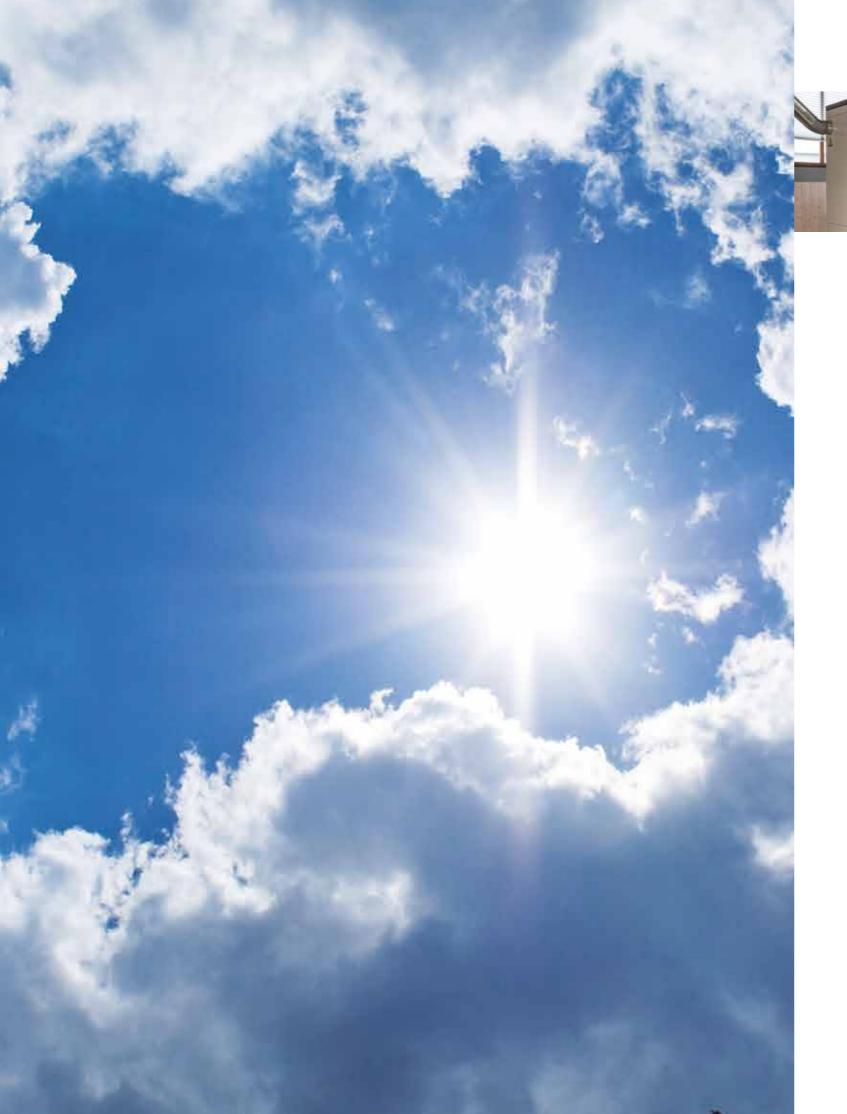














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AL-KO extraction systems are developed in the Bavarian Jettingen-Scheppach, tested under various operating conditions and manufactured at the Jettingen-Scheppach and Lutherstadt Wittenberg plants with loving attention to quality. This guarantees you are investing in a quality product which you will enjoy on a daily basis for years to come.











The Directors of AL-KO KOBER SE (from left to right): Dr. Christian Stehle (COO) and Peter Kaltenstadler (CEO)

LIFE IN PURSUIT OF QUALITY — FROM THE VILLAGE FORGE TO A GLOBAL CORPORATION

AL-KO KOBER SE was founded in 1931 by Alois Kober as a small metalworking shop in the Bavarian-Swabian town of Großkötz, near Günzburg.

The third generation to run this family business, it is still managed as per the founder's wishes: constantly striving for quality, innovation and carefully designed functionality.

AL-KO EXTRACTION TECHNOLOGY ENGINEERED AND MADE IN GERMANY

4 AL-KO 5

AL-KO EXTRACTION TECHNOLOGY — ENGINEERED AND MADE IN GERMANY

WHO IS AL-KO EXTRACTION TECHNOLOGY?

AL-KO Extraction Technology develops, produces and sells extraction units and extraction systems for diverse and constantly increasing areas of application in trade and industry.

The AL-KO Extraction Technology has developed a special filter technology for its extraction units and extraction systems, which offers decisive operating and maintenance cost savings compared to the conventional principle. A customer-oriented and individually the customer on site by providing advice and

adapted solution can be found for every extraction task together with the proven AL-KO modular system for extraction units.

AL-KO Extraction Technology sells its products in Germany and abroad exclusively through specialist dealers and professional partners. This has the advantage for the end customer that the direct enquiry is immediately forwarded to the responsible partner, who will then assist

practical help. AL-KO sales partners are regularly informed about products, techniques and regulations in order to be competent partners for their end consumer.

AL-KO Extraction Technology works closely with ministries, associations, trade bodies and trade supervisory/occupational safety offices on developing new technologies in order to comply with current regulations.

NOLOGY FROM AL-KO?

- I Surface-coated high-performance filters
- I Filter cleaning with compressed air (JET cleaning)
- Long filter service life and washability of the filters
- I Compact design (and therefore manoeuvrability and flexibility of the mobile extraction units)
- Low operating costs (energy efficiency)
- I Strong team in technology and service
- I Pure air dust extractors tested and certified by trade association
- I Drivers of innovation through variety of patented solutions
- I Wide product range from vacuum cleaner up to filter systems for many industries
- I Standardized systems and assemblies neverthless freely configurable

WHY FXTRACTION TECH- THE EXPERT PARTNER FOR EXTRACTION SYSTEMS

I Efficiency and occupational safety

These are topics that are of great importance in almost every company. The products from AL-KO Extraction Technology contribute to optimising precisely these points.

I Clean air for breathing and effective work

These are the principles according to which AL-KO filter systems are developed and built With the help of a specific filtration system, the AL-KO OPTI JET® process, AL-KO Extraction Technology has succeeded in generating clean air economically.

I Technical expertise

for high-quality filtration technologies which is input both into the mobile dust extractors and the stationary extraction units, helps to ensure that all dust and chips produced are collected quickly and correctly, disposed of. Individual solutions to problems are developed by our own design office, extraction units and systems are produced in series production and according to industrial standards.

I For our clients

AL-KO Extraction Technology's customers include the processing trade and industrial companies which produce dust and chips and would like to have them disposed of quickly and without problems. Many areas of application are covered. It goes without saying that AL-KO extraction units and extraction systems remove all the surplus materials that are created - welding fumes are also no problem.

Customer proximity

is a top priority at AL-KO Extraction Technology. Our products are sold in over 25 countries exclusively through specialist dealers (mobile extraction units) and professional partners (stationary extraction units). Customers thus have an AL-KO contact person on site who is always at their side with advice and practical help, backed up by AL-KO as a strong manufacturer.

MOBILE AND STATIONARY PRODUCT RANGE

| Mobile raw air equipment

- MOBIL 100 / 125 / 140 / 160 / 200 / AAS 1013 - 6013
- BAG

| Mobile pure air equipment

- POWER UNIT 100
- POWER UNIT 120
- POWER UNIT 140
- POWER UNIT 160
- POWER UNIT 200
- POWER UNIT 250
- POWER UNIT 300
- POWER UNIT 350 - POWER UNIT 350+
- I Industrial vacuum cleaner

- JET STREAM

| Sanding Tables

- AST 1.5 BASIC
- AST 1.0 PREMIUM
- AST 2.0 PREMIUM
- AST 3.0 PREMIUM

| Mobile paint mist extraction

- COLOUR JET 1
- COLOUR JET 2
- COLOUR JET 3
- COLOUR JET 4

| Stationary extraction units

- ECO JET, various types, air flow rates 3,500 - 22,000 m3/h
- PROFI JET, in the modular system, air flow rate 2,000 -m3/h

Manual workplace extraction

- TURBO JET 4
- TURBO JET 6
- TURBO JET 8

Discharge variants

- Waste container
- Rotary lock valves
- Briquette presses
- Push floor discharge
- Round discharge

Welding fume-/ dedusting system

- AL-KO FLEX UNIT
- AL-KO FLEX UNIT ECO
- AL-KO FLEX UNIT 15 50

FILTER APPLICATION POSSIBILITIES OF AL-KO FILTER TECHNOLOGY

1. The AL-KO filter material is suitable 2. In general, dust in dust explosion for the following applications:

- Wood
- Wood composites
- Plastics
- Paper
- Welding fumes
- I Lead and zinc smelter dedusting
- Aerated concrete demolition
- I Coking plant dedusting Sandblasting plants
- I Cement clinker plants and grinding plants

- class 1, i.e. up to a maximum K_{st}- value 200 bar m/s, can be extracted and filtered.
- The following products can therefore also be separated if the filter surface air load is appropriate:
- I Wood products, fibrous materials, composites (peat, pulp, cardboard, etc.)
- I Food, luxury foodstuffs, animal feed (brewer's yeast, powdered egg, meat meal, etc.)
- I Coal, coal powder
- I Natural products (leather, herbs, fertilizers, sugar, etc.)
- Plastics, resins, rubber (epoxy resin powder)
- I Pharmaceuticals, cosmetics (dandelion, lemon balm powder, etc.)

- Intermediates, auxiliaries (cellulose, citric acid, desulphurization agents, etc.)
- I Technical products (dyes, fillers, metal powder except aluminium dust, magnesium dust, etc.)
- I Inorganic products (graphite, soot, coke, sinter dust, etc.)
- Metal chips (aluminium chips, steel chips, etc.)

In this case, special materials (e.g. slate powder, quartz, trass powder, etc.) must applied to the AL-KO filter material before it is exposed to dust. In addition, depending on the medium, the filter surface load must be reduced.

AL-KO

AL-KO EXTRACTION TECHNOLOGY — ENGINEERED AND MADE IN GERMANY

AI -KO FILTER TECHNOLOGY

THE AL-KO high-performance filter system Al-KO OPTI JET®

The high-quality AL-KO filtration technology consists of two components that have been precisely matched to each other. The combination of surface filtration and proven AL-KO OPTI JET® cleaning delivers an advantage compared to the competition, which still largely works with vibratory cleaning and three-dimensional depth filters.

The principle of surface filtration is based on the fact that the dust particles are already separated at the surface and therefore cannot penetrate into the depth of the filter material. The polyester needle felt of which the filter tubes are made is surrounded by a water and oil-repellent layer, which makes it possible to regenerate each tube up to three times by washing.

During the extraction process, a filter cake forms on the outside of the filter tubes. With conventional filter material, this cake acts as an auxiliary filter layer and is necessary to maintain the residual dust content. For this reason, a completely cleaned depth filter allows additional dust pollution until it has again once been accumulated a certain layer of dust. In comparison, no auxiliary layer is required

for the AL-KO filter material, which means that the cleaning intervals can be selected as required and the filter is immediately fully operational again after each cleaning process. Further advantages of this filter material are the high mechanical load capacity, which results from the high basis weight of 400 g/m² and the excellent air permeability with a minimum dust transmission rate.

With the proven AL-KO OPTI JET® cleaning system, the filters are cleaned by means of a pressure surge that flows through the filter material from the inside to the outside. In connection with this type of cleaning, the so-called "Girlanden-Effekt" or "garland effect" comes into play. The garland occurs during the extraction process when the filter tubes are placed around the longitudinal bars of the support cages.

The sudden inflation of the tubes causes the filter tube to undergo a change in shape, which leads to the filter cake being blown off.

The garland is lifted off the support cage and opens out to form a round, inflated hose. This change in shape not only breaks apart the filter cake, but also casts it off. The fast centrifugal movement and the subsequent abrupt stopping process push the fine dust out of the filter material due to the inertia force. In addition to this garland effect, the so-called counter-flushing also contributes to optimum filter cleaning. Here, compressed air flows through the filter bags from the inside to the outside against the direction of application, so that the fine dust is removed from the surface by the air flow.

This point is the decisive difference from the mechanical shaking of the filters. Although the mechanical movements of the filter bags break open and shake off the filter cake, the fine dust is also shaken into the material, causing the pores to become blocked. A second disadvantage of vibration cleaning is the mechanical stress on the filter housing.

WASHING INSTRUCTIONS FOR AL-KO STANDARD FILTER MEDIA

Textile filter media are sensitive to abrasion. Improper mechanical treatment, including washing, leads to surface damage and roughening. A drum washing machine should only be used if the filter media are sufficiently protected against friction on the drum walls. This can be done, for example, by wrapping in oversized bags of open fabric.

In principle, the following washing steps should be observed:

1. Water-soluble, easily removable soiling

- I Placing the filter media in a cold water bath
- Washing and rinsing of filter media
- I Increasing the water temperature to max. 50 °C and prolonged soaking assist the cleaning effect
- I A commercially available mild detergent can be used to speed up the washing process

2. Acid or alkaline soiling

- I Removal of acid soiling by alkaline bath or alkaline soiling by acid bath
- Alkaline bath with ammonia added to the washing liquid at the rate of 1-2 ml/l
- Acid bath with acetic acid added to the washing liquid at the rate of 1-2 ml/l
- Washing temperature max. 50°C

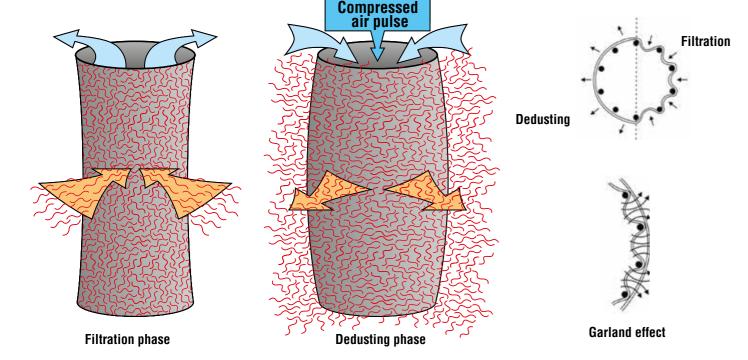
The washed filter media can be dried in air or in industrial dryers. The drying temperature must be significantly below the temperature resistance of the respective filter medium.

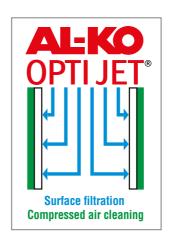
3. Structural change

Depending on previous exposure, the washing process can lead to a structural change in the surface finish. This may lead to the criteria according to BIA test category M no longer being met.

4. Local regulations

I Check that local regulations for waste water are not violated.





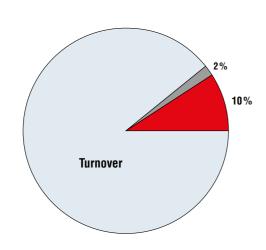
OPEN UP YOUR SAVINGS POTENTIAL

YOUR AL-KO CONSULTANT WILL HELPS YOU TO DO THIS



Electricity and heat usually cost a company between 2 and 10% of sales. This range already indicates the savings potential and the opportunities to improve margins through energy-efficient production. Especially in wood processing: **40% of the electricity consumption** in joinery or carpentry shops **is attributable to the extraction technology.** Your AL-KO expert advisor **will help you** uncover the energy wasters.

The extraction system is responsible for approx. 40% of your electricity consumption. You decide whether you spend 2 or 10% of your turnover on electricity and heat.







THE ELECTRICITY WASTERS

- I Obsolete facilities: New motors are significantly more efficient than even relatively recent models. The flow behaviour is also significantly better today than it was a few years ago.
- I Raw air dust extractor: The maximum efficiency of a raw air dust extractor is 50%, compared to more than 80% for clean air dust extractors with vacuum system.
- I Filters: Worn, damaged or insufficiently cleaned filters falsify the result of the differential pressure measurement. The extraction unit is triggered more frequently than necessary.
- I Controllers: Old controllers are less optimised, and what is more if they are also set incorrectly then the system does not run at the optimum operating point and wastes energy.

...AND MONEY WASTERS

- I Piping: The extraction system has gone through all the changes in the company: Long distances, many branches, various pipe diameters, valves that are not practical to operate: Pressure and speed losses consume energy unnecessarily and therefore waste money.
- I Seals: Porous and defective seals lead to air and pressure losses, controller errors, polluted air and wasted energy.

THE SOLUTION

AL-KO EXTRACTION UNITS WHICH ARE OPTIMISED IN TERMS OF ENERGY AND PERFORMANCE

Of course, there are cases in which only the complete replacement of the extraction unit and piping makes economic sense. In most cases, however, there are individual interventions that have a positive effect on your company's (energy) balance sheet:

OPTIMUM SIZE AND PIPING BY YOUR AI -KO PARTNER

- I AL-KO offers you the suitable extraction unit for every application size. AL-KO PROFI JET systems can grow with you thanks to their modular design. This secures your investment.
- I Optimum planning of the pipe network by the AL-KO specialist partner guarantees the shortest possible routes and perfect functioning of the AL-KO extraction unit. The pipe sections should be arranged so they are as short and straight as possible.



THE MOBILE AND STATIONARY EXTRACTION UNITS FROM AL-KO

- I AL-KO OPTI JET® cleaning: With the AL-KO OPTI JET® cleaning, the filter is inflated for approx. one second. The compressor only supplies 1/7 of the required compressed air, the rest is carried along. A smaller compressor and less energy are required for optimum cleaning results.
- I Reduction in heating costs: With all stationary AL-KO extraction units and mobile pure air dust extractors, the warm, filtered air remains in the room or is recirculated.
- With an extraction volume of 10,000 m³/h and a room temperature of 20 °C, savings of up to 3500 € per year are possible.
- I Aerodynamics: In order to guarantee an optimum air flow, AL-KO fan housings are optimised in terms of aerodynamics. The size of the units is particularly compact.
- I Energy-saving fans: AL-KO uses particularly energy-saving IE3 fans in all units from 7.5 kW upwards.

USE YOUR ENERGY

With the briquetting presses from AL-KO, you use the energy you have in your company. Thanks to its calorific value, the wood briquette is a perfect fuel. By reducing the volume of product residues by up to 90%, there is an enormous saving effect for logistics.



Perfect fuel: the calorific value of wood briquettes in comparison

19.5 kJ lignite briquettes

18.0 kJ wood briquettes

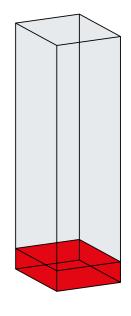
6.5 kJ air-dried hardwood

5.8 kJ air-dried softwood

4.2 kJ freshly felled wood

Saving effect for logistics: up to 90% volume reduction

Before 100 % material



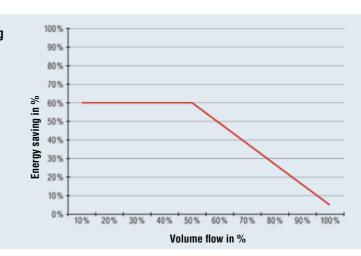
After 10 % material

AL-KO FREQUENCY CONVERTERS

- I Whenever individual processing machines are not in operation, the speed of the extraction fan is reduced to such an extent that the extraction of the other machines is still guaranteed. Each machine is assigned a minimum speed and the lower limit for ensuring pneumatic transport is defined. But even at full load, a frequency converter
- saves approx. 10% energy because it ensures that the motor runs at the optimum operating point.
- I The machine recognition function knows where work is being done and only extracts air there. In conjunction with a frequency converter, this means energy savings of up to 60% and clean air, as the extraction starts

automatically. Together with pneumatic valves, this results in high energy savings and reduced working time.

Energy saving when using an AL-KO frequency converter



THE AL-KO PRINCIPLE

QUALITY FOR LIFE

We take the promise "Quality for Life" very seriously. How seriously becomes evident when looking at the age AL-KO extraction systems reach on average. This is why, along with an AL-KO extraction system, you are purchasing the certainty of investing in your company's future, the stability of your operations and your team's motivation.



POWER UNIT

A real asset at work for people and

ECO JET AND PROFI JET

ECO JET and PROFI JET filter systems offer the right solution for any application, providing people and machines with clean air in the workplace.

ECO JET – The cleanest form of security of investment

PROFI JET – The extraction system that grows with your company





PURE AIR DUST EXTRACTOR POWER UNIT

- I Efficient and economical: Large air surge tank with fast diaphragm valves for effective OPTI JET® filter cleaning and lowest use of compressed air.
- I So simple and yet so effective: OPTI JET® dedusting and filter bag with snap ring lock.
- I Highly economical: energy-efficient motors according to IE3.
- I Safety in case of emergencies: Low-maintenance automatic fire extinguishing | Retroactively extendable: Conversion to system (standard from POWER UNIT 250).
- I Completely calm: sound-insulated air recirculation by AL-KO.

- I All options are available: PLC control system for manual and automated operation (from POWER UNIT 140). Countless options from machine recognition to slide valve control and frequency-controlled operation to name but
- No mess: container with window for visual
- I Practical down to the last detail: container lock with ergonomic tension lever.
- discharge via briquette press or rotary lock valve possible (from POWER UNIT 140).

The advantages for you:

- I High extraction performance
- Compact design
- 100% air recirculation without loss of temperature (residual dust $< 0.1 \text{ mg/m}^3$)
- Integrated pre-separator and extendable control system
- Optimum filter dedusting
- Minimal noise level
- Patented filling level control
- Certified automatic extinguishing device, easy to maintain
- Dust compartment for dust-free container change (optional: safety lock of the containers)
- Freely configurable assemblies, exchangeable and expandable













AL-KO AL-KO

POWER UNIT (APU)



AL-KO POWER UNIT 100/120

Туре	100	100**	120**	120 M**
Art.no.	192 488	192 489	192 490	192 498
Extraction nozzle	100 mm	100 mm	120 mm	120 mm
Nominal motor rating	1.1 kW / 1 Ph	1.5 kW / 3 Ph	1.5 kW / 3 Ph	1.5 kW / 3 Ph
Voltage	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
Max. flow rate	790 m³ / h	790 m³ / h	1,140 m³ / h	1,140 m³ / h
Nominal flow rate*	565 m³ / h	565 m³ / h	814 m³ / h	814 m³ / h
Vacuum at nominal flow rate	2,118 Pa	2,124 Pa	2,180 Pa	2,180 Pa
Filter area	4.1 m ²	4.1 m ²	5.1 m ²	5.1 m ²
Filter dedusting	Manual	Manual	Manual	Pressurised air
Pre-separator	Integrated	Integrated	Integrated	Integrated
Swarf collection capacity	approx. 135 L	approx. 135 L	approx. 135 L	approx. 135 L
Sound pressure level***	69 dB(A)	69 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L/W/H) in mm	1,178 x 650 x 1,973			
Weight net	approx. 114 kg	approx. 116 kg	approx. 117 kg	approx. 121 kg

M - Version with automatic filter dedusting and machine detection

Options:

- I Controller upgrade page 33
- I Accesories:
- I Swarf bags page 36
- I Floor cleaning set page 38



AL-KO POWER UNIT 140

_	440.11	440 1155	440.0
Туре	140 H	140 HM	140 P
Art.no.	199 000	199 362 01	192 487 01
Extraction nozzle	140 mm	140 mm	140 mm
Nominal motor rating	2.2 kW / 3 Ph	2.2 kW / 3 Ph	2.2 kW / 3 Ph
Voltage	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
Max. flow rate	1,600 m³ / h	1,600 m ³ / h	1,600 m ³ / h
Nominal flow rate*	1,108 m³ / h	1,108 m³ / h	1,108 m ³ / h
Vacuum at nominal flow rate	2,591 Pa	2,591 Pa	2,591 Pa
Filter area	6.3 m ²	6.3 m ²	6.3 m ²
Filter dedusting	Manual	Manual	Pressurised air
Pre-separator	Integrated	Integrated	Integrated
Swarf collection capacity (net/gross)	165 L / 241 L	165 L / 241 L	165 L / 241 L
Sound pressure level**	69 dB(A)	69 dB(A)	69 dB(A)
Dimensions (L / W / H) in mm	1,688 x 830 x 2,050	1,688 x 830 x 2,050	1,688 x 830 x 2,050
Weight net	320 kg	320 kg	330 kg

Sales prices in Euro excluding VAT. Subject to technical modifications

Options:

I Accesories:

I Filter surface increase up to

I Control options page 32-33

I Swarf bags page 36

I Valves page 38-39

(on request)

I External switch cabinet

I PUR-spiral hose page 36 I Sound damper I Exhaust air hood

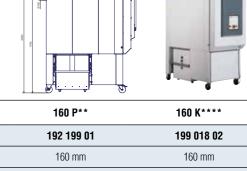
I Increase of expansion chamber

I Clean dust compartment page 35

20,5 m² (on request)

- I Valves page 38-39
- I PUR-spiral hose page 36

AL-KO POWER UNIT 160



Туре	160 H**	160 HM	160 P**	160 K****
Art.no.	199 001	199 363 01	192 199 01	199 018 02
Extraction nozzle	140 mm	160 mm	160 mm	160 mm
Nominal motor rating	2.2 kW / 3 Ph			
Voltage	400 V / 50 Hz			
Max. flow rate	2,000 m ³ / h			
Nominal flow rate*	1,448 m³ / h			
Vacuum at nominal flow rate	2,503 Pa	2,503 Pa	2,503 Pa	2,503 Pa
Filter area	9.1 m ²	9.1 m ²	9.1 m ²	9.1 m ²
Filter dedusting	Manual	Manual	Pressurised air	Pressurised air
Pre-separator	Integrated	Integrated	Integrated	Integrated
Swarf collection capacity (net/gross)	165 L / 241 L			
Sound pressure level***	69 dB(A)	69 dB(A)	69 dB(A)	69 dB(A)
Dimensions (L / W / H) in mm	1,688 x 830 x 2,050			
Weight net	330 kg	330 kg	340 kg	350 kg

*** Free sound field measurement according to DIN EN 11201 **** K – integrated compressor





Options:

- I Filter surface increase up to 29.4 m² (on request)
- I Clean dust compartment page 35
- I Control options page 32-33
- I Accesories:
- I Swarf bags page 36
- I Valves page 38-39
- I External switch cabinet
- I Increase of expansion chamber (on request)
- I PUR-spiral hose page 36
- I Sound damper
- I Exhaust air hood

** Free sound field measurement according to DIN EN 11201

POWER UNIT (APU)







AL-KO POWER UNIT 200

Туре	200 P**	200 P 4,0 kW	200 K ¹⁾
Art.no.	192 491 01	192 497 01	199 609 01
Extraction nozzle	200 mm	200 mm	200 mm
Nominal motor rating	3.0 kW/3 Ph	4.0 kW/3 Ph	3.0 kW/3 Ph
Voltage	400V/50Hz	400V/50Hz	400V/50Hz
Max. flow rate	3,010 m³/h	3,010 m³/h	3,010 m³/h
Nominal flow rate*	2,262 m³/h	2,262 m³/h	2,262 m³/h
Vacuum at nominal flow rate	2,174 Pa	2,446 Pa	2,174 Pa
Filter area	13.8 m²	13.8 m ²	13.8 m ²
Filter dedusting	Pressurised air	Pressurised air	Pressurised air
Pre-separator Pre-separator	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	2 x 165 L / 2 x 241 L	2 x 165 L / 2 x 241 L	2 x 165 L / 2 x 241 L
Sound pressure level***	72 dB(A)	72 dB(A)	72 dB(A)
Dimensions (L / W / H) in mm	2,296 x 830 x 2,050	2,296 x 830 x 2,050	2,296 x 830 x 2,050
Briquette / rotary lock valve performance	-	=	=
Briquette diameter	-	-	-
Weight net	460 kg	460 kg	470 kg

*GS-HO-07 **On stock *** Free sound field measurement according to DIN EN 11201 1) Compressor integrated

PURE AIR DUST EXTRACTORS

POWER UNIT (APU)



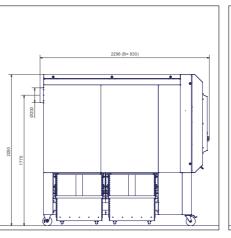


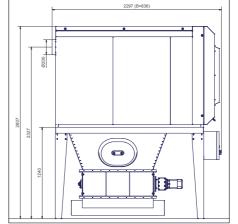
AL-KO POWER UNIT 200

Туре	200 P-ZRS	200 P-BP 30-40
Art.no.	199 044 01	199 019 01
Extraction nozzle	200 mm	200 mm
Nominal motor rating	3.0 kW/3 Ph	3.0 kW/3 Ph
Voltage	400V/50Hz	400V/50Hz
Max. flow rate	3,010 m³/h	3,010 m³/h
Nominal flow rate*	2,262 m³/h	2,262 m³/h
Vacuum at nominal flow rate	2,174 Pa	2,174 Pa
Filter area	13.8 m²	13.8 m ²
Filter dedusting	Pressurised air	Pressurised air
Pre-separator	Integrated	Integrated
Swarf collection capacity (net / gross)	Rotary lock valve	Briquette press
Sound pressure level***	72 dB(A)	72 dB(A)
Dimensions (L / W / H) in mm	2,296 x 836 x 2,607	2,296 x 1,314 x 2,467
Briquette / rotary lock valve performance	15,744 L/h ²⁾	30 – 40 kg/h ²⁾
Briquette diameter	-	40 mm
Weight net	550 kg	950 kg

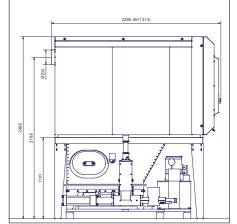
*** Free sound field measurement according to DIN EN 11201

- I Filter surface increase up to 44.8 m² (on request)
- I Clean dust compartment page 35
- I Control options page 32-33
- I Accesories:
- I Swarf bags page 36
- I Valves page 38-39
- I External switch cabinet
- I Increase of expansion chamber (on request)
- I PUR-spiral hose page 36
- I Sound damper
- I Exhaust air hood





Sales prices in Euro excluding VAT. Subject to technical modifications.



POWER UNIT (APU)





AL-KO POWER UNIT 250

Туре	250 P**	250 P-ZRS
Art.no.	195 676 03	195 875 03
Extraction nozzle	250 mm	250 mm
Nominal motor rating	7.5 kW/3 Ph	7.5 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz
Max. flow rate	4,900 m³/h	4,900 m³/h
Nominal flow rate*	3,534 m³/h	3,534 m³/h
Vacuum at nominal flow rate	2,451 Pa	2,451 Pa
Filter area	22.4 m²	22.4 m²
Pre-separator	Integrated	Integrated
Extinguishing device	Integrated	Integrated
Swarf collection capacity (net / gross)	2 x 165 L / 2 x 250 L	Rotary lock valve
Sound pressure level***	72 dB(A)	72 dB(A)
Dimensions (L / W / H) in mm	2,351 x 1,058 x 2,350	2,387 x 1,058 x 2,797
Briquette / Rotary lock valve performance	-	15,744 L/h²)
Briquette diameter	-	
Weight net	758 kg	728 kg

*** Free sound field measurement according to DIN EN 11201

PURE AIR DUST EXTRACTORS

POWER UNIT (APU)



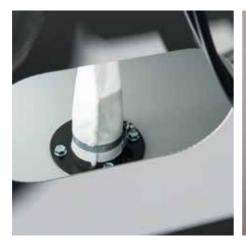


AL-KO POWER UNIT 250

Туре	250 P-BP 30-40	250 P-BP 30-50
Art.no.	199 537 01	195 872 05
Extraction nozzle	250 mm	250 mm
Nominal motor rating	7.5 kW/3 Ph	7.5 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz
Max. flow rate	4,900 m³/h	4,900 m³/h
Nominal flow rate*	3,534 m³/h	3,534 m³/h
Vacuum at nominal flow rate	2,451 Pa	2,451 Pa
Filter area	22.4 m²	22.4 m²
Pre-separator Pre-separator	Integrated	Integrated
Extinguishing device	Integrated	Integrated
Swarf collection capacity (net / gross)	Briquette press	Briquette press
Sound pressure level***	72 dB(A)	72 dB(A)
Dimensions (L / W / H) in mm	2,351 x 1,329 x 2,609	2,351 x 1,329 x 2,609
Briquette / Rotary lock valve performance	30 – 40 kg/h ²⁾	$30 - 50 \text{ kg/h}^2$
Briquette diameter	40 mm	50 mm
Weight net	1,381 kg	1,381 kg

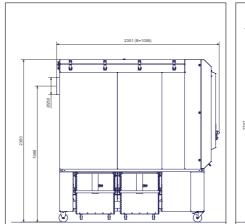
*** Free sound field measurement according to DIN EN 11201

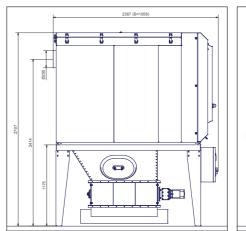
- I Filter surface increase up to 63 m² (on request)
- I Clean dust compartment page 35
- I Control options page 32-33
- I Accesories:
- I Swarf bags page 36
- I Valves page 38-39
- I External switch cabinet
- I Increase of expansion chamber (on request)
- I PUR-spiral hose page 36
- I Sound damper
- I Exhaust air hood

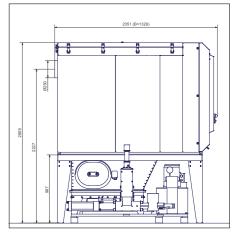


Sales prices in Euro excluding VAT. Subject to technical modifications.









POWER UNIT (APU)





AL-KO POWER UNIT 300

Туре	300 P**	300 P-ZRS
Art.no.	195 677 03	195 876 03
Extraction nozzle	300 mm	300 mm
Nominal motor rating	7.5 kW/3 Ph	7.5 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz
Max. flow rate	6,000 m³/h	6,000 m³/h
Nominal flow rate*	5,089 m³/h	5,089 m³/h
Vacuum at nominal flow rate	2,434 Pa	2,434 Pa
Filter area	30 m²	30 m²
Pre-separator Pre-separator	Integrated	Integrated
Extinguishing device	Integrated	Integrated
Swarf collection capacity (net / gross)	3 x 165 L / 3 x 250 L	Rotary lock valve
Sound pressure level***	71 dB(A)	71 dB(A)
Dimensions (L / W / H) in mm	3,000 x 1,058 x 2,351	3,037 x 1,058 x 3,017
Briquette / Rotary lock valve performance	-	15,744 L/h²)
Briquette diameter	-	-
Weight net	838 kg	832 kg

On stock * Free sound field measurement according to DIN EN 11201

PURE AIR DUST EXTRACTORS

POWER UNIT (APU)







AL-KO POWER UNIT 300

Туре	300 P-BP 30-40	300 P-BP 30-50	300 P-BP 50-70
Art.no.	199 538 01	192 006 05	195 874 05
Extraction nozzle	300 mm	300 mm	300 mm
Nominal motor rating	7.5 kW/3 Ph	7.5 kW/3 Ph	7.5 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz
Max. flow rate	6,000 m³/h	6,000 m³/h	6,000 m³/h
Nominal flow rate*	5,089 m³/h	5,089 m³/h	5,089 m³/h
Vacuum at nominal flow rate	2,434 Pa	2,434 Pa	2,434 Pa
Filter area	30 m ²	30 m²	30 m ²
Pre-separator Pre-separator	Integrated	Integrated	Integrated
Extinguishing device	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	Briquette press	Briquette press	Briquette press
Sound pressure level***	71 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L / W / H) in mm	3,000 x 1,352 x 2,807	3,000 x 1,352 x 2,807	3,000 x 1,352 x 2,807
Briquette / Rotary lock valve performance	30 – 40 kg/h ²⁾	30 – 50 kg/h ²⁾	50 – 70 kg/h ²⁾
Briquette diameter	70 mm	70 mm	70 mm
Weight net	1,570 kg	1,570 kg	1,570 kg

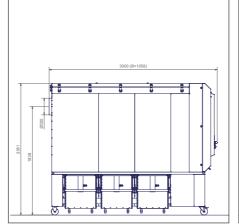
On stock * Free sound field measurement according to DIN EN 11201

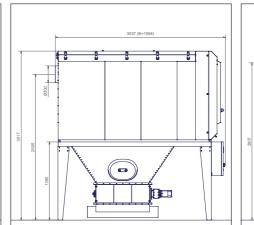
2) Depending on the material

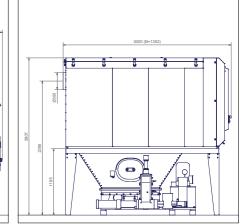
- I Filter surface increase up to 90 m² (on request)
- I Clean dust compartment page 35
- I Control options page 32-33
- I Accesories:
- I Swarf bags page 36
- I Valves page 38-39
- I External switch cabinet
- I Increase of expansion chamber (on request)
- I PUR-spiral hose page 36
- I Sound damper
- I Exhaust air hood











AL-KO POWER UNIT 350 AND POWER UNIT 350⁺

THE NEW PERFORMANCE CLASS



AL-KO POWER UNIT 350 and POWER UNIT 350+ is the new performance class among pure air dust extractors. The powerful 11 kW IE3 motor extracts dust and swarf with a gigantic flow rate of more than 8,000 m³/h, while being very economical in terms of consumption. Thanks to 57 filters, the AL-KO POWER UNIT 350 and POWER UNIT 350⁺ offers a gigantic filter surface of 73 m² enough to lower the residual dust content of the air which is **100% recycled** to $< 0.1 \text{ mg/m}^3$ (H3).

Naturally, the AL-KO POWER UNIT 350 and 350⁺ uses tried and tested, and further improved, AL-KO OPTI JET® technology and the integrated pre-separator comes as standard.

While performing on a gigantic level, AL-KO POWER UNIT 350 and POWER UNIT 350⁺ is never noisy. The maximum sound level at a distance of one meter measures according to DIN EN ISO 11201 **absolutely quiet 71 dB (A)** – probably the lowest figure in this class. This is not surprising as the AL-KO POWER UNIT 350 and POWER UNIT 350⁺ is equipped with real sound-absorbing panels - as standard.

Thanks to the unique design and the further optimised internal layout, AL-KO POWER UNIT 350 is extremely space-saving: with its dimensions of 3,129 x 1,058 x 2,351 mm (LxWxH) the AL-KO POWER UNIT 350 is significantly smaller than many other devices of the 300 class.

The advantages for you:

- I Highest extraction performance
- I Lowest energy consumption A+
- I Compact construction

THE NEW LEVEL OF PERFECTION

- I New technology
- I Unique design
- I Made in Germany
- I Patended air routing











AL:KO

- I Optimum safety

POWER UNIT (APU)



AL-KO POWER UNIT 350

Туре	350 P	350 P-FU ¹⁾	350 P-RA
Art.no.	199 560	199 710	199 690
Extraction nozzle	350 mm	350 mm	350 mm
Nominal motor rating	11.0 kW/3 Ph	11.0 kW/3 Ph	11.0 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz
Max. flow rate	ca. 8,500 m³/h	ca. 8,500 m³/h	ca. 8,500 m³/h
Nominal flow rate*	6,927 m³/h	6,927 m³/h	6,927 m³/h
Vacuum at nominal flow rate	2,543 Pa	2,543 Pa	2,543 Pa
Filter area	73 m²	73 m²	73 m²
Pre-separator	Integrated	Integrated	Integrated
Extinguishing device	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	3 x 165 L / 3 x 250 L	3 x 165 L / 3 x 250 L	Rotary lock valve
Sound pressure level***	71 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L / W / H) in mm	3,129 x 1,058 x 2,351	3,340 x 1,058 x 2,351	3,164 x 1,143 x 3,017
Briquette / Rotary lock valve performance	_	-	7,232 L/h ²⁾
Briquette diameter	_	-	-
Weight net	977 kg	1,044 kg	1,368 kg

Options:

- I Filter surface increase up to 146 m² (on request)
- I Clean dust compartment page 35
- I Control options page 32-33
- I Accesories:
- I Swarf bags page 36
- I Valves page 38-39
- I External switch cabinet
- I Increase of expansion chamber (on request)
- I PUR-spiral hose page 36
- I Sound damper
- I Exhaust air hood





PURE AIR DUST EXTRACTORS **POWER UNIT (APU)**

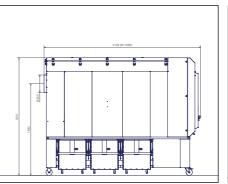


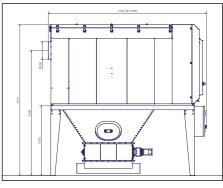


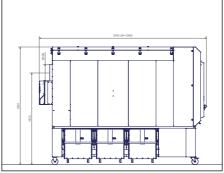
AL-KO POWER UNIT 350

Туре	350 P-RA FU ¹⁾	350 P-ZRS	350 P-ZRS FU ¹⁾
Art.no.	199 715	199 563	199 713
Extraction nozzle	350 mm	350 mm	350 mm
Nominal motor rating	11.0 kW/3 Ph	11.0 kW/3 Ph	11.0 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz
Max. flow rate	ca. 8,500 m³/h	ca. 8,500 m³/h	ca. 8,500 m ³ /h
Nominal flow rate*	6,927 m³/h	6,927 m³/h	6,927 m³/h
Vacuum at nominal flow rate	2,543 Pa	2,543 Pa	2,543 Pa
Filter area	73 m²	73 m²	73 m²
Pre-separator	Integrated	Integrated	Integrated
Extinguishing device	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	Rotary lock valve	Rotary lock valve	Rotary lock valve
Sound pressure level***	71 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L / W / H) in mm	3,374 x 1,143 x 3,017	3,164 x 1,058 x 3,017	3,374 x 1,058 x 3,017
Briquette / Rotary lock valve performance	7,232 L/h ²⁾	15,744 L/h ²⁾	15,744 L/h ²⁾
Briquette diameter	-	_	_
Weight net	1,390 kg	1,010 kg	1,030 kg

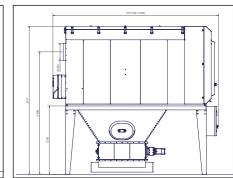
¹⁾FU - with frequency converter incl. control panel and plain-text display, integrated control loop with pressure transmitter for demand-driven control of the dust extractor







Sales prices in Euro excluding VAT. Subject to technical modifications.



²⁾ Depending on the material

¹⁾FU - with frequency converter incl. control panel and plain-text display, integrated control loop with pressure transmitter for demand-driven control of the dust extractor

^{*}According GS-HO-07 dusted *** Free sound field measurement according to DIN EN 11201

²⁾ Depending on the material

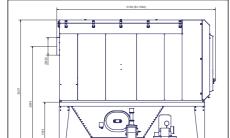
POWER UNIT (APU)

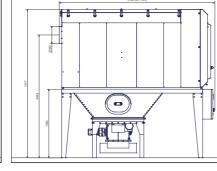


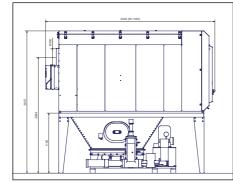
AL-KO POWER UNIT 350

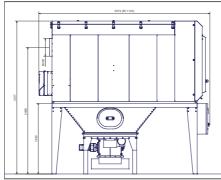
Туре	350 P-BP 30-50	350 P-BP 30-50 FU ¹⁾	350 P-BP 50-70	350 P-BP 50-70 FU ¹⁾
Art.no.	199 561	199 711	199 562	199 712
Extraction nozzle	350 mm	350 mm	350 mm	350 mm
Nominal motor rating	11.0 kW/3 Ph	11.0 kW/3 Ph	11.0 kW/3 Ph	11.0 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz
Max. flow rate	ca. 8,500 m³/h	ca. 8,500 m³/h	ca. 8,500 m³/h	ca. 8,500 m³/h
Nominal flow rate*	6,927 m³/h	6,927 m³/h	6,927 m³/h	6,927 m³/h
Vacuum at nominal flow rate	2,543 Pa	2,543 Pa	2,543 Pa	2,543 Pa
Filter area	73 m²	73 m²	73 m²	73 m²
Pre-separator	Integrated	Integrated	Integrated	Integrated
Extinguishing device	Integrated	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	Briquette press	Briquette press	Briquette press	Briquette press
Sound pressure level***	71 dB(A)	71 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L / W / H) in mm	3,129 x 1,352 x 2,807	3,340 x 1,352 x 2,807	3,129 x 1,352 x 2,807	3,340 x 1,352 x 2,807
Briquette / Rotary lock valve performance	$30 - 50 \text{ kg/h}^{2)}$	$30 - 50 \text{ kg/h}^{2)}$	$50 - 70 \text{ kg/h}^{2)}$	$50 - 70 \text{ kg/h}^{2)}$
Briquette diameter	50 mm	50 mm	70 mm	70 mm
Weight net	1,740 kg	1,806 kg	1,740 kg	1,806 kg

¹⁾FU - with frequency converter incl. control panel and plain-text display, integrated control loop with pressure transmitter for demand-driven control of the dust extractor









PURE AIR DUST EXTRACTORS

POWER UNIT (APU)



AL-KO POWER UNIT 350+

Туре	350⁺ P	350⁺ P FU¹)	350⁺ P-RA
Art.no.	199 843	199 849	199 847
Extraction nozzle	355 mm	355 mm	355 mm
Nominal motor rating	15.0 kW/3 Ph	15.0 kW/3 Ph	15.0 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz
Max. flow rate	ca. 10,000 m³/h	ca. 10,000 m³/h	ca. 10,000 m ³ /h
Nominal flow rate*	7,127 m³/h	7,127 m³/h	7,130 m³/h
Vacuum at nominal flow rate	3,000 Pa	3,000 Pa	3,000 Pa
Filter area	73 m²	73 m²	73 m²
Pre-separator	Integrated	Integrated	Integrated
Extinguishing device	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	3 x 165 L / 3 x 250 L	3 x 165 L / 3 x 250 L	Rotary lock valve
Sound pressure level***	74 dB(A)	74 dB(A)	74 dB(A)
Dimensions (L / W / H) in mm	3,130 x 1,058 x 2,351	3,341 x 1,058 x 2,351	3,164 x 1,143 x 3,017
Briquette / Rotary lock valve performance		_	7,232 L/h**
Briquette diameter	-		_
Weight net	1,040 kg	1,064 kg	1,386 kg

- I Filter surface increase up to 146 m² (on request)
- I Clean dust compartment page 35
- I Control options page 32-33
- I Accesories:
- I Swarf bags page 36
- I Valves page 38-39
- I External switch cabinet
- I Increase of expansion chamber (on request)
- I PUR-spiral hose page 36
- I Sound damper
- I Exhaust air hood





^{*} According GS-HO-07 dusted *** Free sound field measurement according to DIN EN 11201

¹⁾FU - with frequency converter incl. control panel and plain-text display, integrated control loop with pressure transmitter for demand-driven control of the dust extractor

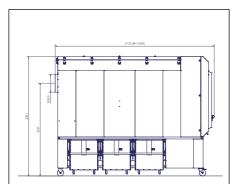
Options:

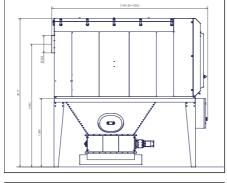
PURE AIR DUST EXTRACTORS **POWER UNIT (APU)**

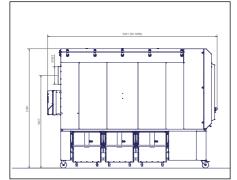
AL-KO POWER UNIT 350+

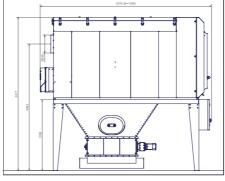
Туре	350* P-RA-FU ¹⁾	350* P-ZRS	350⁺ P-ZRS-FU¹)
Art.no.	199 874	199 846	199 852
Extraction nozzle	355 mm	355 mm	355 mm
Nominal motor rating	15.0 kW/3 Ph	15.0 kW/3 Ph	15.0 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz
Max. flow rate	ca. 10,000 m³/h	ca. 10,000 m³/h	ca. 10,000 m ³ /h
Nominal flow rate*	7,130 m³/h	7,130 m³/h	7,130 m ³ /h
Vacuum at nominal flow rate	3,000 Pa	3,000 Pa	3,000 Pa
Filter area	73 m²	73 m²	73 m²
Pre-separator	Integrated	Integrated	Integrated
Extinguishing device	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	Rotary lock valve	Rotary lock valve	Rotary lock valve
Sound pressure level***	74 dB(A)	74 dB(A)	74 dB(A)
Dimensions (L / W / H) in mm	3,374 x 1,143 x 3,017	3,164 x 1,058 x 3,017	3,376 x 1,058 x 3,017
Briquette / Rotary lock valve performance	7,232 L/h ²⁾	15,816 L/h ²⁾	15,816 L/h ²⁾
Briquette diameter	=	_	-
Weight net	1,409 kg	1,027 kg	1,051 kg

^{*} According GS-HO-07 dusted **On stock *** Free sound field measurement according to DIN EN 11201 2) Depending on the material









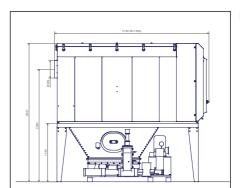
PURE AIR DUST EXTRACTORS

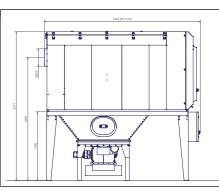
POWER UNIT (APU)

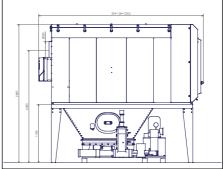


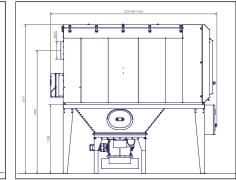
AL-KO POWER UNIT 350+

Туре	350* P-BP 30-50	350 ⁺ P-BP 30-50 FU ¹⁾	350⁺ P-BP 50-70	350⁺ P-BP 50-70 FU¹)
Art.no.	199 844	199 850	199 845	199 851
Extraction nozzle	355 mm	355 mm	355 mm	355 mm
Nominal motor rating	15.0 kW/3 Ph	15.0 kW/3 Ph	15.0 kW/3 Ph	15.0 kW/3 Ph
Voltage	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz	400 V/50 Hz
Max. flow rate	ca. 10,000 m ³ /h	ca. 10,000 m ³ /h	ca. 10,000 m³/h	ca. 10,000 m³/h
Nominal flow rate*	7,127 m³/h	7,127 m³/h	7,127 m³/h	7,127 m³/h
Vacuum at nominal flow rate	3,000 Pa	3,000 Pa	3,000 Pa	3,000 Pa
Filter area	73 m²	73 m²	73 m²	73 m²
Pre-separator	Integrated	Integrated	Integrated	Integrated
Extinguishing device	Integrated	Integrated	Integrated	Integrated
Swarf collection capacity (net / gross)	Briquette press	Briquette press	Briquette press	Briquette press
Sound pressure level***	74 dB(A)	74 dB(A)	74 dB(A)	74 dB(A)
Dimensions (L / W / H) in mm	3,130 x 1,352 x 2,807	3,341 x 1,352 x 2,807	3,130 x 1,352 x 2,807	3,341 x 1,352 x 2,807
Briquette / Rotary lock valve performance	30 – 50 kg/h ²⁾	30 – 50 kg/h ²⁾	50 - 70 kg/h ²⁾	50 – 70 kg/h ²⁾
Briquette diameter	50 mm	50 mm	70 mm	70 mm
Weight net	1,802 kg	1,826 kg	1,802 kg	1,826 kg









¹⁾FU - with frequency converter incl. control panel and plain-text display, integrated control loop with pressure transmitter for demand-driven control of the dust extractor

²⁾ Depending on the material

¹⁾ FU - with frequency converter incl. control panel and plain-text display, integrated control loop with pressure transmitter for demand-driven control of the dust extractor

POWER UNIT CONTROL TECHNOLOGY

Product	Designation	Art. no.
Machine detection incl. slide valve control	APU 140-350* 4ME&4S EXTERNAL I Machine detection for up to 4 processing machines I by transducer coils or potential-free contact I incl. automatic slide valve control I for up to 4 electropneumatic or electric motor-driven shutter valves in 24 V I external connection box for independent wall mounting	199 105
	APU 140-350* 8ME&8S EXTERNAL I Machine detection for up to 8 processing machines I by transducer coils or potential-free contact I incl. automatic slide valve control I for up to 8 electropneumatic or electric motor-driven shutter valves in 24 V I external connection box for independent wall mounting	199 106
	APU 140-350* 12ME&12S EXTERNAL I Machine detection for up to 12 processing machines I by transducer coils or potential-free contact I incl. automatic slide valve control I for up to 12 electropneumatic or electric motor-driven shutter valves in 24 V I external connection box for independent wall mounting	199 107
	APU 140-350* 16ME&16S EXTERNAL I Machine detection for up to 16 processing machines I by transducer coils or potential-free contact I incl. automatic slide valve control I for up to 16 electropneumatic or electric motor-driven shutter valves in 24 V I external connection box for independent wall mounting	199 108
Machine detection	APU/MPJ 140-350* 8ME 230V I Machine detection for automatic start-up of up to 8 processing machines I by transducer coil I external connection box for independent wall mounting I electrical power supply 230 V to be provided on site I on-site fusing	195 601
Machine detection incl. slide valve control	APU/MPJ 140-350* 8ME&8S 230V I Machine detection for up to 8 processing machines I by transducer coil or potential-free contact I incl. automatic slide valve control I for up to 8 electropneumatic or electric motor-driven shutter valves in 230 V I external connection box for independent wall mounting I electrical power supply 230 V to be provided on site I on-site fusing	195 602 02
	APU 140-160 P & K control FC I with frequency converter 2.2 kW incl. control panel and plain-text display I integrated control loop with pressure transmitter for demand-driven control of the dust extractor	199 094 01
	APU 200 P control FC I with frequency converter 3.0 kW incl. control panel and plain-text display I integrated control loop with pressure transmitter for demand-driven control of the dust extractor	199 095 01
	APU 250-300 P control FC I with frequency converter 7.5 kW incl. control panel and plain-text display I integrated control loop with pressure transmitter for demand-driven control of the dust extractor	199 096

DUST EXTRACTORS

CONTROL TECHNOLOGY

Product	Designation	Art. no.
Control options for POWER UNIT 100 – 350*	Flash lamp 24V/DC/RED Flash lamp for visual detection of a fault indication on an AL-KO control unit; flash lamp supplied loose for on-site connection	199 433
0	Signal horn with flash lamp Signal horn incl. flash lamp for acoustic and visual detection of a fault indication on an AL-KO control unit; signal horn and flash lamp supplied loose for on-site connection	199 434
2 0 2	Transducer coil for detection of a processing machine	938 361
20	Automatic switch on for 230 V and 400 V up to 16 A, automatic start-up of an extraction device (raw air dust extractor)	938 415
	Automatic switch on for 230 V and 16 A, automatic start-up of an extraction device (raw air dust extractor)	199 569

External controllers for wall mounting, other options and configuration for other voltages on request.

POWER UNIT ACCESSORIES

Product	Designation	Art. no.
Accessories/options	APU 160 splitter silencer For POWER UNIT 160 Add-on silencer for mounting on the unit Height 536 mm Reduce the dB value by 4 dB(A)	199 913
	APU 200 splitter silencer For POWER UNIT 200 Add-on silencer for mounting on the unit Height 536 mm Reduce the dB value by 4 dB(A)	199 911
	APU 250 - 350* splitter silencer For POWER UNIT 250 - 350* Add-on silencer for mounting on the unit Height 610 mm Reduce the dB value by 4 dB(A)	199 687
	AL-KO LEVEL CONTROL 21 Contactless level filling sensor suitable for ATEX-Zone 21 Ultrasonic sensor For dry dust and chips Preinstalled at AL-KO extraction units or to retrofit	199 100 01
	Feeding shaft- compressed air-dedusting 1 pc Control on request	199 751

MACHINE FIRE PROTECTION SYSTEM FOR POWER UNIT 250 – 350⁺

Product	Designation	Art. No.
IGNITION PROTECTION SYSTEM FOR DUST COLLECTOR	APU 250-350* ignition protection system Ignition protection system for mobil extractors during suction wood and wood materials in indoor areas according to EN 16770 Consisting of: I spark detector FM 1/8 Ex incl. screw-in holder and connection cable I extinguishing device IPS with pressure switch incl. extinguishing nozzle, nozzle holder, flow monitor, terminal box I alarm module incl. optical and acoustic indication	199 903
	Pressure booster pump MPT 250 Only necessary if the domestic water connection is permanently less than 3 bar	199 898
	Installation tool for ignition protection system (reusable)	199 899
	Spare part - spark detector FM 1/8	199 900
	Spare part - extinguishing nozzle K45 for extinguishing device	199 901
	Spare part - alarm module	199 902

AL-KO DUST COMPARTMENT

PRACTICAL - SIMPLE - CLEAN

The AL-KO DUST COMPARTMENT, the simple and inexpensive solution for greater cleanliness and health protection in the workplace.

The advantages for you:

- I Easy to operate
- I Dust-free wind-up during container changes
- I Bag removal with lifting machine
- I Optimised health protection



Release the chippings container



Push in the dust compartment



Replace the chippings container



Reinsert the chippings container and remove the dust compartment

Sales prices in Euro excluding VAT. Subject to technical modifications.



Clamp the chippings container into place

CLEAN DUST COMPARTMENT

Designation	Art. no.
APU 140-160 Dust compartment cpl.¹)	199 752
APU 200 Dust compartment cpl. ¹⁾	199 834
APU 250 Dust compartment cpl. ¹⁾	199 836
APU 300-350* Dust compartment cpl.¹)	199 837
APU 140-200 Dust compartment	868 283
APU 250-350* Dust compartment	868 340

¹)Content: 1 pc. Dust compartment plus the required guide rail

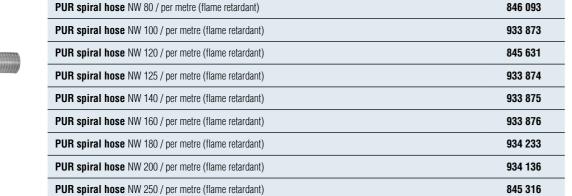
DUST EXTRACTOR

ACCESSORIES

Product	Designation	Art. no.
Swarf bags for pure air equipment	Swarf bags for APU 100 / 120, D = 520 mm, 1,300 mm long, 20 pcs.	868 154
	Swarf bags for APU 140 / 160 / 200 (705 x 640 x 1,200), 20 pcs.	868 157
	Swarf bags for APU 250 / 300 / 350 / ECO JET (890 x 570 x 1,200), 20 pcs.	934 605
	Swarf bags for MOBIL JET 125 / 140 (640 x 600 x 1,000), 20 pcs., up to build year 2005	868 159
16.31 - 313	Swarf bags for MOBIL JET 140 / 160 (938 x 620 x 1,200), 20 pcs.	868 160
	Swarf bags for MOBIL JET 200 (780 x 520 x 1,200), 20 pcs.	868 161
	Swarf bags for MOBIL JET 250 / 300 (920 x 780 x 1,150), 20 pcs.	868 162
Swarf bags for raw air equipment	Swarf bags for MOBIL 100, D = 400 mm, 900 mm long, 5 pcs.	868 156
	Swarf bags for MOBIL 125 – 200 / AAS, D = 520 mm, 1,300 mm long, 20 pcs.	868 154

PUR spiral hose NW 300 / per metre (flame retardant)

PUR spiral hose Individual lengths 5 m / 10 m



934 698

8

Worm drive hose clip

Worm drive hose clip NW 50	847 903
Worm drive hose clip NW 80	847 270
Worm drive hose clip NW 100	847 041
Worm drive hose clip NW 120	847 264
Worm drive hose clip NW 125	847 264
Worm drive hose clip NW 140	847 074
Worm drive hose clip NW 160	847 265
Worm drive hose clip NW 180	847 266
Worm drive hose clip NW 200	847 267
Worm drive hose clip NW 250	847 268
Worm drive hose clip NW 300	847 269

DUST EXTRACTOR

ACCESSORIES

Product	Designation	Art. no.
Filter	For POWER UNIT 100/MOBIL JET 100 SP-Filter bag 1 pc necessary	195 181
Filter category M electro conductive	For POWER UNIT 120 H SP-Filter bag 1 pc necessary	195 671
	For POWER UNIT 120 M SP-Filter bag 1 pc necessary	195 673
	For POWER UNIT 140 P filter 1m 16 pcs necessary	851 003 01
	For POWER UNIT 140 H filter 1m 16 pcs necessary	851 011 01
	For POWER UNIT 160 H filter 1m 23 pcs necessary	851 011 01
	For POWER UNIT 160 P filter 1m 23 pcs necessary	851 003 01
	For POWER UNIT 160 K filter 1m 23 pcs necessary	851 003 01
	For POWER UNIT 200 P filter 1m 35 pcs necessary	851 003 01
	For POWER UNIT 250 P filter 1,15m 63 pcs necessary	851 012 01
	For POWER UNIT 300 P filter 1,15m 90 pcs necessary	851 012 01
	For POWER UNIT 350 P filter 1m 57 pcs necessary	867 416
	für POWER UNIT 350° P filter 1m 57 pcs necessary	867 416

Sales prices in Euro excluding VAT. Subject to technical modifications.

DUST EXTRACTOR

ACCESSORIES

Product	Designation	Art. no.	
Floor cleaning sets and accessories for workshop and machine cleaning	Floor cleaning set Metal, consisting of floor cle metal elbow extension pipe 2.5 m highly flexible PU hos	938 579	
	Floor cleaning set	like 938 579, + adapter for 120	938 579 10
18	Floor cleaning set	like 938 579, but without hose	938 580
	Floor cleaning set	like 938 580, + adapter for 120	938 580 10
	Crevice nozzle	for floor and machine cleaning	520 305

Product
Valve, electropneumatic
24 V DC / 230 V
1 = 1 cylinder $/ 2 = 2$ cylinders

Designation



	EPS 80/1	NW 80 / 1 with rim 24 V / 230 V	192 132
	EPS 100/1	NW 100 / 1 with rim 24 V / 230 V	192 133
	EPS 120/1	NW 120 / 1 with rim 24 V / 230 V	192 135
6	EPS 125/1	NW 125 / 1 with rim 24 V / 230 V	192 136
	EPS 140/1	NW 140 / 1 with rim 24 V / 230 V	192 138
	EPS 150/1	NW 150 / 1 with rim 24 V / 230 V	192 139
	EPS 160/1	NW 160 / 1 with rim 24 V / 230 V	192 140
	EPS 180/1	NW 180 / 1 with rim 24 V / 230 V	192 141
	EPS 200/1	NW 200 / 1 with rim 24 V / 230 V	192 143
	EPS 220/2	NW 220 / 2 with rim 24 V / 230 V	192 145
	EPS 225/2	NW 225 / 2 with rim 24 V / 230 V	192 146
	EPS 250/2	NW 250 / 2 with rim 24 V / 230 V	192 147
	EPS 280/2	NW 280 / 2 with rim 24 V / 230 V	192 148
	EPS 300/2	NW 300 / 2 with rim 24 V / 230 V	192 149
	EPS 315/2	NW 315 / 2 with rim 24 V / 230 V	192 150
	EPS 350/2	NW 350 / 2 with rim 24 V / 230 V	192 151
	EPS 355/2	NW 355 / 2 with rim 24 V / 230 V	192 152
	EPS 400/2	NW 400 / 2 with rim 24 V / 230 V	192 153
	EPS 450/2	NW 450 / 2 with rim 24 V / 230 V	192 154
	EPS 500/2	NW 500 / 2 with rim 24 V / 230 V	192 155

Sales prices in Euro excluding VAT. Subject to technical modifications.

Art. no.

DUST EXTRACTOR

ACCESSORIES

Product	Designation	Art. no.
Valve, electric motor 24 V DC	MAS 80 / 15 Nm	938 426
3	MAS 100 / 15 Nm	938 427
	MAS 120 / 15 Nm	192 001
A.	MAS 140 / 15 Nm	938 429
	MAS 150 / 15 Nm	938 430
	MAS 160 / 15 Nm	938 431
	MAS 180 / 15 Nm	938 432
	MAS 200 / 15 Nm	938 433
	MAS 225 / 15 Nm	938 434
	MAS 250 / 15 Nm	938 435
	MAS 280 / 15 Nm	938 436
	MAS 300 / 15 Nm	938 437

Product	Designation	Art. no.
Residual dust sensor	Residual dust monitoring for AL-KO extraction systems	
	The residual dust monitoring uses an electrokinetic sensor to detect the residual dust in the return air duct.	
	If the defined limit value of 0.3 mg/m³ is exceeded, the evaluation unit generates a self-holding alarm.	
	If there is a recirculating air valve, it is moved to the outgoing air position.	
	Residual dust sensor without residual dust evaluation unit	194 648
	(residual dust sensor calibrates without evaluation unit)	
	Residual dust evaluation unit	194 650 01
	(residual dust evaluation unit in IP65 housing wired and programmed)	

RAW AIR DUST COLLECTORS MOBIL AND AAS

THE ROBUST SOLUTION FOR CLEANER AIR

Whether you need to extract dust, swarf or plastic, polystyrene, paper, metal or glass waste, at different locations or stationary, AL-KO raw air dust collectors MOBIL and AAS are characterised by optimum extraction performance, robust construction and convenient handling. Both ranges of models ensure a significant reduction of dust levels (class L). Short installation periods and quick-release brackets for fastening the standardised swarf bags simplify work. The AAS series also offers the possibility of switching to swarf collection bins, either as part of the original equipment or at a later stage. Filter cartridges can be refitted at any stage as well.

The advantages for you:

- I Exceptional value for money
- I Robust design
- I Easy to operate
- I Outstanding extraction performance
- I Wide range of possibilities for retrofitting



MOBIL RAW AIR DUST COLLECTORS **MOBIL | AAS**



MOBIL 100 - 200

Туре	1001)**	125W**	125D**	140W**	140D**	160**	200**
Art. no.	195 174	195 125	195 126	195 142 50	195 127 50	195 129 50	195 131 50
Extraction nozzle	100 mm	125 mm	125 mm	140 mm	140 mm	160 mm	200 mm
Nominal motor rating	0.75 kW / 1 Ph	0.75 kW / 1 Ph	0.75 kW / 3 Ph	1.1 kW / 1 Ph	0.75 kW / 3 Ph	1.5 kW / 3 Ph	2.2 kW / 3 Ph
Voltage	230 V / 50 Hz	230 V/50 Hz	400 V/50 Hz	230 V/50 Hz	400 V/50 Hz	400 V / 50 Hz	400 V / 50 Hz
Flow rate	865 m³ / h	1,350 m ³ / h	1,350 m³ / h	1,650 m ³ / h	1,650 m ³ / h	2,200 m ³ / h	2,500 m ³ / h
Vacuum at nominal flow rate	1,780 Pa	1,600 Pa	1,600 Pa	1,750 Pa	1,750 Pa	2,500 Pa	2,700 Pa
Filter area	1.1 m ²	1.9 m ²	1.9 m ²	1.9 m ²	1.9 m ²	1.9 m ²	2.2 m ²
Swarf collection capacity	90 L	175 L	175 L	175 L	175 L	175 L	175 L
Dimensions (L/W/H) in mm	883x479x1,622	1,061x 577x2,100	1,061x 577x2,100	1,061x 577x2,100	1,061x 577x2,100	1,061x 577x2,100	1,061x 577x2,300
Weight net	26 kg	51 kg	53 kg	52 kg	53 kg	53 kg	60 kg

1) 2 m hose included in the delivery

Use in the wood industry is not permitted according DIN EN 16770



AAS 1013-AFB - 6013-AFB

Туре	1013-AFB	2013-AFB	3013-AFB	4013-AFB	5013-AFB	6013-AFB
Art. no.	199 451	199 452	199 457	199 458	199 459	199 460
Extraction nozzle	160 mm	160 mm	200 mm	250 mm	250 mm	300 mm
Nominal motor rating	2.2 kW/3Ph	2.2 kW/3Ph	3 kW/3Ph	4 kW/3Ph	5.5 kW/3Ph	7.5 kW/3Ph
Voltage	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
Nominal flow rate*	1,300 m³ / h	1,300 m³ / h	2,500 m ³ / h	3,500 m ³ / h	4,500 m³ / h	5,500 m ³ / h
Max. flow rate	1,800 m³ / h	2,300 m ³ / h	3,300 m³ / h	4,300 m³ / h	5,300 m ³ / h	7,300 m³ / h
Max. vacuum	2,100 Pa	2,200 Pa	2,700 Pa	2,500 Pa	2,900 Pa	2,900 Pa
Filter area	2.2 m ²	2 x 2.2 m ²	3 x 2.2 m ²	4 x 3.5 m ²	5 x 3.5 m ²	6 x 3.5 m ²
Swarf collection capacity	175 L	2 x 175 L	3 x 175 L	4 x 175 L	5 x 175 L	6 x 175 L
Dimensions (L/W/H) in mm	1,149 x 578 x 2,115	1,817 x 578 x 2,115	2,486 x 578 x 2,115	3,416 x 787 x 2,754	4,101 x 787 x 2,754	4,786 x 787 x 2,754
Weight net	74 kg*	103 kg*	139 kg*	238 kg*	277 kg*	319 kg*

Use in the wood industry is not permitted according DIN EN 16770

MOBIL RAW AIR DUST COLLECTORS

AAS



AAS 1013 - 6013

Туре	1013KS*	1013 *	2013 KS*	2013*
Art. no.	195 773 01	199 375 01	195 774 01	199 376 01
Extraction nozzle	160 mm	160 mm	160 mm	160 mm
Nominal motor rating	2.2 kW/3Ph	2.2 kW/3Ph	2.2 kW/3Ph	2.2 kW/3Ph
Voltage	400 V /50 Hz	400 V /50 Hz	400 V /50 Hz	400 V /50 Hz
Nominal flow rate*	1,300 m³/h	1,300 m³/h	1,300 m³/h	1,300 m³/h
Max. flow rate	1,800 m³/h	1,800 m³/h	2,300 m³/h	2,300 m³/h
Max. vacuum	2,100 Pa	2,100 Pa	2,200 Pa	2,200 Pa
Filter area	2.2 m ²	2.2 m ²	2 x 2.2 m ²	2 x 2.2 m ²
Swarf collection capacity	175 L	175 L	2 x 175 L	2 x 175 L
Dimensions (L/W/H) in mm	1,149 x 578 x 2,115	1,149 x 578 x 2,115	1,817 x 578 x 2,115	1,817 x 578 x 2,115
Weight net	61 kg	61 kg	76 kg	76 kg

Туре	3013*	4013*	5013*	6013*
Art. no.	192 452 01	195 776 02	195 777 02	195 778 02
Extraction nozzle	200 mm	250 mm	250 mm	300 mm
Nominal motor rating	3 kW/3Ph	4 kW/3Ph	5,5 kW/3Ph	7,5 kW/3Ph
Voltage	400 V /50 Hz			
Nominal flow rate*	2,500 m³/h	3,500 m³/h	4,500 m³/h	5,500 m³/h
Max. flow rate	3,300 m³/h	4,300 m³/h	5,300 m³/h	7,300 m³/h
Max. vacuum	2,700 Pa	2,500 Pa	2,900 Pa	2,900 Pa
Filter area	3 x 2,2 m ²	4 x 3,5 m ²	5 x 3,5 m ²	6 x 3,5 m ²
Swarf collection capacity	3 x 175 L	4 x 175 L	5 x 175 L	6 x 175 L
Dimensions (L/W/H) in mm	2,486 x 578 x 2,115	3,416 x 787 x 2,754	4,101 x 787 x 2,754	4,786 x 787 x 2,754
Weight net	98 kg	182 kg	207 kg	236 kg

^{*} with swarf bags

Use in the wood industry is not permitted according DIN EN 16770

The **AAS 1013 – 6013** raw air units are equipped with steel castors as standard. AAS 1013 and 2013 are additionally available as variants with plastic castors (KS, only in version with swarf bags).

- Extraction nozzle on top in standard version, conversion to nozzle underneath is generally possible on site without extra cost
- Selection between two standard discharge variants (swarf bag, swarf collection bin)
- Container painted in RAL 7035 structured finish, body with feet in galvanised steel plate design
- I Units can be retrofitted for swarf collection barrels (AFB) on site; for this, there is a retrofit set for AAS 1013 – 3013 and a retrofit set for AAS 4013 – 6013. These sets comprise a container as well as the holding and fastening materials.
- I Uniform swarf bags for all unit variants (art. no. 868 154, D=520, 1,300 mm long)
- I Filter length with AAS 1013 3013 = 1,000 mm filter length with AAS 4013 - 6013 = 1,600 mm
- Filter cartridges art. no. 195 194 can be retrofitted at any time

MOBIL RAW AIR DUST COLLECTORS MOBIL | AAS | BAG

Product	Туре			Art. no.
Connection cable for raw air equipment	Connection cable 230 V, 5 m with plug-i	in connection		520 195
<u> </u>	Connection cable 400 V, 5 m with plug-i	n connection		520 196
Accessories/options	Retrofit set AFB	AAS 1013-3013	Comprising: 1 Pc. bin as well as	199 461
	Retrofit set AFB	AAS 4013-6013	the holding and fastening materials	199 462
	Transport device	AAS 1013		199 504
	Transport device	AAS 2013	Comprising: 1 Pc. base plate and castors for mobile handling of the AAS	199 505
	Transport device	AAS 3013		199 506
Filter	for MOBIL 100 filter	320 / 400 700		934 988
	for MOBIL 125-160 fi	845 692		
	for AAS 1000-3000 / /	845 693		
	for AAS 4000-6000 / /	AAS 4013-6013 filter 5	25 / 625 1600	849 089
	for BAG 140-200 filte	er Kat. L 1600		867 947
Filter cartridges	Filter cartridges for raw air equipment diameter 330 mm for MOBIL 100 (Height of the filter cartridges with Ø 330 mm = 890 mm); 6 m ²			195 193
	Filter cartridges for raw air equipment diameter 500 mm for MOBIL 125 – 200, AAS (height of the filter cartridges with Ø 500 mm = 1,025 mm); 11 m ²			195 194

MOBILE VENTILATION EXTRACTION FAN

The advantages for you: I Fresh air supply for working

with construction chemicals I Fresh air supply for working with loose materials I Fresh air supply for working in rooms with uncomfortable air conditions



BAG 140 - 200

Туре	140	200
Art. no.	199 679	199 677
Intake nozzle	120 mm und 140 mm	120 mm und 200 mm
Rated motor power	1,1 kW/1 Ph	2,2 kW/3 Ph
Voltage	230 V/50 Hz	400 V/50 Hz
Flow rate	1,650 m³/h	2,500 m³/h
Vacuum at nominal flow rate	1,750 Pa	2,700 Pa
Filter surface	3 m²	3 m ²
Chippings collection volume	175 L	175 L
Dimensions (L/W/H) in mm	590* x 632 x 835	590* x 632 x 835
Net weight without packaging	ca. 29 kg	ca. 34 kg

Sales prices in Euro excluding VAT. Subject to technical modifications.

MOBILE PAINT MIST EXTRACTION

FLEXIBLE AND EFFICIENTLY

Your Benfits:

- I mobile design
- I high degree of separation, high suction performance
- l easy to handle
- I long filter life, therefore less downtime
- I flexible due to suction technology with front panel system
- certified for ATEX-zone 2

COLOUR JET

Туре	Туре 1	Туре 2	Туре 3	Type 4
Art. no.	195 627 01	195 628 01	195 629 01	195 752 01
Motor rating	1.5 kW	0.75/2.1 kW	0.75/2.1 kW	2.2 kW
Motor speed	1,410 min ⁻¹	960/1,430 min ⁻¹	960/1,430 min ⁻¹	1,430 min ⁻¹
Air volume	4,600 m³/h	3,000 / 6,800 m³/h	3,000 / 6,800 m³/h	6,800 m³/h
Usable pressure	500 Pa	400 / 500 Pa	400 / 500 Pa	500 Pa
Dimensions (L/W/H) in mm	1,012 x 1,405 x 912	1,012x1,405x943	1,912 x 1,405 x 943	1,912 x 1,405 x 943
Dimensions (L/W/H) in mm*	1,897 x 1,405 x 1,135	1,897 x 1,405 x 1,166	2,971 x 1,405 x 1,215	2,971 x 1,405 x 1,215
Filter area	1 m ²	1 m ²	2 m ²	2 m ²
Weight net	175 kg	176 kg	248 kg	248 kg

^{*} with opened side parts

oduct	Designation		Art. no.
Accessories/options	,	T 2, COLOUR JET 3, COLOUR JET 4, diameter 300 mm with flange ring, 1 cover flap for outside wall)	195 376 01
	Energy-saving stand Hook-on fixture for spray gun w throttle valve (integrated in COL	195 753	
	Volume paper filter for COLOUR JET 1, COLOUR JE prefilter for hooking onto COLOI	T 2: Holding frame with additional volume paper, JR JET	195 630 01
	Volume paper filter for COLOUR JET 3, COLOUR JE prefilter for hooking onto COLOU	T 4: Holding frame with additional volume paper, JR JET	195 631 01
	1 replacement volume paper filter	for COLOUR JET 1, COLOUR JET 2	195 640
	1 replacement volume paper filter	for COLOUR JET 3, COLOUR JET 4	195 650
	1 replacement prefilter	for COLOUR JET 1, COLOUR JET 2	195 651
	1 replacement prefilter	for COLOUR JET 3, COLOUR JET 4	195 652
	1 replacement fine filter	for COLOUR JET 1, COLOUR JET 2	195 653
	1 replacement fine filter	for COLOUR JET 3, COLOUR JET 4	195 654
	Teflon spray	Content: 400 ml	195 389

PROGRAM AL-KO VENTILATING AND AIR-CONDITIONING SYSTEMS

Air handling unit type AT4-F

The AT4-F kit is the basis for your air conditioning and ventilation system. In the development of the housing has AL-KO particularly strict standards created. So are indoor and outdoor space not only completely decoupled from each other, the AT4-F modules also correspond in each configuration according to T2/TB2 energy standard. With the sensibly graduated device cross-sections air capacities of 1,000 m³/h up to 120,000 m³/h can be realized. The housing construction is completely dismantled. The housing panel consists of a sandwich construction of two hot galvanized sheet steel shells with an internal, non-combustible insulation. The panels are 47 mm thick, cold bridge free and powder coated.



Applications:

- I commercial, industrial and automotive
- I spraying and painting equipment
- I medicine / pharma
- I human climate

The ideal complement to our exhausting systems is e.g. a weatherproof supply air

A supply air device typically consists of an outside air filter, a hot water heat exchanger and a fan. If required, this device can also be extended with regulation and additional ventilation components such as e.g. a cooling register.

An ideal complement to our paint mist extractors. For instance with an air volume of 3,000 m³ / h up to 7,000 m³ / h.



The ideal air heating or air cooling for your working space

AL-KO offers a comprehensive program on decentralized air heating and cooling units. Your working space can be heated electric or with hot or cold water in an energy-efficient way (6 - 73 kW heat output) or cooled (5 - 66 kW cooling capacity). Devices for the ATEX area complete this assortment off.



HIGH-PERFORMANCE INDUSTRIAL VACUUM AL-KO JET STREAM

SOLUTIONS THAT IMPROVE EFFICIENCY

AL-KO industrial vacuum cleaners are not simple vacuum cleaners but true industrial tools capable of increasing the efficiency of each industrial process, ensuring security and cleaning standards even in the most demanding environments.

From the wood-working handicraft to the foundry, from the small bakery to the largest automotive industry, our vacuum cleaners have solved and continue to satisfy the cleaning requirements of industry worldwide.

The AL-KO sales team is available to our customers at any time with its professionalism and competence. We always find the best result for every application, wether in terms of cleaning or material recovery. Instead of selling products, AL-KO offers real solutions to meet your expectations or even exceed them.









JET-STREAM

Model	JS M	JS 202 DS M*	JS 3533 M*	JS 3535 M*
Art.no.	192 451	197 000	197 006	197 008
Motor performance	1.2 kW/ 230V/ 50 Hz	2.3 kW/ 230 V/ 50 Hz	2.2 kW/ 400 V/ 50 Hz	4.0 kW/ 400 V/ 50 Hz
Max. vacuum	22,000 Pa	25,000 Pa	30,000 Pa	32,000 Pa
Max. volume flow	150 m³/h	360 m³/h	300 m³/h	450 m³/h
Filter area / diameter	6,000 cm ²	30,000 cm²/ 360 mm	20,000 cm²/ 420 mm	20,000 cm²/ 420 mm
Filtertype main filter	flat-fold filter	cartridge, polyester	star, polyester	star, polyester
Dust class Cat. BIA	M (<0,1 mg/m³)	M (<0,1 mg/m³)	M (<0,1 mg/m³)	M (<0,1 mg/m³)
Filter area load	250 m³/(m²xh)	120 m³/(m²xh)	150 m³/(m²xh)	225 m³/(m²xh)
Filter cleaning system	automatic	Dustop	manual	manual
Suction nozzle	Ø 35 mm	Ø 50 mm	Ø 80 mm	Ø 80 mm
Storage capacity	43	20	45 I	45 I
Noise level (EN ISO 3744)	67 dB(A)	76 dB(A)	69 dB(A)	69 dB(A)
Dimension (L x W x H)	520 x 380 x 695 mm	590 x 480 x 1,100 mm	1,000 x 550 x 1,250 mm	1,000 x 550 x 1,250 mm
Weight	approx. 13.7 kg	approx. 35 kg	approx. 80 kg	approx. 90 kg

Sales prices in Euro excluding VAT. Subject to technical modifications

* not suitable to extract wood dust

RELIABILITY

Discover every day the reliability of each AL-KO vavuum cleaner. Not only because each vacuum cleaner is the perfect combination of quality, safety and technology, but also because you have at your disposal a unique service, attentive to your requirements and your

The choice of an AL-KO industrial vacuum cleaner guarantees that you will be able to work with the certainty of being able to count an safe and efficient device in all situations.

YOUR BENEFITS

- I mobile collection container
- I comfortable lever clamping closure
- I optionally with tear-resistant plastic bags and appropriate sack holder
- I robust steel frame with powder painting
- I trackless rotatable wheels and parking brake









JET-STREAM

Model	JS DM 3 M*	JS ZFR 75 M*	JS DG 70 EXP M*	JS DM 40 Oil*
Art.no.	197 023	197 031	197 037	197 045
Motor performance	3.45 kW/ 230 V/ 50 Hz	3.0 kW/ 400 V/ 50 Hz	5.5 kW/ 400 V/ 50 Hz	3.45 kW/ 230 V/ 50 Hz
Max. vacuum	25,000 Pa	30,000 Pa	30,000 Pa	25,000 Pa
Max. volume flow	540 m³/h	350 m³/h	550 m³/h	540 m³/h
Filter area / diameter	20,000 cm²/ 500 mm	20,000 cm²/ 500 mm	30,000 cm²/ 500 mm	500 mm
Filtertype main filter	star, polyester	star, polyester	star, polyester	3D Superweb
Dust class Cat. BIA	M (<0,1 mg/m³)	M (<0,1 mg/m³)	M (<0,1 mg/m³)	polypropylene- 5μg
Filter area load	270 m³/(m²xh)	174 m³/(m²xh)	183 m³/(m²xh)	
Filter cleaning system	manual	manual	manual	
Suction nozzle	Ø 80 mm	Ø 80 mm	Ø 80 mm	Ø 80 mm
Storage capacity	100	100 l	100	solids 40 I / fluids 100 I
Noise level (EN ISO 3744)	76 dB(A)	75 dB(A)	72 dB(A)	76 dB(A)
Dimension (L x W x H)	770 x 660 x 1,500 mm	770 x 670 x 1,700 mm	660 x 1,180 x 1,450 mm	840 x 660 x 1,250 mm
Weight	approx. 85 kg	approx. 95 kg	approx. 146 kg	approx. 65 kg

HIGH-PERFORMANCE INDUSTRIAL VACUUM AL-KO JET STREAM

EXECUTION SUITABLE FOR INSTALLATION IN ZONE 22











JET-STREAM

Model	JS 202 BL M Z22	JS 3533 M Z22	JS 3535 M Z22	JS ZFR 75 M Z22	JS DG 70 EXP M Z22
Art.no.	197 007	197 009	197 011	197 010	197 030
Motor performance	2.3 kW/ 230 V/ 50 Hz	2.2 kW/ 400 V/ 50 Hz	4.0 kW/ 400 V/ 50 Hz	3.0 kW/ 400 V/ 50 Hz	5.5 kW/ 400 V/ 50 Hz
Max. vacuum	25,000 Pa	30,000 Pa	32,000 Pa	30,000 Pa	30,000 Pa
Max. volume flow	360 m³/h	300 m³/h	450 m³/h	350 m³/h	550 m³/h
Filter area / diameter	30,000 cm²/ 360 mm	20,000 cm²/ 420 mm	20,000 cm²/ 420 mm	20,000 cm²/ 500 mm	30,000 cm²/ 500 mm
Filtertype main filter	cartridge, polyester	star, polyester	star, polyester	star, polyester	star, polyester
Dust class Cat. BIA	M (<0,1 mg/m³)	M (<0,1 mg/m³)	M (<0,1 mg/m³)	M (<0,1 mg/m³)	M (<0,1 mg/m³)
Filter area load	120 m³/(m²xh)	150 m³/(m²xh)	225 m³/(m²xh)	174 m³/(m²xh)	183 m³/(m²xh)
Filter cleaning system	Dustop	manual	manual	manual	manual
Suction nozzle	Ø 50 mm	Ø 80 mm	Ø 80 mm	Ø 80 mm	Ø 80 mm
Storage capacity	201	45	45 I	100	100 l
Noise level (EN ISO 3744)	76 dB(A)	69 dB(A)	69 dB(A)	75 dB(A)	72 dB(A)
Dimension (L x W x H)	590 x 480 x 1,100 mm	1,000 x 550 x 1,250 mm	1,000 x 550 x 1,250 mm	770 x 670 x 1,700 mm	660 x 1,180 x 1,450 mm
Weight	approx. 35 kg	approx. 80 kg	approx. 90 kg	approx. 95 kg	approx. 146 kg

Sales prices in Euro excluding VAT. Subject to technical modifications

Further sizes and executions on request

SAFETY

SAFETY is not just an abstract concept at AL-KO, but a real philosophy. From the engineering to certification, our goal is to provide to our customers state of the art, safe and user-friendly AL-KO extraction solutions.

Whether ATEX industrial vacuum cleaners or systems in dust class M or H, AL-KO always offers the right solution and the corresponding device.

ATEX ZONING AND EQUIPMENT CATEGORY

	Zone	Duration of occurence of an explosive atmosphere	Equipment category
Gases, Vapours, Mists	0	Continously, for a long period, frequently	1G
	1	Occasionally	2G
	2	Rarely or for a short period	3 G
Dusts	20	Continously, for a long period, frequently	1D
	21	Occasionally	2D
	22	Rarely or for a short period	3D

CLASSIFICATION OF DUST CLASSES

Suitable for dry, dangerous to health, non flammable dust	Valid dust class accord. to DIN EN 60335-2-69, annex AA					
since 01.01.2015	Dust class	Maximum passage level				
with AGW* > 1 mg/m³	at least L (M, H)	<1 %				
with AGW* ≥ 0.1 mg/m³	at least M (H)	< 0.1 %				
with AGW* < 0.1 mg/m³	Н	< 0.005 %				
Carcinogenic dangerous substances accord. GefStoffV § 11 TRGS 905 or TRGS 906	Н	< 0.005 %				









Dust class M (medium hazard) according EN 60335-2-69, for separating dust with exposure limit value more than 0.1 mg/m³



EN 60335-2-69, for separating dust with exposure for any dust with all exposure limits including carcinogenic and patho-

HIGH-PERFORMANCE INDUSTRIAL VACUUM AL-KO JET STREAM

OPTIONAL ACCESSORIES

Optional Accessories / suitable for		W SS	JS 202 DS M	JS 3533 M	JS 3535 M	JS DM 3 M	JS ZFR 75 M	JS DG 70 EXP M	JS DM 40 OIL
	Art. no.								
Trade and industry kit extension tube 2-pc DN35, elbow, upholstery nozzle, joint nozzle DN35, floor nozzle DN35 widet, floor nozzle DN35 small, all-purpose nozzle	195 587	Х							
Kit BASIC -DN 40 device connector, suction hose DN40 Evaflex with socket 3m, bristle brush DN40, rubber nozzle DN40 round conductive with connecting piece, hand tube DN40 chromed, floor brush DN40 dry/ wet	197 098		Х						
Kit INDUSTRY -DN 40 device connector, suction hose DN40 Superflex antistatic with socket 3m, bristle brush DN40, rubber nozzle DN40 round conductive with connecting piece, hand tube DN40 aluminium, floor nozzle DN40 430mm with brushes and rolls	197 091		X						
Kit BASIC antistatic -DN 40 device connector, suction hose DN40 Evaflex with sockets 3m, rubber nozzle DN40 round conductive with connecting piece, hand tube DN40 aluminium, floor nozzle DN40 430 mm with brushes and stainless steel rolls	197 092		Х						
Kit INDUSTRY antistatic -DN 40 connection piece, suction hose DN40 Superflex with sockets 3m, rubber nozzle DN40 round conductive with connecting piece, hand tube DN40 aluminium, floor nozzle DN40 430 mm with brushes and stainless steel rolls	197 093		Х						
Kit BASIC -DN 50 reduction DN80/50, suction nozzleDN50 Evaflex with socket 3m, brush nozzle DN50, joint tube DN50 aluminium 500 mm, rubber nozzle DN50 round conductive with connecting piece, hand tube DN50 aluminium, floor nozzle DN50 430 mm with brushes and rolls	197 012			Х	Х				
Kit INDUSTRY -DN 50 reduction DN80/50, suction nozzle DN50 Superflex with sockets 3m, bristle brush DN50, joint nozzle DN50 aluminium 500 mm, rubber nozzle DN50 round conductive with connecting piece, hand tube DN50 aluminium, floor nozzle DN50 430 mm with brushes and rolls	197 094			Х	Х				
Kit BASIC antistatic -DN 50 reduction DN80/50, suction hose DN50 Evaflex antistatic with sockets 3m, rubber nozzle DN50 round conductive with connecting piece, hand tube DN50 aluminium, floor nozzle DN50 430 mm with brushes and stainless steel rolls	197 015			Х	Х				
Kit INDUSTRY antistatic -DN 50 reduction DN80/50, suction nhose DN50 Superflex antistatic with sockets 3m, rubber nozzle DN50 round conductive with connecting piece, hand tube DN50 aluminium, floor nozzle DN50 430 mm with brushes and rolls	197 095			Х	Х				
Kit INDUSTRY -DN 70 reduction DN80/70, suction nozzle DN70 PU Superflex antistatic with sockets 3m, rubber nozzle DN70 round conductive with connection piece, joint nozzle DN70 aluminium 500 mm, hand tube DN70 aluminium, floor nozzle DN70 550 mm with brushes and rolls	197 096					Х	Х	Х	
Kit INDUSTRY antistatic -DN 70 reduction DN80/70, suction nozzle DN70 PU Superflex antistatic with sockets, rubber nozzle DN70 round conductive with connecting piece, hand tube DN70 aluminium, floor nozzle DN70 550 mm withnbrushes and stainless steel rolls	197 097					Х	Х	Х	

Optional Accessories / suitable for		M SC	JS 202 DS M	JS 3533 M	JS 3535 M	JS DM 3 M	JS ZFR 75 M	JS DG 70 EXP M	JS DM 40 OIL
	Art. no.							,	_
Kit INDUSTRY -DN 50 reduction DN80/50, screw socket for hose DN 50 PU, PU suction hose DN50 with steel core 3m, hose clip DN60, connecting angle DN 50 steel, rubber nozzle DN50 round conductive with connecting piece, joint nozzle flat aluminium 500mm	197 046								Х
H- absolute filter dust class H14	197 001		Х						
H- absolute filter dust class H14	197 019			X	Х				
H- absolute filter dust class H14	197 024					Х			
H- absolute filter dust class H14	197 038						Х		
H- absolute filter dust class H14	197 032							Χ	
M- filter antistatic	197 002		Х						
M- filter antistatic	197 020			X	Х				
M- filter antistatic	197 025					Х			
M- filter antistatic	197 033						Х		
M- filter antistatic	197 039							Χ	
PTFE- filter with coating, dust class M	197 003		Х						
PTFE- filter with coating, dust class M	197 021			X	Х				
PTFE- filter with coating, dust class M	197 026					Х			
PTFE- filter with coating, dust class M	197 034						Х		
PTFE- filter with coating, dust class M	197 040							Χ	
Paper filter bags, 5 pc	195 588	X							
Replacement filter	195 589	Х							
Suction hose 4m with socket	195 590	Х							
Connecting adapter	195 591								
Disposable bag, antistatic D360/400 mm, 80 mikron, 1 pc	197 085		Х						
Disposable bag, antistatic D400/450 mm, 80 mikron, 1 pc	197 086					Х	Х	Χ	

Filter prices are only valid for original equipment ex works, additional accessories and spare parts on request







Calculation of the stationary systems is made by a max. Filter load of 150 m³/m²*h.

More than this value is not allowed by AL-KO and is only made on responsibility of the commissioning engineer.

While developing the ECO JET compact filter systems, AL-KO focussed on three goals: ECO JET offers you maximum security of investment, exceedingly low operating costs and maximum convenience. This is why every ECO JET system is of course fitted with the unique AL-KO OPTI JET® filter system: For you and your valuable machinery this means cleaner air, constant extraction performance, lower energy consumption, less noise and vibration, longer filter service life and thus less downtime as well as predictable maintenance intervals. In addition, the programmable controller enables you to make changes at any time with little effort. That's security of investment you can enjoy on a daily basis.

The advantages for you:

- I Permanently clean air for people and machines
- I Low energy consumption
- Less downtime and predictable maintenance intervals
- Low sound and vibration emission
- I Easy to extend









STATIONARY COMPACT FILTER SYSTEMS **ECO JET**

| Default disposal:

- ➤ Waste container
- > Rotary feeder
- ➤ Briquetting press
- > Round discharge

| Special disposal:

Sliding floor, chain floor, screw conveyor and other variations on request

Options:

Spacer rings for longer filters = more filter area = lower filter load = reduction of the differential pressure = reduction of energy- and operating costs

alternative

As expansion increase = calming of the air speed = filter protection = higher liftetime



Excerpt of possible variations. Other versions on request.

Туре	Туре 2	Туре 3	Туре 4	Туре 5
Vacuum at nominal flow rate	2,500 Pa	3,700 – 4,200 Pa	2,500 – 4,200 Pa	2,100 – 3,700 Pa
Motor rating	3.0 kW	5.5 – 11 kW	7.5 – 15 kW	7.5 – 15 kW
Flow rate	2,300 m³/h	2,500 - 4,200 m ³ / h	6,045 - 10,000 m ³ / h	6,045 - 10,000 m ³ / h
Filter area	17.3 m²	23 – 38.8 m ²	28.8 – 58.2 m ²	40.3 – 77.6 m ²
Depth	1,122 – 1,315 mm	1,122 – 1,315 mm	1,122 — 1,315 mm	1,122 – 1,315 mm
Length	2,225 mm	2,440 mm	3,188 mm	3,950 mm
Height	2,959 mm	2,959 – 4,832 mm	2,959 – 5,291 mm	2,959 – 5,150 mm

Туре	Туре 6	Type DUO 6	Type DUO 8	Type DUO 10
Vacuum at nominal flow rate	2,250 – 3,000 Pa	2,100 – 4,700 Pa	2,100 – 4,700 Pa	2,100 – 4,700 Pa
Motor rating	11 – 18.5 kW	15 – 18.5 kW	2 x 11 – 2 x 15 kW	2 x 11 – 2 x 18.5 kW
Flow rate	7,770 - 10,000 m ³ / h	5,700 - 13,000 m ³ / h	8,000 - 17,000 m ³ / h	8,000 - 25,000 m ³ / h
Filter area	51.8 – 97 m ²	57.6 – 97 m ²	69.2 – 116.4 m ²	92 – 155.2 m²
Depth	1,122 – 1,315 mm	2,121 – 2,173 mm	2,121 – 2,296 mm	2,121 – 2,296 mm
Length	4,563 mm	2,530 mm	3,188 mm	3,919 mm
Height	2,959 – 4,059 mm	3,610 – 5,277 mm	3,610 – 5,597 mm	3,996 – 5,597 mm

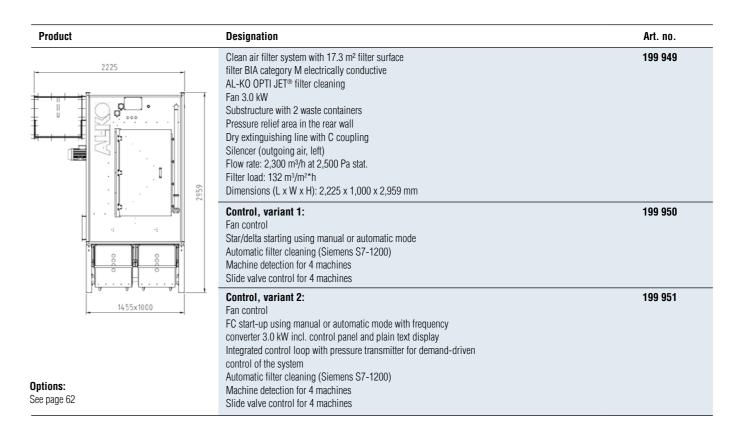
STATIONARY COMPACT FILTER SYSTEMS **ECO JET**

For calculation of other System-variations, please send following information to us:

Checklist ECO JET				
Partner:				
Customer:				
Project:				
Flow rate (m³/h):				
Vacuum fan total (Pa):				
Pressure fan total (Pa):				
Filter area (m²):				
Filter load: Please observ the rules (such as wood max. 150 m³/m²*h)				
Voltage solenoid valves 24 V / 230 V:				
Special voltage (such as V/Hz):				
Machines to extract:				
Material to extract:				
Material per hour (kg):				
Installation situation (on roof, walls, near buildings, place of installation):				
ATEX Zone:	Yes	(Cat:)	No
ECO JET top:				
Number of fans:				
ECO JET spacer rings:	Yes	(Height:)	No
ECO JET bottom / disposal:				
Inlet (mm):				
Pipes:				
Sound damper (guidelines sound):	Yes	(dB(A):)	No
Control requirements:				

STATIONARY COMPACT FILTER SYSTEMS (Excerpt)

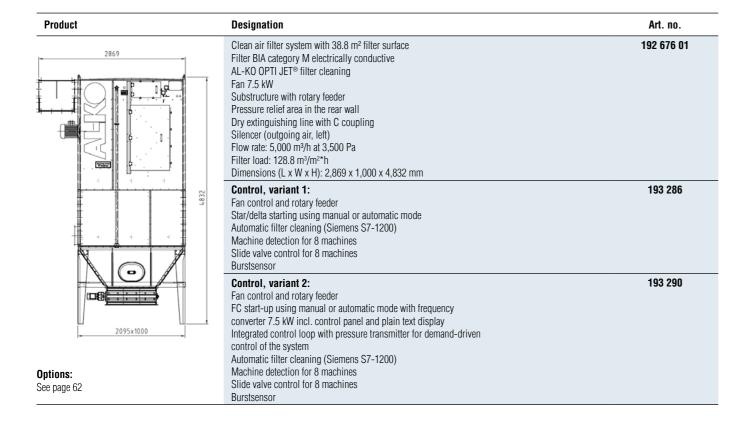
ECO JET 2 AFB 3.0 KW (waste container)



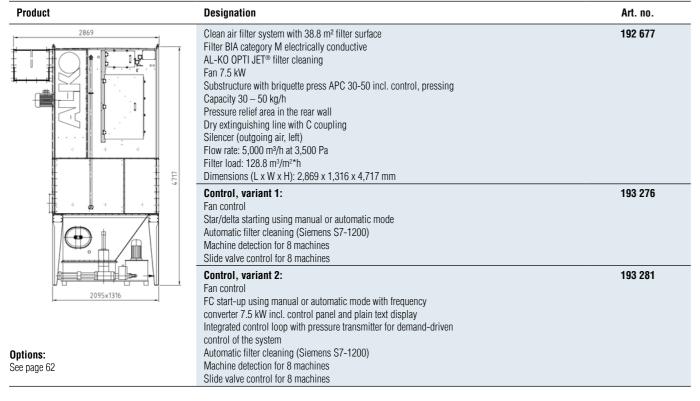
ECO JET 3 XL AFB 7.5 KW (waste container)

Product	Designation	Art. no.
2869	Clean air filter system with 38.8 m² filter surface Filter BIA category M electrically conductive AL-KO OPTI JET® filter cleaning Fan 7.5 kW Substructure with 3 waste containers Pressure relief area in the rear wall Dry extinguishing line with C coupling Silencer (outgoing air, left) Flow rate: 5,000 m³/h at 3,500 Pa Filter load: 128.8 m³/m²*h Dimensions (L x W x H): 2,869 x 1,000 x 4,059 mm	192 675 01
6507	Control, variant 1: Fan control Star/delta starting using manual or automatic mode Automatic filter cleaning (Siemens S7-1200) Machine detection for 8 machines Slide valve control for 8 machines	193 276
2099x1000 Deptions:	Control, variant 2: Fan control FC start-up using manual or automatic mode with frequency converter 7.5 kW incl. control panel and plain text display Integrated control loop with pressure transmitter for demand-driven control of the system Automatic filter cleaning (Siemens S7-1200)	193 281
See page 62	Machine detection for 8 machines Slide valve control for 8 machines	

ECO JET 3 XL ZRS 7.5 KW (rotary feeder)

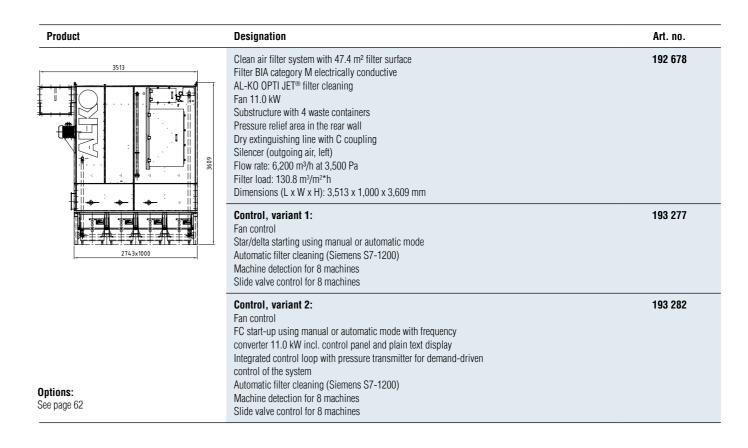


ECO JET 3 XL BP 7.5 KW (briquetting press)

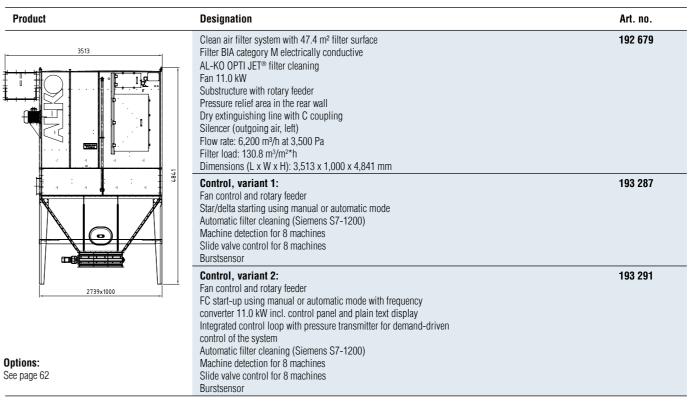


STATIONARY COMPACT FILTER SYSTEMS

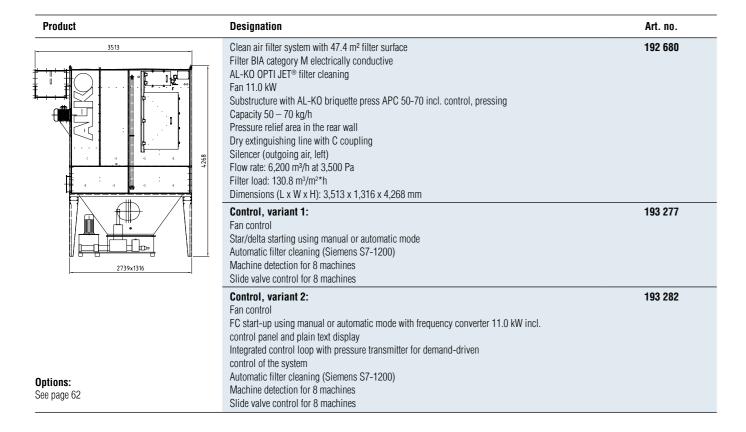
ECO JET 4 L AFB 11 KW (waste container)



ECO JET 4 L ZRS 11 KW (rotary feeder)



ECO JET 4 L BP 11 KW (briquetting press)

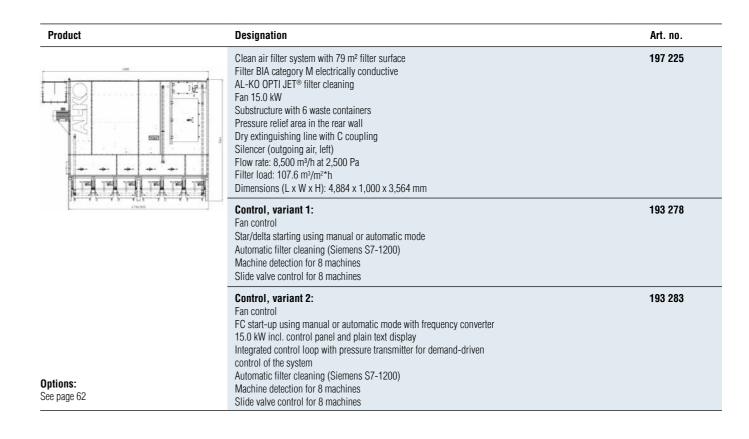


ECO JET 5 AFB 11 KW (waste container)

Product	Designation	Art. no.
	Clean air filter system with 46 m² filter surface Filter BIA category M electrically conductive AL-KO OPTI JET® filter cleaning Fan 11.0 kW Substructure with 5 waste containers Pressure relief area in the rear wall Dry extinguishing line with C coupling Silencer (outgoing air, left) Flow rate: 6,200 m³/h at 3,500 Pa Filter load: 134.8 m³/m²*h Dimensions (L x W x H): 4.243 x 1.000 x 2.959 mm	199 952
3570,500	Control, variant 1: Fan control Star/delta starting using manual or automatic mode Automatic filter cleaning (Siemens S7-1200) Machine detection for 8 machines Slide valve control for 8 machines	199 277
Options: See page 62	Control, variant 2: Fan control FC start-up using manual or automatic mode with frequency converter 11.0 kW incl. control panel and plain text display Integrated control loop with pressure transmitter for demand-driven control of the system Automatic filter cleaning (Siemens S7-1200) Machine detection for 8 machines Slide valve control for 8 machines	193 282

STATIONARY COMPACT FILTER SYSTEMS

ECO JET 6 L AFB 15 KW (waste container)

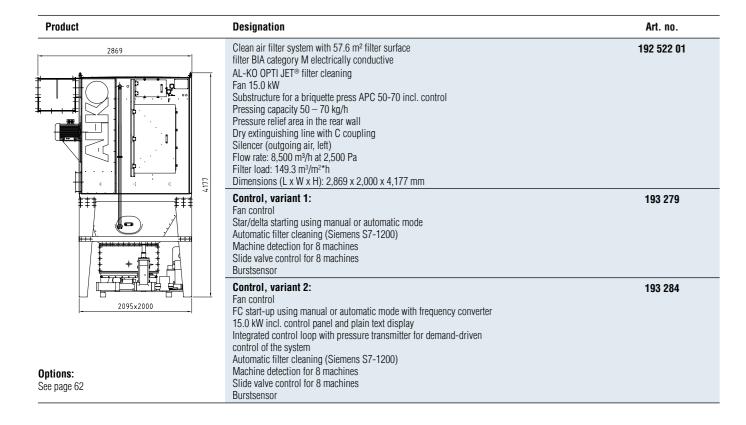


ECO JET DUO 6 ZRS 15 KW (rotary feeder)

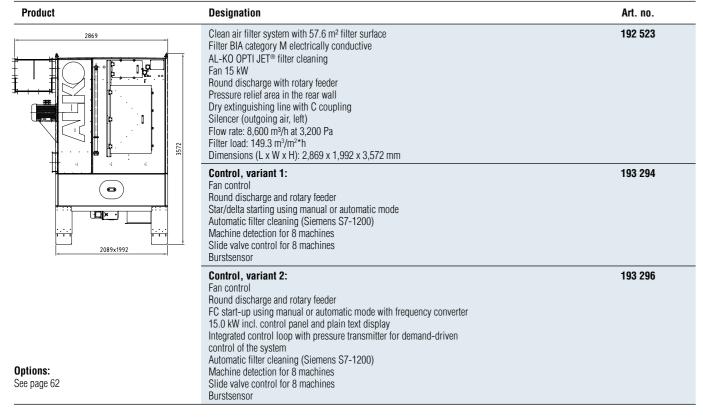
Product	Designation	Art. no.
2869	Clean air filter system with 57.6 m² filter surface BIA M electrically conductive AL-KO OPTI JET® filter cleaning Fan 15.0 kW Substructure with rotary feeder Pressure relief area in the rear wall Dry extinguishing line with C coupling Silencer (outgoing air, left) Flow rate: 8,600 m³/h at 3,200 Pa Filter load: 149.3 m³/m²*h Dimensions (L x W x H): 2,869 x 2,000 x 4,177 mm	192 521 01
4 4 4	Control, variant 1: Fan control and rotary feeder Star/delta starting using manual or automatic mode Automatic filter cleaning (Siemens S7-1200) Machine detection for 8 machines Slide valve control for 8 machines Burstsensor	193 289
2095x2000 Dptions: See page 62	Control, variant 2: Fan control and rotary feeder FC start-up using manual or automatic mode with frequency converter 15.0 kW incl. control panel and plain text display Integrated control loop with pressure transmitter for demand-driven control of the system Automatic filter cleaning (Siemens S7-1200) Machine detection for 8 machines Slide valve control for 8 machines Burstsensor	193 293

Sales prices in Euro excluding VAT. Subject to technical modifications.

ECO JET DUO 6 BP 15 KW (briquetting press)

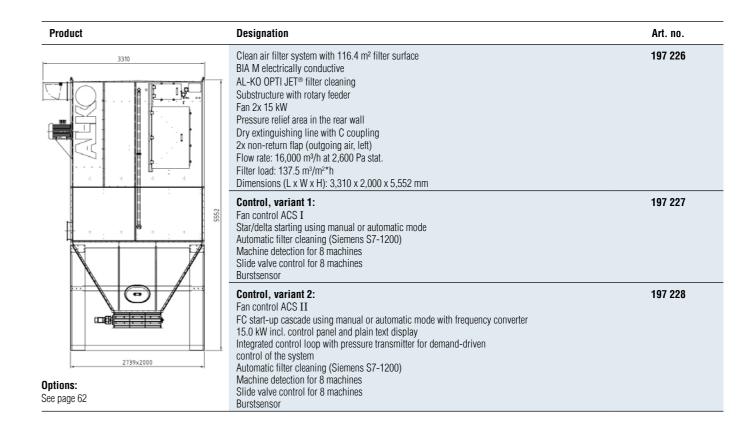


ECO JET DUO 6 RA 15 KW (round discharge)

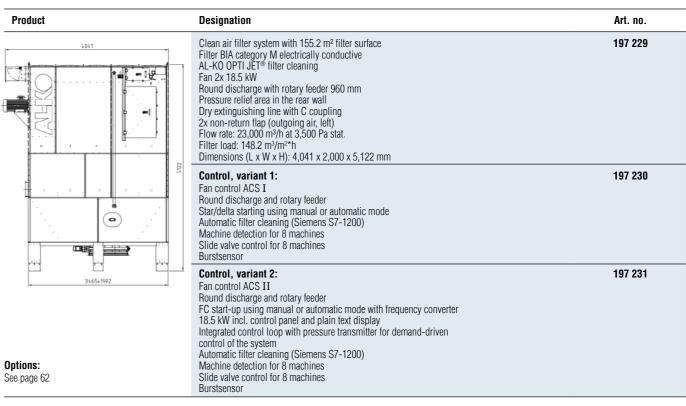


STATIONARY COMPACT FILTER SYSTEMS

ECO JET DUO 8 XL ZRS 2x15 KW (rotary feeder)



ECO JET DUO 10 XL RA 2x18.5 KW (round discharge)



ACCESSORIES ECO JET

IMPORTANT: In all stationary systems of the ECO JET series, it is necessary to order the intake sockets as well!

Intake sockets 250 mm with check valve in rectangular duct Intake sockets 300 mm with check valve in rectangular duct Intake sockets 2 x 250 mm with check valve in rectangular duct Intake sockets 2 x 300 mm with check valve in rectangular duct Intake sockets 315 mm with check valve in rectangular duct Intake sockets 350 mm with check valve in rectangular duct Intake sockets 355 mm with check valve in rectangular duct Intake sockets 400 mm with check valve in rectangular duct Swarf bags for ECO JET/ PROFI JET 20 pcs	199 610 199 611 199 612 199 613 199 614 199 323 199 479 199 324 199 325
Intake sockets 300 mm with check valve in rectangular duct Intake sockets 2 x 250 mm with check valve in rectangular duct Intake sockets 2 x 300 mm with check valve in rectangular duct Intake sockets 315 mm with check valve in rectangular duct Intake sockets 350 mm with check valve in rectangular duct Intake sockets 355 mm with check valve in rectangular duct Intake sockets 400 mm with check valve in rectangular duct	199 612 199 613 199 614 199 323 199 479 199 324 199 325
Intake sockets 2 x 250 mm with check valve in rectangular duct Intake sockets 2 x 300 mm with check valve in rectangular duct Intake sockets 315 mm with check valve in rectangular duct Intake sockets 350 mm with check valve in rectangular duct Intake sockets 355 mm with check valve in rectangular duct Intake sockets 400 mm with check valve in rectangular duct	199 613 199 614 199 323 199 479 199 324 199 325
Intake sockets 2 x 300 mm with check valve in rectangular duct Intake sockets 315 mm with check valve in rectangular duct Intake sockets 350 mm with check valve in rectangular duct Intake sockets 355 mm with check valve in rectangular duct Intake sockets 400 mm with check valve in rectangular duct	199 614 199 323 199 479 199 324 199 325
Intake sockets 315 mm with check valve in rectangular duct Intake sockets 350 mm with check valve in rectangular duct Intake sockets 355 mm with check valve in rectangular duct Intake sockets 400 mm with check valve in rectangular duct	199 323 199 479 199 324 199 325
Intake sockets 350 mm with check valve in rectangular duct Intake sockets 355 mm with check valve in rectangular duct Intake sockets 400 mm with check valve in rectangular duct	199 479 199 324 199 325
Intake sockets 355 mm with check valve in rectangular duct Intake sockets 400 mm with check valve in rectangular duct	199 324 199 325
Intake sockets 400 mm with check valve in rectangular duct	199 325
Swarf bags for ECO JET/ PROFI JET 20 pcs	934 605
Swarf bags for ECO JET/ PROFI JET 20 pcs	934 605
FCO IFT exhaust air, ailanear V4	938 022 01
ECO DE L'EXHAUST GII - SHEHICEL A L	930 022 01
ECO JET exhaust air- silencer V2	199 480
ECO JET return air channel EA/RA	199 953
ECO JET DUO return air channel EA/RA	199 954
ECO JET non-return flap 910x346x250 mm	199 975
Feeding shaft - compressed air- dedusting	199 751
Clida valva agatral avad grava	193 742
Horn & flash lamp fault indication	193 763
EA/RA control 24V	193 773
ACS AL-KO LEVEL CONTROL 21 ATEX	193 759 01
Paddle switch 24V- 230V	199 842
Control dedusting feeding shaft 1 pc	193 803
Dedusting module 5 solenoid valves	867 231
Dedusting module 10 solenoid valves	867 233
	ECO JET return air channel EA/RA ECO JET DUO return air channel EA/RA ECO JET non-return flap 910x346x250 mm Feeding shaft - compressed air- dedusting Slide valve control quad group Horn & flash lamp fault indication EA/RA control 24V ACS AL-KO LEVEL CONTROL 21 ATEX Paddle switch 24V- 230V Control dedusting feeding shaft 1 pc Dedusting module 5 solenoid valves

STATIONARY SYSTEM FILTER EQUIPMENT **PROFIJET**

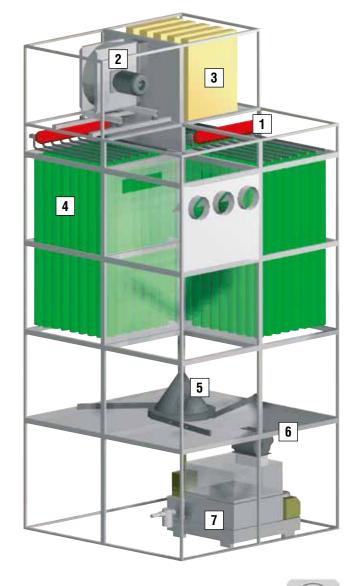
On the following pages you will find a few variations. More systems on request.

Calculation of the stationary systems is made by a max. Filter load of 150 m 3 /m 2 *h. More than this value is not allowed by AL-KO and is only made on responsibility of the commissioning engineer.

- **1** Efficient and economical: Large air surge tank with fast diaphragm valves for effective OPTI JET® filter cleaning and lowest use of compressed air.
- **2** Safely regulated: Process fans according to ErP Directive 2009/125/EC.
- **3** Safeguarding good neighbourhood relations: sound-insulated return air chamber, optionally with sound-absorbing panels providing the lowest sound emission values on the market.
- **4** Optimum efficiency: OPTI JET® filter bag (BGIA-tested for dust class M).
- **5** According to your preference: Discharge made from galvanised steel plates or welded and powder-coated.
- **6** AL-KO rotary feeder pressure-tested according to ATEX Directive 2014/34/EU.
- **7** They soon pay themselves off: AL-KO briquette presses.

The advantages for you:

- I Individual solution with cost-effective standard components
- I AL-KO OPTI JET® technology for cleaner air, less downtime and lower energy consumption
- I Security of investment as the system can grown and change along with the business
- I Integrated insulation for minimal temperature loss
- Integrated fire and explosion protection











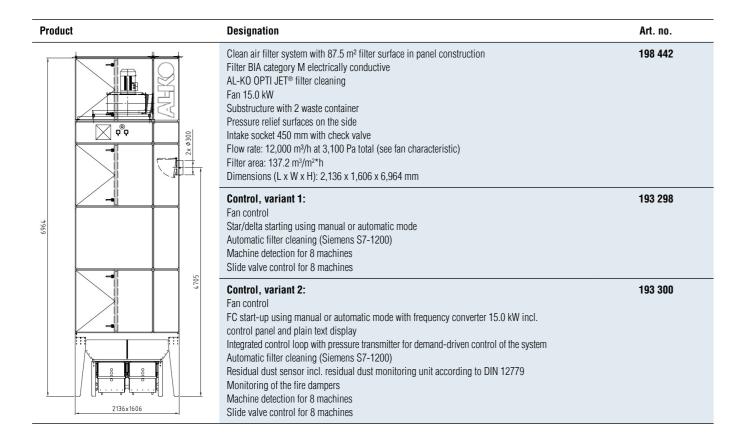






STATIONARY SYSTEM FILTER EQUIPMENT

PROFI JET 1 AFB / 15 KW (waste container)



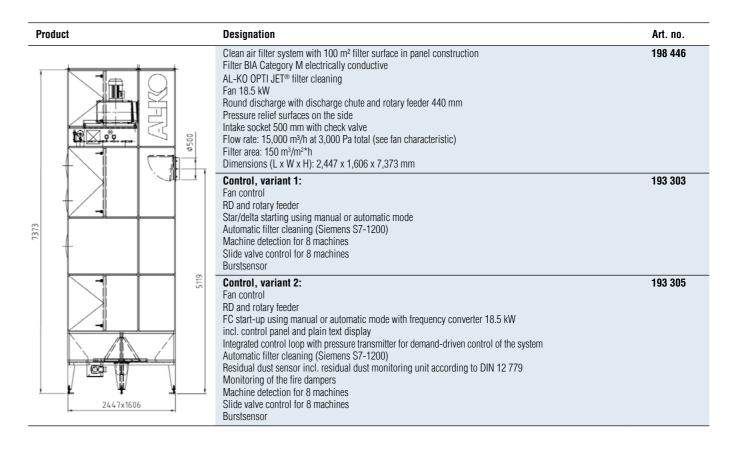
PROFI JET 2 BP / 15 KW (briquetting press)

Product	Designation	Art. no.
	Clean air filter system with 75 m² filter surface in panel construction Filter BIA category M electrically conductive AL-KO OPTI JET® filter cleaning Fan 15.0 kW Briquette press with a pressing capacity of 30 – 50 kg/h incl. control Pressure relief surfaces on the side Intake socket 450 mm with check valve Flow rate: 12,000 m³/h at 3,160 Pa total (see fan characteristic) Filter area: 137.2 m³/m²*h Dimensions (L x W x H): 2,601 x 1,606 x 7,571 mm	198 444
	Control, variant 1: Fan control Star/delta starting using manual or automatic mode Automatic filter cleaning (Siemens S7-1200) Machine detection for 8 machines Slide valve control for 8 machines	193 298
2601x1606	Control, variant 2: Fan control FC start-up using manual or automatic mode with frequency converter 15.0 kW incl. control panel and plain text display Integrated control loop with pressure transmitter for demand-driven control of the system Automatic filter cleaning (Siemens S7-1200) Residual dust sensor incl. residual dust monitoring unit according to DIN 12 779 Monitoring of the fire dampers Machine detection for 8 machines Slide valve control for 8 machines	193 300

Sales prices in Euro excluding VAT. Subject to technical modifications

STATIONARY SYSTEM FILTER EQUIPMENT

PROFI JET 3 RA / 18.5 KW (round discharge with rotary feeder)

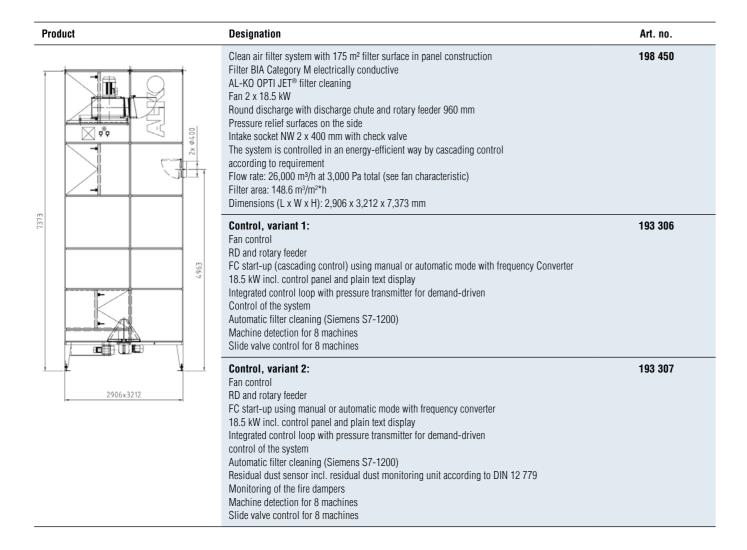


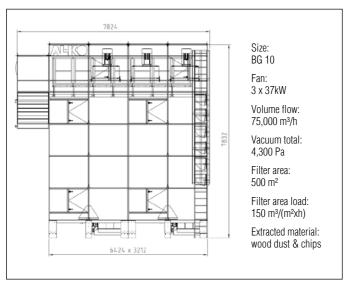
PROFI JET 4 BP / 18.5 KW (briquetting press)

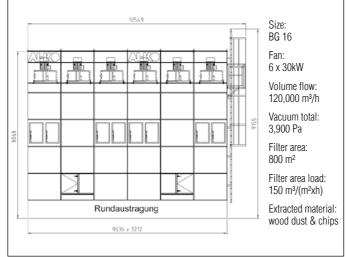
Product	Designation	Art. no.
0005	Clean air filter system with 100 m² filter surface in panel construction Filter BIA Category M electrically conductive AL-KO OPTI JET® filter cleaning Fan 18.5 kW Briquette press with a pressing capacity of 30 – 50 kg/h incl. control Pressure relief surfaces on the side Intake socket 500 mm with check valve Flow rate: 15,000 m³/h at 3,100 Pa total (see fan characteristic) Filter area: 150 m³/m²*h Dimensions (L x W x H): 2,601 x 1,606 x 8,183 mm	198 448
9358	Control, variant 1: Fan control Star/delta starting using manual or automatic mode Automatic filter cleaning (Siemens S7-1200) Machine detection for 8 machines Slide valve control for 8 machines	193 299
2601x1606	Control, variant 2: Fan control FC start-up using manual or automatic mode with frequency converter 18.5 kW incl. control panel and plain text display Integrated control loop with pressure transmitter for demand-driven control of the system Automatic filter cleaning (Siemens S7-1200) Residual dust sensor incl. residual dust monitoring unit according to DIN 12 779 Monitoring of the fire dampers Machine detection for 8 machines Slide valve control for 8 machines	193 301

STATIONARY SYSTEM FILTER EQUIPMENT

PROFI JET 5 RA / 2 X 18.5 KW (round discharge with rotary feeder)







WELDING FUME / DEDUSTING UNITS

AL-KO FLEX UNIT (AFU) SERIES



Features:

- 2in1 Extraction with heat recovery
- I Efficient and economical trough large air surge tank with fast diaphragm valves for effective OPTI JET® filter cleaning and lowest use of compressed air
- I Filter bag with bayonet fitting for easiest handling
- I 100% fresh air supply prevent long-term odour nuisance
- I Energy saving by heat recovery and frequency converter
- I Low space requirement
- I Simple maintenance access
- Low noise emission
- I Individual control features
- I Individual expandable







Supply air section		AFU ECO TYPE 1	AFU ECO TYPE 2	AFU ECO TYPE 3	AFU ECO TYPE 4
Art. no.		199 854	199 855	199 856	199 857
Fan (EC radial fan)	kW	3.0	5.5	2 x 3.0	2 x 5.5
Air volume	m³/h	5,200	9,000	10,400	18,000
Vacuum at nominal rate	Pa	1,100	900	1,100	900
Exhaust air section					
Fan	kW	7.5	11.0	2x 7.5	2x 11.0
Filter loading	m³/(m²xh)	53	48	41	43
Air volume	m³/h	5,200	9,000	10,400	18,000
Vacuum at nominal rate	Pa	3,000	2,800	3,400	2,800
Heat recovery					
Efficiency	%	60 - 67	61 - 66	60 - 67	61 - 66
Dimensions (W x D x H)	mm	4,182 x 1,306 x 2,821	4,472 x 1,413 x 3,182	4,182 x 2,612 x 2,821	4,933 x 2,715 x 3,107
Voltage		400 V / 3 Ph / 50 Hz	400 V / 3 Ph / 50 Hz	400 V / 3 Ph / 50 Hz	400 V / 3 Ph / 50 Hz

AL:KO

WELDING FUME — AND DUST FILTER SYSTEMS

AL-KO AFU 15-50

AL-KO filter units serie AFU 15-50 are universally applicable to extract chips, dust as well as welding fume in metal and plastic industry and many other sectors. They combine high reliability with a compact and space-saving design. They create ideal production conditions with healthy air in the workplace, are unusually quiet and help to achieve significant cost savings. All sizes are designed to offer the optimum combination of maximum extraction power

and the lowest possible energy consumption. Furthermore, the tried-and- tested AL-KO OPTI JET® process guarantees filter cleaning, and consequently increased filter service life. They are delivered ready for connection, all you need is to insert the swarf bag.



YOUR BENEFITS

- I High extraction performance
- I Compact design
- I Integrated pre-separator and extendable control system
- I Optimum filter dedusting
- I Minimum noise level
- I Container move left/ right possible
- I Equipment with different filter media
- I Special voltage on request
- I Additional variants for pre-separation
- I Simple exhaust air duct connection
- I Castors in the standard for positioning on the workplace
- I Integrated lifting point for fork lift
- I Crane eyes installed
- I Extensive control options also with frequency converter
- Various discharge systems available (Briquett press, rotary feeder, etc)
- I Dust-free container removal by AL-KO DUST COMPARTMENT (option)
- I Made for single and muliti-user extraction
- I VENTURI-nozzle in the standard for optimum filter cleaning
- I Optionally with spark pre-separator



- Large air surge tank with fast diaphragm valves for optimum JET filter cleaning and lowest use of compressed air
- **2** Filter cartridge made of antistatic polyester needle felt material (BGIAtested for dust class M) as standard with bajonet catch for easy handling
- 3 Energy-efficient motors according to IE3 as standard

- Sound-insulated air recirculation for optimum noise emission values
- **S** PLC control: manual and automated operation possible; can be extended with many options (e.g. machine recognition; slide valve control; frequency controlled operation and many more functions besides)
- **6** Viewing window for easy fill level check
- Tergonomically shaped clamping lever for simple container locking





CLEAN DUST COMPARTMENT



The AL-KO DUST COMPARTMENT, the simple and inexpensive solution for greater cleanliness and health protection in the workplace.

The advantages for you:

- I Easy to operate
- I Dust-free wind-up during container changes I Bag removal with lifting machine
- I Optimised health protection

Model	AFU 15*	AFU 25*	AFU 35*	AFU 50*
Art. no.	199 133	199 132	199 131	199 129
Suction nozzle	160 mm	200 mm	250 mm	300 mm
Motor performance	2.2 kW	4.0 kW	7.5 kW	7.5 kW
Voltage	400 V / 3 Ph			
Max. volume flow	2,200 m³/h	3,200 m³/h	5,000 m³/h	6,000 m³/h
Vacuum	2,800 Pa	3,200 Pa	3,800 Pa	4,000 Pa
Number of filter	2	2	4	4
Filter area	42 m²	42 m²	84 m²	84 m²
Swarf 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 (L / W / H)	1,908 x 1,058 x 2,113 mm			
Weight	392 kg	412 kg	460 kg	470 kg

*ATTENTION: Depending on the application (material sample), appropriate filters must be selected. Likewise, appropriate accessories must be taken into account. Contact your sales representative!

Product	Туре	Art. no.
Filter	Filter cartridge for welding fume 1.0m/ filter area 21 m ² Filter cartridge for welding fume 1.2 m ² / filter area 25 m ²	869 729 868 952
	Filter cartridge for aluminium dust 1.0 m/ filter area 14 m ² Filter cartridge for aluminium dust 1.2 m/ filter area 17.2 m ²	868 954 868 785
	Filter cartridge for material 1.0 m/ filter area 13 m ² Filter cartridge for material 1.2 m/ filter area 15.6 m ²	86928101 86928201
Accessories	AFU 15-50 splitter silencer	199 145
	AFU 15-50 dust compartment cpl.	199 144
	Spark trap 160 with rim cpl.	199 990
	Spark trap 200 with rim cpl.	199 991
	Spark trap 250 with rim cpl.	199 992
	Spark trap 300 with rim cpl.	199 993



APPLICATION

Thanks to the proven AL-KO extraction program, we can offer you a customized suction solution for almost every application and every special requirements. AL-KO extraction systems are designed for the following application areas.



Metal



Welding fume





Stone materials

Plastic materials

AL:KO

AL-KO

DISPOSAL OPTIONS

BRIQUETTE PRESSES

Product	Designation	Art. no.
BRIQUETTE PRESSES		
	AL-KO briquette press APS 30-40 Feed opening NW 800 mm Drive output 4 kW / 400 V / 50 Hz Throughput rate up to 30 kg/h depending on material Cpl. incl. hydraulics Switch cabinet connection part for transport hose Autom. final position of all cylinders Base plate Container with standard height 900 mm Oil quantity 60 L Briquette size 80 x 40 mm	199 322
	AL-KO briquette press APC 30-40 Feed opening 1,044 x 1,044 mm Drive output 4 kW / 400 V / 50 Hz Throughput rate up to 40 kg/h depending on material Cpl. incl. hydraulics Switch cabinet with PLC control Connection piece for transport hose Automatic final position of all cylinders Galvanised tongs Automatic ON/OFF Base plate Manual control for cylinders (incl. sash frame) Screw pre-compactor Oil quantity 100 L Briquette diameter 40 mm	192 665
	AL-KO briquette press APC 30-50 Feed opening 1,044 x 1,044 mm Drive output 5.5 kW / 400 V / 50 Hz Throughput rate up to 50 kg/h depending on material Cpl. incl. hydraulics Switch cabinet with PLC control Connection piece for transport hose Automatic final position of all cylinders Galvanised tongs Automatic ON/OFF Base plate Manual control for cylinders (incl. sash frame) Screw pre-compactor Oil quantity 160 L Briquette diameter 50 mm	192 286
	AL-KO briquette press APC 50-70 Feed opening 1,044 x 1,044 mm Drive output 5.5 kW / 400 V / 50 Hz Throughput rate up to 70 kg/h depending on material Cpl. incl. hydraulics Switch cabinet with PLC control Connection piece for transport hose Automatic final position of all cylinders Galvanised tongs Automatic ON/OFF Base plate Manual control for cylinders (incl. sash frame) Screw pre-compactor Oil quantity 160 L Briquette diameter 70 mm	192 288

DISPOSAL OPTIONS

BRIQUETTE PRESSES

Product	Designation	Art. no.
BRIQUETTE PRESSES		
	AL-KO briquette press APV 60 Feed opening 1,400 x 1,400 mm Drive output 7.5 kW / 400 V / 50 Hz Throughput rate 60 - 90 kg/h depending on material Cpl. incl. hydraulics Switch cabinet with PLC control Connection piece for transport hose Automatic final position of all cylinders Galvanised tongs Pole-changing screw motor	192 290
	Hardened insert sleeve in pressing chamber Base plate Manual control for cylinders (incl. sash frame) Oil quantity 160 L Briquette diameter 50 mm	
• A 33 MAZ	AL-KO briquette press APV 80 Feed opening 1,400 x 1,400 mm Drive output 7.5 kW / 400 V / 50 Hz Throughput rate 80 - 100 kg/h depending on material Cpl. incl. hydraulics Switch cabinet with PLC control Connection piece for transport hose Automatic final position of all cylinders Galvanised tongs Pole-changing screw motor Hardened insert sleeve in pressing chamber Base plate Manual control for cylinders (incl. sash frame) Oil quantity 160 L Briquette diameter 60 mm	938 701
	AL-KO briquette press APV 100 Feed opening 1,400 x 1,400 mm Drive output 11 kW / 400 V / 50 Hz Throughput rate 100 - 150 kg/h depending on material Cpl. incl. hydraulics Switch cabinet with PLC control Connection piece for transport hose Automatic final position of all cylinders Galvanised tongs Pole-changing screw motor Hardened insert sleeve in pressing chamber Base plate Manual control for cylinders (incl. sash frame) Oil quantity 250 L Briquette diameter 70 mm	938 702

DISPOSAL OPTIONS

BRIQUETTE PRESSES

Product	t Designation	
BRIQUETTE PRESSES		
	AL-KO briquette press APV 120 Feed opening 1,400 x 1,400 mm Drive output 11 kW 400 V/50 Hz throughput rate 120 - 180 kg/h depending on material Cpl. incl. hydraulics Switch cabinet with PLC control Connection piece for transport hose Automatic final position of all cylinders Galvanised tongs Pole-changing screw motor Hardened insert sleeve in pressing chamber Base plate Manual control for cylinders (incl. sash frame) Oil quantity 250 L Briquette diameter 80 mm	938 743
Accessories	Briquette press oil pre-heater obtained the viscosity at colder temperatures Briquette press oil cooler	938 710 938 711
	Briquette press low oil switch to display of low oil	938 712
Accessories / Options	BP transport pipe for briquett diameter up to 50 mm straight, per metre, Ø 70 mm	938 707
	BP transport pipe for briquett diameter up to 50 mm 90° elbow, r = 120 cm, Ø 70 mm	938 708
	BP transport pipe for briquett diameter up to 70 mm straight, per metre, Ø 90 mm	938 793
	BP transport pipe for briquett diameter up to 70 mm 90° elbow, r = 120 cm, Ø 90 mm	938 794

DISPOSAL OPTIONS

SHREDDER

Product	Designation	Art. no.
SHREDDER		
ALKO	AL-KO shredder AZR 600, 18.5 kW Feed opening approx. 600 x 800 mm 0.6 m³ funnel volume Rotor diameter 252 mm Slow-running unit Cutting system 14 diamond knives 40 x 40 mm Electrical control via PLC Main motor 18.5 kW Screen perforation 20/25 mm Automatic star/delta start-up + 5 m cable Automatic OFF on idling Operating hours counter Extraction nozzle Diameter 160 mm Vibration-damping machine feet Air speed 28 m/s Weight 1,300 kg Other options and machines on request	199 399

ROTARY FEEDER

Product	Designation	Art. no.	
ROTARY FEEDER			
	ZRS 440/1FG 0.18 kW 4 rpm II1D/- Rotary feeder 440/1 0.18 kW 4 rpm CE 0588 EX II 1D/- (device interior/exterior area) EX D (protection system) FSA 11 ATEX 1614X	867 972	
	ZRS 440/FG 0.37 kW 11 rpm II1D/- Rotary feeder 440 0.37 kW 11 rpm CE 0588 EX II 1D/- (device interior/exterior area) EX D (protection system) FSA 11 ATEX 1614X	867 973	
	ZRS 960/1FG 0.18 kW 4 rpm EX II 1D/- Rotary feeder 960/1 0.18 kW 4 rpm CE 0588 EX II 1D/- (device interior/exterior area) EX D (protection system) FSA 11 ATEX 1614X	867 974	
	ZRS 960/FG 0.55 kW 11 rpm EX II 1D/- Rotary feeder 960 0.55 kW 11 rpm CE 0588 EX II 1D/- (device interior/exterior area) EX D (protection system) FSA 11 ATEX 1614X	867 975	

AL-KO SANDING TABLES

FOR A CLEAN WORKPLACE DURING MANUAL WORK

Sanding tables, when combined with dust extractors or a decentralised filter system, ensure additional removal of dust during manual sanding work with manual sanders, as well as when working with hand-guided sanding equip- In the domain of manual / sanding stations, ment, that goes beyond the device's own dust removal function. The sanding table significantly reduces the amount of dust produced,

the air in the room is noticeably improved and the health of the employee is not put at risk by dusty exhaust air.

AL-KO offers the ideal solution for every requirement: with its "BASIC" series, AL-KO provides a low-cost entry-level model that

impresses primarily with its practice-proven features and value for money.

The "PREMIUM" series is aimed at customers with more exacting demands, since the highquality, carefully thought-out details leave no wish un-granted.







AST 1.0 PREMIUM 1,000 1,000 757 - 1,157 1,400 87 199 645 **AST 2.0 PREMIUM** 2,000 1,000 757 - 1,157 1,800 147 199 646 AST 3.0 PREMIUM 2.200 220 199 647 3.000 1.000 757 - 1.157 AST 1.5 BASIC 1.500 73 1.585 1.000 735 - 1.015 199 922 **Optional Accessories: Electrical connector strip** Power cable H07-RN-F 3G 2.5², 5 m long, with mains switch I Electrical master switch, lockable I Protective earth contact sockets, 16 amps, 230 volts, for electrical tools

Recommended extraction

performance [m³]

Working height

[mm]



2-pole circuit breaker on the supply side

Adjustable work height from 757 mm - 1,157 mm

Vacuum clamping system

or electrical shutter valve

Designation

Powerful vacuum pump, suitable for continuous operation

I On/off switch for controlling the extractor fan and a pneumatic

Length

[mm]

Width

[mm]

- 2x clamps, suction bar with separate shut-off valve for horizontal and vertical clamping
- Vacuum clamp 360° pivoting, module dimension 45°
- I Workpiece release by foot valve

Support fixture for vertical clamping

Load holding with vertical clamping by folding out support fixture

Mobility set

- I Simple movement of the sanding table on 4 pivoting castors
- I Sturdy pivoting castors with rubber tyres and Stopp-Fix brake
- Work height with castors: adjustable from 859 mm 1,259 mm

Options for PREMIUM:	Art.no.
Electrical connector strip	199 648
Vacuum clamping system	199 649
Hydraulic height adjustment	199 650
Support fixture	199 651
Mobility set	199 652



Weight

[kg]

Art.no.







■ MADE

COMPRESSED AIR SUPPLY / AIR CONSUMPTION **JET-FILTER**

Guide values for compressed air supply and compressed air consumption when using surface-coated (max 8.5 bar) or surface-treated (max 6.0 bar) filter material.

	Cleaning-off	Air consumption	Min. compressed air supply / compressor at factory setting			
Device type	pressure max. (bar)	(standard litres) each Cleaning cycle	ca. suction cabability (I/min)	ca. filling performance (I/min)	ca. driving power (kW)	
MJ 140 / 160	6.0	108	165	130	1.5	
MPJ 160	6.0	108	165	130	1.5	
APU 140 / 160	6.0	108	165	130	1.5	
MJ 200	6.0	108	165	130	1.5	
MPJ 200	6.0	108	165	130	1.5	
APU 200	6.0	108	165	130	1.5	
MJ 250	6.0	234	350	270	2.2	
MPJ 250 / 300	6.0	234	350	270	2.2	
APU 250 / 300	6.0	234	350	270	2.2	
APU 350 / 350 ⁺	6.0	234	350	270	2.2	
	4.0	142	210	170	1.5	
MJ 300	6.0	342	520	400	3.0	
ECO JET 3	6.0	234	350	270	2.2	
ECO JET 4	6.0	234	350	270	2.2	
ECO JET 5	6.0	234	350	270	2.2	
ECO JET 6	6.0	234	340	240	2.2	
PROFI JET BG1/BG2	6.0	396	600	450	4.0	

Information:

In principle, compressed air consumption and compressor output depend on the network conditions (pressure, connection cross-section, line length, etc.). The values given are only approximate values. The number of cycles per hour depends on the operating parameters (material quantities, material type, etc.)

Guiding value: Dust extraction Chip extraction	~ 3 cycles per hour ~ 1 cycle per hour
Omp ontidotion	i dydid poi illoui

Machine type	air flow into (m/s)*	pressure loss into (Pa)*		
Sliding table saw above	23	1500		
Sliding table saw below	23	1000		
Edge bender per aggregate	23	1700		
Edge grinding machine per aggregate	23	1200		
Folding and profiling machine for windows	28	1200		
Four-side planer	28-32	1200		
Horizontal panel saw	23	1300		
Long belt sander with slide table	23	1000		
Long slot drilling machine	28	850		
Machining center CNC	28-35	2000- 3000		
Milling machine at the table	28	1000		
Milling machine at the fence	28	500		
Pendulum saw	23	1000		
Surface planer	28	700		
Table band saw	23	850		
Tenoning and slot machine	28	800		
Thickness planer	28	700		
Vertical panel saw	28	1500		
Waste wood shredder	28	1000		
Wide belt sander per aggregate	23	1000		

*Please note manufacturers advice !!

CALCULATION SUCTION CAPACITY

Pipe diar cross sec		Air quantity (m³/h) depending on air velocity (m/s) and pressure loss (Pa) per m suction pipe					
DN in mm	A in cm ²	m³/h at 20 m/s	Loss in Pa	m³/h at 23 m/s	Loss in Pa	m³/h at 28 m/s	Loss in Pa
80	50	271	45	416	61	507	95
100	79	565	37	650	51	792	84
120	113	814	30	936	53	1140	68
125	123	884	29	1016	41	1237	65
140	154	1108	26	1275	35	1552	56
160	201	1448	23	1665	30	2027	47
180	254	1832	20	2107	27	2565	41
200	314	2262	18	2601	24	3167	37
225	394	2863	16	3292	21	4008	32
250	491	3534	14	4064	19	4948	28
300	707	5089	12	5853	16	7125	24
315	779	5611	11	6453	15	7855	22
350	990	6927	10	7966	14	9698	20
400	1257	9048	9	10405	12	12667	18
450	1590	11451	8	13168	11	16031	16

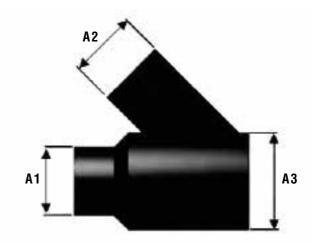
Valid for steel tube, folded alongside, inside smooth. Loss from branches, bends and pipe distributers are about 50 Pa.

Also note, pressure loss from suction hose is about 5-6 times higher than steel tube.

Calculation cross section on several connection and distributing points

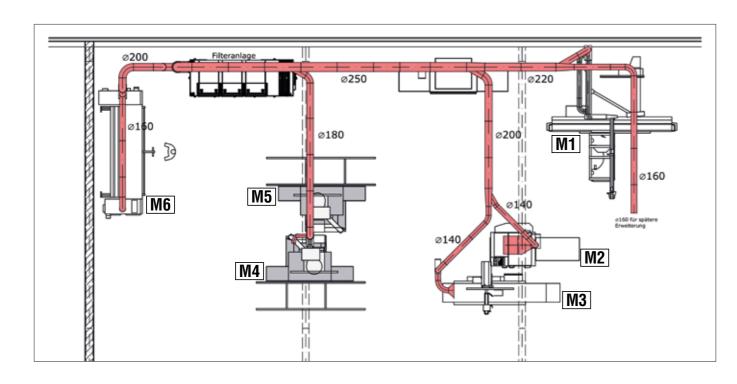
Example circular saw:

Connection A1 = \emptyset 120 mm \triangleq A 113 cm² Connection A2 = \emptyset 100 mm \triangleq A 79 cm² = connection A3 = A 192 cm² $\triangleq \emptyset$ 160 mm



In this example, the suction line requires a pipe diameter DN 160 mm. To integrate this machine in the suction pipe network, the same calculation method is used for the determination of the main pipe.

Example: $A1 = \emptyset$ pipe from additional machine $+ A2 = \emptyset 160 \text{ mm} = A3 \emptyset \text{ main pipe in direction}$ dust extractor.



Calculation dust extractor with desired simultaneity of 2 machines

The amount of the necessary air volume results from the machines with the greatest demand. When calculating with smaller values, the required air volume would be too low, so the system would be too small.

If all machines should be extracted at the same time, even if this happens only for a short time, an extraction capacity of 10,838 m³/h would be required. For simultaneity 2 machines 4,560 m³/h.

In this example, more than two machines or machines in other combinations can be extracted simultaneously. However, the required extraction capacity must not exceed the maximum volume flow of the selected dust extractor.

Machine	Ø Suction nozzle	Required velocity.	Volume flow	Pressure loss at nozzle	Simulta neity	Air requirement
M1 Circular saw	120 + 100 mm	23 m/s	1,587 m³/h	1,500 Pa		
M2 Thickness planer	140 mm	28 m/s	1,552 m³/h	700 Pa		
M3 Surface planer	140 mm	28 m/s	1,552 m³/h	700 Pa		
M4 Milling machine	120 + 120 mm	28 m/s	2,280 m³/h	1,000 Pa	Х	2,280 m³/h
M5 Milling machine	120 + 120 mm	28 m/s	2,280 m³/h	1,000 Pa	Х	2,280 m³/h
M6 Grinding machine	120 + 100 mm	23 m/s	1,587 m³/h	1,000 Pa		

Alr requirement total 10,838 m³/h at simult. 4,560 m³/h

Calculation required vacuum of the dust extractor

At first, all pipelines to the machines to be extracted must be calculated. Often, the pipe with the largest pipe length has the greatest pressure loss. Only then the right extraction system can be selected.

Calculation formula:

Pressure loss on extraction nozzle + pressure loss in pipe line incl. suction hose

= required vacuum of dust extractor

The pressure loss inside the dust extractor is already considered at AL-KO extractors.

Example:

Machine with the largest loss
Circular saw

8 linear meter pipe Ø 250 mm each 19 Pa =
2 linear meter pipe Ø 220 mm each 21 Pa =
2 linear meter pipe Ø 160 mm each 30 Pa =
2 bows, 2 branches each 50 Pa =

Total pressure loss

1,500 Pa
42 Pa
42 Pa
200 Pa

At the required suction performance of 4,560 m³/h as well as a pressure loss 1,954 Pa an AL-KO POWER UNIT 250 is necessary.

The operator is free to use an extraction unit with a higher performance, eg. an APU 300 (as a reserve capacity).



Note when designing the piping:

- I Use the next largest dimension according the table for selection of the pipe cross section
- I The total cross-section of the machines to be extracted at the same time may not exceed the connection cross-section of the dust extractor
- I The suction nozzle on a single machine may not be larger than the connection crosssection of the dust extractor
- I For longer suction lines, the main pipe should be larger than the machine connection
- I Plan the suction lines as directly as possible, as little as possible branches and bends
- I Reductions and transitions to the suction hose should be directly before the machine to be extracted
- I Gate valves on all machines

I Observe the requirements of the machine manufacturer with regard to the required suction power and vacuum at the machine nozzle



AL-KO EXTRACTION TECHNOLOGY – YOUR STRONG PARTNER

In Europe and across the world, thousands of customers every year choose quality products from AL-KO Extraction Technology. The enthusiasm for these products and customers' confidence in us demonstrates that even today, products bearing the "MADE IN GERMANY" label have a future — if they are consistently based on innovation and superior quality.

Look to the future with us, and as our customer and partner profit from the performance, the quality and the security offered by the AL-KO brand.

AL-KO THERM GMBH Extraction Technology

Hauptstraße 248 – 250 89343 Jettingen-Scheppach Germany Tel. +49 8225 39-2412 Fax +49 8225 39-2435 absaug.technik@al-ko.de

www.al-ko.com