

EXTRACTION TECHNOLOGY

**AL-KO**  
QUALITY FOR LIFE



MOBILE CLEAN AIR DUST COLLECTORS

# AL-KO POWER UNIT

Powerful extraction devices  
for crafts and industry.



  
MADE IN GERMANY

[alko-extractiontechnology.com](http://alko-extractiontechnology.com)



# AL-KO EXTRACTION TECHNOLOGY: GUARANTEED QUALITY

**AL-KO Extraction Technology is part of AL-KO Airtech and has been developing, manufacturing, and delivering extraction devices and systems for dust and fume extraction for over 35 years.**

Our devices and systems are used both for direct extraction at the source and for hall ventilation. In combination with the heat recovery systems from

AL-KO Air Technology, we are the only manufacturer capable of providing customers with complete solutions for air purification and conditioning from a single source. Our strong customer orientation, maximum manufacturing quality, and our dedicated and highly qualified staff distinguish us in the market.

## MADE IN GERMANY

### **Innovation and patent protection as a success factor:**

As a technologically leading company, AL-KO holds numerous patents and utility models.

### **AL-KO: A financially strong and renowned German manufacturer:**

With over 50 years of experience and a worldwide sales network, AL-KO stands for stability and quality.

### **A reliable partner for long-term business relationships:**

AL-KO focuses on trust and consistency. The clear focus is on placing customer needs at the center of actions.

### **Commitment to quality and sustainability:**

Through active participation in associations and committees, comprehensive certifications, and sustainable production processes, AL-KO guarantees the highest quality standards for its products and services.

### **Competence through continuous training:**

Thanks to targeted in-company training programs and specialized know-how at the AL-KO Campus, the company ensures that its personnel always stay up to date.



## OUR VISION

**AL-KO Extraction Technology offers extraction technology for air purification at the highest level.**

For our customers, we are more than just a supplier of high-quality extraction technology. With our expertise, we provide solutions for clean air in the workplace, ensuring the lowest energy consumption while protecting people and the environment.

## OUR MISSION

**"More than clean air" – with our extraction technology, we protect people, machines, and the environment.**

We continuously work to create a better working environment for our customers with our devices and systems, improve their product quality, and increase productivity. As a result, AL-KO extraction systems are always a worthwhile investment.

## OUR GOAL

We want to support our customers in creating a clean and healthy working environment through high product quality, optimal service, and innovative technology.



### Innovation

Through continuous development of our devices and systems, they are always up to date with the latest technology.



### Customer Benefit

Increasing our customers satisfaction is our daily motivation. To achieve this, we take every customer suggestion into account, continuously improving our devices and services to the benefit of our customers.



### Environmental Awareness

The use of our systems protects people and the environment. We continuously optimize energy consumption, reduce CO<sub>2</sub> emissions, as well as dust and fume emissions.







# OUR STRENGTHS ARE YOUR SAVINGS POTENTIAL

Discover the key advantages that make the difference.

- + Expert advice
- + Maintenance & Service (short delivery times)
- + Tested & certified
- + Long-term & fast spare parts delivery capability
- + Investment security
- + Modularly expandable and convertible

## FUNDED AND TESTED

- **Eligible for funding:**  
Benefit from government support for energy-efficient investments through BAFA funding.
- **Supported by the Federal Office:**  
For Economic Affairs and Export Control: Financial and regulatory security for your company.
- **Tested by the BGHM:**  
The products awarded with the DGUV Test have been tested by the Testing and Certification Body of the German Social Accident Insurance according to the relevant testing principles for health protection.
- **Certified:**  
Meets all relevant safety requirements of the industry.
- **Patented ultrasonic container monitoring:**  
Precise control for maximum operational safety.
- **ATEX certified for explosive environments:**  
Safe operation even in demanding environments.





## ENERGY AND PERFORMANCE OPTIMIZED AL-KO EXTRACTION SYSTEMS



### System design and sizing

AL-KO offers customized extraction systems that grow with your needs. The planning of the ductwork by professional partners ensures short, straight routes and optimal functionality



### Filter cleaning

AL-KO OPTI JET® cleaning: Jet impulses with minimal compressed air consumption for best efficiency and lowest energy requirements



### Energy-saving fans

Motors with energy efficiency class IE3 or higher



### Energy efficiency

Warm, filtered air remains in the room through air recirculation – savings of up to € 3,500 annually with an extraction volume of 10.000 m<sup>3</sup>/h and a room temperature of 20° C



### Aerodynamics

Flow-optimized fan housings for best air flow, compact design

## THE AL-KO FREQUENCY CONVERTERS



**Energy savings up to 60%**

System operation with frequency converter in combination with machine detection ensures enormous energy savings.



# FEATURES AND SPECIAL CHARACTERISTICS

## AL-KO CLEAN DUST SHIELD

Prevents dust from falling off during container emptying

### Patented emptying process

- Remove the dust shield plate from the designated holder
- Before emptying, insert the dust shield plate over the containers

- Remove and empty the container
- Subsequently, remove the dust shield plate again

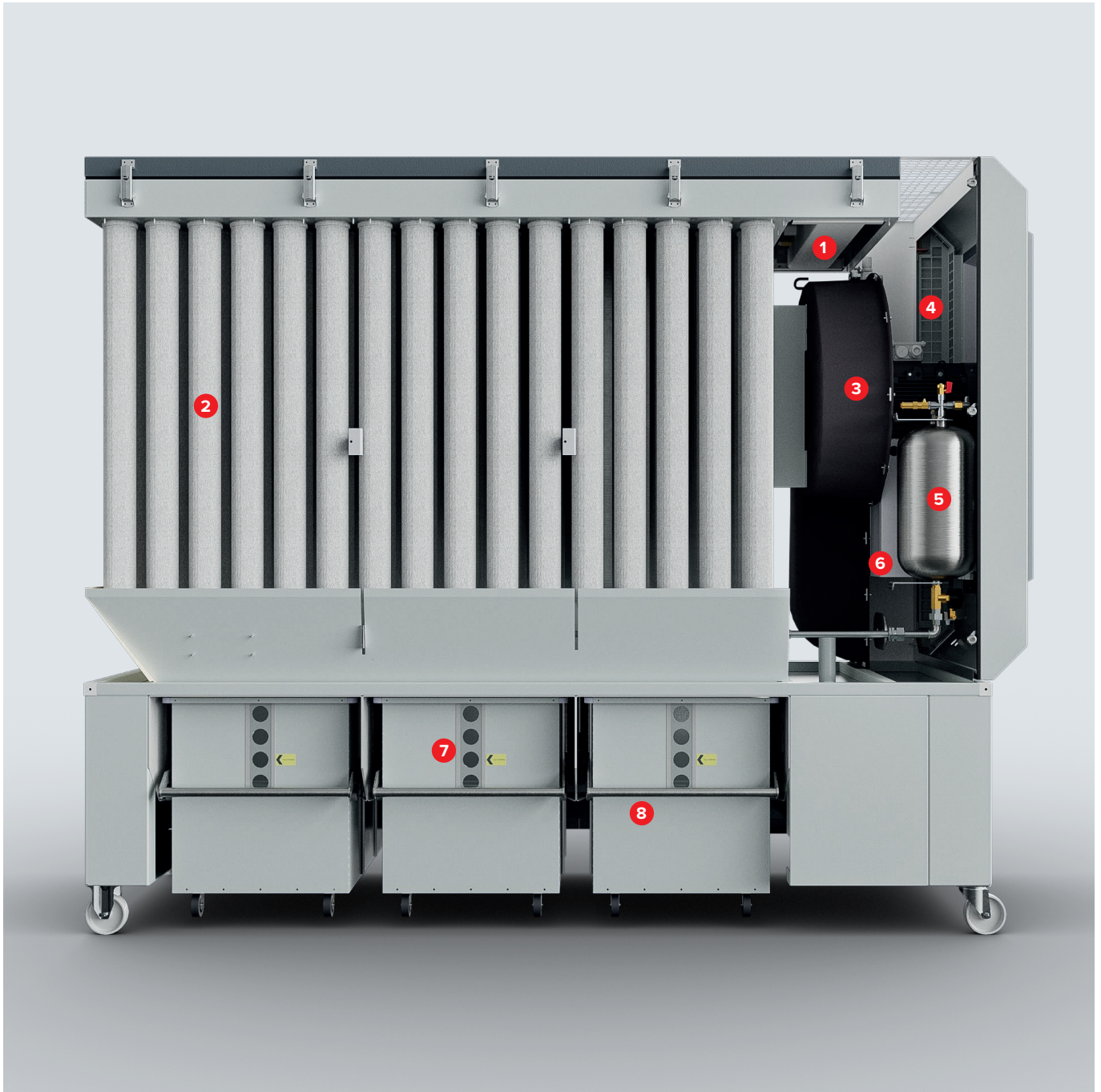
### Your advantages

- Easy handling
- Dust-free sealing during container exchange
- Optimal health protection





## INNOVATIVE TECHNOLOGY FOR THE HIGHEST DEMANDS



- 1** Large-volume compressed air tank with fast-acting diaphragm valves for optimal JET filter cleaning and minimal compressed air consumption
- 2** Bag filter made of antistatic polyester needle felt material, standard with snap ring closure for easy handling.
- 3** Standard energy-efficient motors
- 4** Sound-insulated air recirculation for low noise emission levels
- 5** Maintenance-friendly extinguishing system with manual and automatic activation (standard on POWER UNIT 250, 300, 350, and 350+)
- 6** Control system from size 160; manual and automatic operation possible; expandable with many options.
- 7** Viewing window for easy fill level monitoring
- 8** Ergonomically shaped clamping lever for easy container locking

## OPTIONAL ACCESSORY OPTIONS



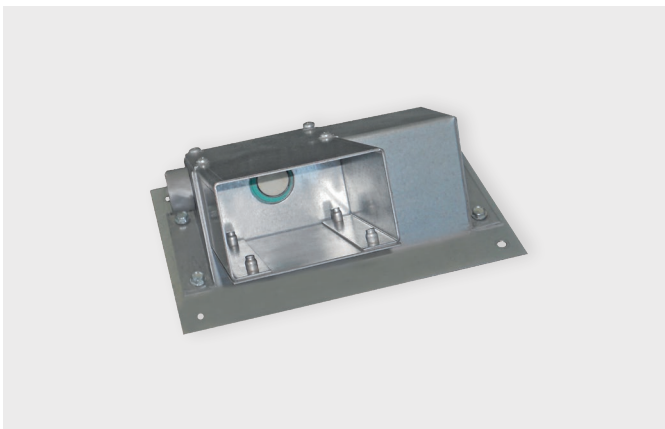
### Smooth gas spring

- Optional gas spring on the lid
- Attached for the lid opening of the POWER UNIT:  
Saves the removal of the entire lid.



### Additional top filter as a suspended particle post-filter stage

- Mounted on the dust extractor in a powder-coated sheet steel housing with integrated filter cartridges
- H13 – Separation of 99.95% of dust particles  $>0.1 - 0.3 \mu\text{m}$ , maximum permeability 0.05%
- H14 – Separation of 99.995% of dust particles  $>0.1 - 0.3 \mu\text{m}$ , maximum permeability 0.005%

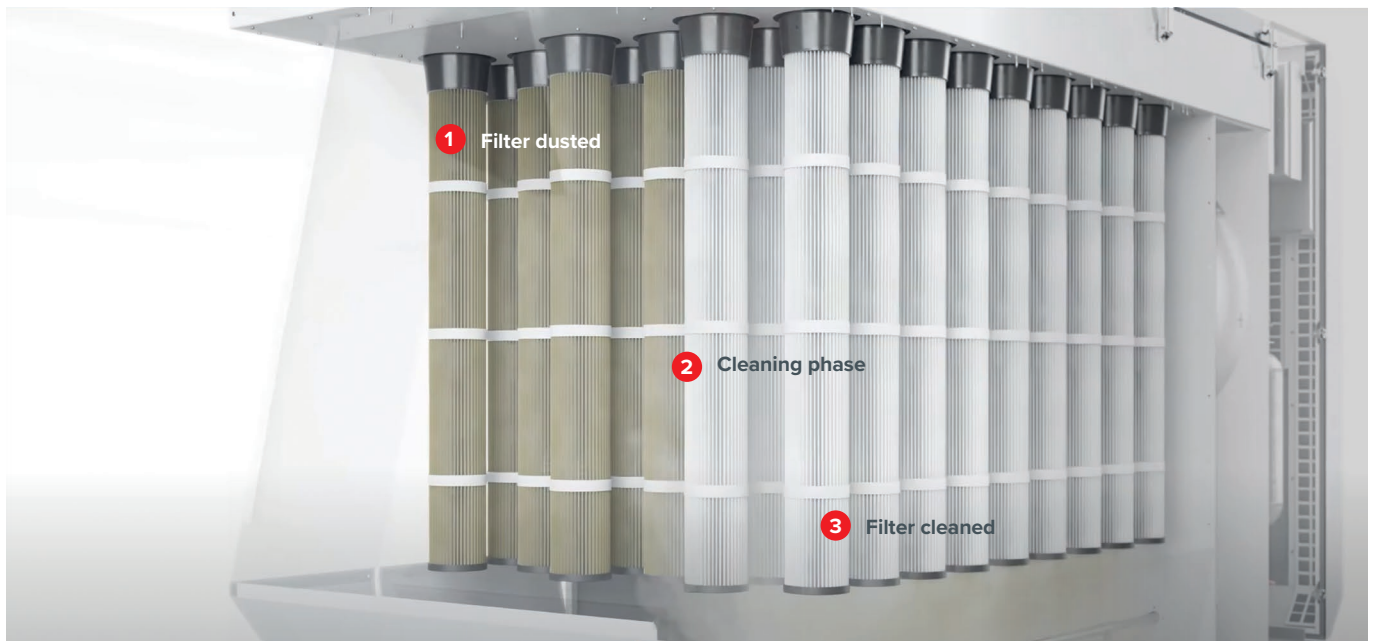


### AL-KO LEVEL CONTROL ALC 21

- Contactless ultrasonic fill level sensor
- Continuous ultrasonic measurement for dust and chips
- Optionally pre-assembled or retrofittable
- ATEX certification for raw air area (Zone 21)
- Unique & patented across Europe



## HIGH-PERFORMANCE FILTER SYSTEM AL-KO OPTI JET



### 1. Filtration phase

#### Contamination level monitored

- The contamination level of the filter is continuously monitored via differential pressure measurement.

#### Automatic cleaning

- When a certain threshold value is reached, the cleaning process starts automatically.



### 2. Cleaning phase

#### Pulsed compressed air blasts

- Compressed air is directed through the filter in short, strong pulses.

#### Detachment of dust particles

- The sudden air blast detaches clogged particles from the surface.



### 3. Cleaned filter

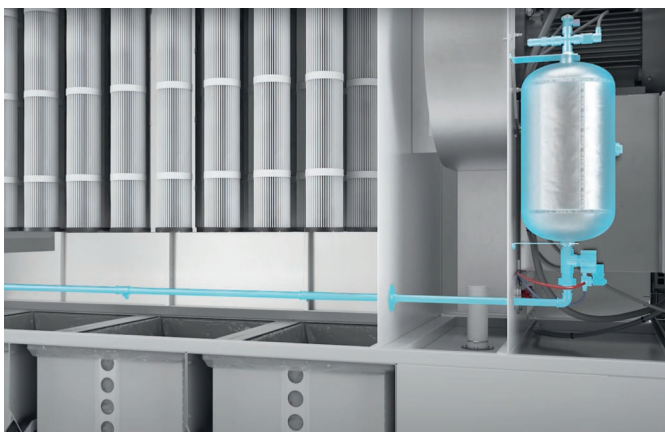
#### Dust falls into the collection container.

- The loosened particles are directed into a dust collection container or a discharge device.

#### Maintaining filter performance

- Regular cleaning ensures that the suction power remains constant and the filter does not become clogged.

## CERTIFIED EXTINGUISHING SYSTEM



#### Automatic extinguishing process

- Integrated extinguishing agent container made of light metal, filled with water
- No permanent water connection required
- Activation via a temperature sensor at over 70 °C
- No annual maintenance required



# PRODUCT FEATURES

## AL-KO POWER UNIT

### YOUR ADVANTAGES



**Durability and attractive appearance**  
due to powder-coated housing made of  
galvanized sheet steel



**Maximum safety**  
certified extinguishing system,  
low dust emptying



**Extremely quiet**  
due to highly effective sound insulation



**Compact modular design**  
therefore requiring minimal space



**Low energy consumption**  
despite extremely high suction power,  
Heating cost savings through recirculation  
operation



**Extensive accessories**  
and numerous options for individual device  
configuration



The versatile AL-KO POWER UNIT® series impresses with innovative technology and many well-thought-out details.

Learn more about the clean air dust extractor AL-KO POWER UNIT in the video.





## AL-KO POWER UNIT 100 / 120

Type	100	100	120	120 M
Article number	192 488	192 489	192 490	192 498 01
Nominal volume flow*	565 m <sup>3</sup> /h	565 m <sup>3</sup> /h	814 m <sup>3</sup> /h	814 m <sup>3</sup> /h
Vacuum pressure at V <sub>enn</sub> .	2,118 Pa	2,124 Pa	2,180 Pa	2,180 Pa
Filter cleaning	Manual	Manual	Manual	Motorized, machine detection
Sound pressure level**	69 dB(A)	69 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L/W/H) in mm	1,178 × 650 × 1,973	1,178 × 650 × 1,973	1,178 × 650 × 1,973	1,178 × 650 × 1,973
Net weight without packaging	ca. 114 kg	ca. 116 kg	ca. 117 kg	ca. 121 kg

\*Tested according to DIN EN 16770 \*\*Free-field measurement according to DIN EN 11201 M – Version with automatic filter cleaning and machine detection

 Suction nozzle 100 mm / 120mm
  Motor rated power 1.1 kW to 1.5 kW
  Filter area 4.1 to 5.1 m<sup>2</sup>
 Chip collection volume approx. 135 L



## AL-KO POWER UNIT 160

Type	160 H	160 HM	160 P	160 K
Article number	199 001	199 363 01	192 199 01	199 018 02
Nominal volume flow*	1,448 m <sup>3</sup> /h	1,448 m <sup>3</sup> /h	1,448 m <sup>3</sup> /h	1,448 m <sup>3</sup> /h
Vacuum pressure at V <sub>enn</sub> .	2,503 Pa	2,503 Pa	2,503 Pa	2,503 Pa
Filter cleaning	Manual	Manual	Pneumatic	Pneumatic, integrated compressor
Sound pressure level**	70 dB(A)	70 dB(A)	70 dB(A)	70 dB(A)
Dimensions (L/W/H) in mm	1,800 × 830 × 2,050	1,718 × 830 × 2,050	1,718 × 830 × 2,050	1,718 × 830 × 2,050
Net weight without packaging	330 kg	330 kg	340 kg	350 kg

\*Tested according to GS-HM-03 \*\*Free-field measurement according to DIN EN 11201 K – Compressor integrated

 Suction nozzle 160 mm
  Motor rated power 2.2 kW / 3 Ph
  Filter area 9.1 m<sup>2</sup>
 Chip collection volume 165 L / 241 L

## AL-KO POWER UNIT 200



Type	200 P	200 K	200 P-ZRS	200 P-BP 30-40
Article number	192 491 01	199 609 01	199 044 01	199 019 02
Nominal volume flow*	2,262 m³/h	2,262 m³/h	2,262 m³/h	2,262 m³/h
Vacuum pressure at Vnenn.	2,563 Pa	2,563 Pa	2,563 Pa	2,563 Pa
Filter cleaning	Pneumatic	Pneumatic	Pneumatic	Pneumatic
Sound pressure level**	72 dB(A)	72 dB(A)	72 dB(A)	72 dB(A)
Dimensions (L/W/H) in mm	2,296 × 830 × 2,050	2,296 × 830 × 2,050	2,297 × 836 × 2,607	2,631 × 1,307 × 2,111
Briquette / rotary valve performance depending on material	–	–	up to 15,744 l/h	up to 40 kg/h
Briquette diameter	–	–	–	40 mm
Net weight without packaging	460 kg	470 kg	550 kg	950 kg

\*Tested according to DIN EN 16770

\*\*Free-field measurement according to DIN EN 11201 K – Compressor integrated



Suction nozzle  
200 mm



Motor rated power  
3.0 kW / 3 Ph



Filter area  
13.8 m²



Substructures  
available



Chip collection volume  
2 × 165 L / 2 × 241 L

## AL-KO POWER UNIT 250



Type	250 P	250 P-ZRS	250 P-BP 30-40	250 P-BP 30-50
Article number	195 676 03	195 875 03	199 537 01	195 872 05
Nominal volume flow*	3,534 m³/h	3,534 m³/h	3,534 m³/h	3,534 m³/h
Vacuum pressure at Vnenn.	3,184 Pa	3,184 Pa	3,184 Pa	3,184 Pa
Sound pressure level**	71 dB(A)	71 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L/W/H) in mm	2,351 × 1,058 × 2,361	2,387 × 1,058 × 2,807	2,351 × 1,332 × 2,619	2,351 × 1,361 × 2,620
Briquette / rotary valve performance depending on material	–	15,744 L/h	up to 40 kg/h	up to 50 kg/h
Briquette diameter	–	–	40 mm	50 mm
Net weight without packaging	758 kg	728 kg	1,381 kg	1,381 kg

\*Tested according to DIN EN 16770

\*\*Free-field measurement according to DIN EN 11201



Suction nozzle  
250 mm



Motor rated power  
7.5 kW / 3 Ph



Filter area  
22.4 m²



Substructures  
available



Integrated automatic  
extinguishing system



Chip collection volume  
2 × 165 L / 2 × 250 L



## AL-KO POWER UNIT 300



Type	300 P	300 P-ZRS	300 P-BP 30-50	300 P-BP 50-70
Article number	195 677 03	195 876 03	192 006 05	195 874 05
Nominal volume flow*	5,089 m³/h	5,089 m³/h	5,089 m³/h	5,089 m³/h
Vacuum pressure at Vnenn.	2,587 Pa	2,587 Pa	2,587 Pa	2,587 Pa
Sound pressure level**	71 dB(A)	71 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L/W/H) in mm	3,000 × 1,058 × 2,361	3,000 × 1,058 × 3,027	3,000 × 1,361 × 2,817	3,000 × 1,351 × 2,817
Briquette / rotary valve performance depending on material	–	15,744 L/h	up to 50 kg/h	up to 70 kg/h
Briquette diameter	–	–	50 mm	70 mm
Net weight without packaging	838 kg	832 kg	1,570 kg	1,570 kg

\*Tested according to DIN EN 16770 \*\*Free-field measurement according to DIN EN 11201

-  Suction nozzle 300 mm
-  Motor rated power 7.5 kW / 3 Ph
-  Filter area 30 m²
-  Substructures available
-  Integrated automatic extinguishing system
-  Chip collection volume 3 × 165 L / 3 × 250 L

## AL-KO POWER UNIT 350



Type	350 P	350 P-ZRS	350 P-BP 30-50	350 P-BP 50-70
Artikel-Nummer	199 560	199 563	199 561	199 562
Nennvolumenstrom*	6,927 m³/h	6,927 m³/h	6,927 m³/h	6,927 m³/h
Unterdruck bei Vnenn.	2,543 Pa	2,543 Pa	2,543 Pa	2,543 Pa
Schalldruckpegel**	71 dB(A)	71 dB(A)	71 dB(A)	71 dB(A)
Maße (L / B / H) in mm	3,129 × 1,058 × 2,361	3,164 × 1,058 × 3,027	3,129 × 1,361 × 2,817	3,129 × 1,361 × 2,817
Brikett- / Zellenradleistung je nach Material	–	15.744 L/h	up to 50 kg/h	up to 70 kg/h
Brikettdurchmesser	–	–	50 mm	70 mm
Gewicht netto ohne Verpackung	977 kg	1,010 kg	1,740 kg	1,740 kg

\*geprüft nach DIN EN 16770 \*\* Freifeldmessung nach DIN EN 11201

-  Suction nozzle 350 mm
-  Motor rated power 11,0 kW / 3 Ph
-  Filter area 73 m²
-  Substructures available
-  Integrated automatic extinguishing system
-  Chip collection volume 3 × 165 L / 3 × 250 L



## AL-KO POWER UNIT 350+

Type	350+ P	350+ P-ZRS	350+ P-BP 30-50	350+ P-BP 50-70
Article number	199 843	199 846	199 844	199 845
Nominal volume flow*	7,127 m³/h	7,130 m³/h	7,127 m³/h	7,127 m³/h
Vacuum pressure at Vnenn.	3,347 Pa	3,347 Pa	3,347 Pa	3,347 Pa
Sound pressure level**	71 dB(A)	71 dB(A)	71 dB(A)	71 dB(A)
Dimensions (L/W/H) in mm	3,130 × 1,058 × 2,361	3,164 × 1,058 × 3,027	3,130 × 1,361 × 2,817	3,130 × 1,361 × 2,817
Briquette / rotary valve performance depending on material	—	15,744 L/h	up to 50 kg/h	up to 70 kg/h
Briquette diameter	—	—	50 mm	70 mm
Net weight without packaging	1,040 kg	1,027 kg	1,802 kg	1,802 kg

\*geprüft nach DIN EN 16770 \*\* Freifeldmessung nach DIN EN 11201

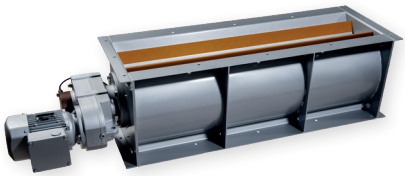
 Suction nozzle 355 mm	 Motor rated power 15,0 kW / 3 Ph	 Filter area 73 m²	 Substructures available	 Integrated automatic extinguishing system	 Chip collection volume 3 × 165 L / 3 × 250 L
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# AL-KO DISPOSAL OPTIONS

## ROTARY VALVE

- Separated material is discharged without pressure into a container, big bag, or similar receptacle
- Usable for materials with temperatures up to 50 °C
- Tested according to ATEX Directive 2014/34/EU



Technical data	ZRS 440	ZRS 960
Inlet	250 × 440 mm	250 × 960 mm
Discharge	208 × 440 mm	208 × 960 mm
Overall height	330 mm	330 mm
Total weight	70 kg	100 kg
Max. conveying capacity at 4 RPM rotary valve speed	7,250 L/h	15,816 L/h
Max. conveying capacity at 12 RPM rotary valve speed	21,750 L/h	47,450 L/h
Temperature range	to 130 °C	to 130 °C

## BRIQUETTING PRESSES

### Energy recovery

- Separated wood chips are processed into fuel briquettes for heating systems

### Cost reduction

- Reduced disposal and storage costs through briquetting

### Resale

- Briquettes can be resold as an environmentally friendly fuel

### Sustainability

- CO<sub>2</sub>-neutral heating through recycled materials



Technical data	APC 30/50	APC 50/70	APV 60	APV 80	APV 100	APV 120
Briquette diameter	50 mm	70 mm	50 mm	60 mm	70 mm	80 mm
Performance depending on material	up to 50 kg/h	up to 70 kg/h	up to 90 kg/h	up to 100 kg/h	up to 150 kg/h	up to 180 kg/h
Motor power	5.5 kW	7.5 kW	7.5 kW	7.5 kW	11 kW	11 kW
Weight	650 kg	750 kg	820 kg	870 kg	1,000 kg	1,050 kg



## AL-KO AIRTECH

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

## AL-KO EXTRACTION TECHNOLOGY

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

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