



Vacumobil 250 / 300 / 350 Dust extractors

Compact extraction units
H3 certified

HÖCKER[®]
POLYTECHNIK

Always one idea ahead

Vacumobil dust extractors series 250, 300 and 350

Deliver air volumes ranging from 3,500 m³/h up to a maximum of 10,000 m³/h

Certified Vacumobil systems from Höcker Polytechnik are ideal for the extraction of dust from one or multiple sources. Designed for airflow capacities up to 10,000 m³/h, they are particularly well suited for small to medium-sized enterprises. Their compact design allows for flexible integration into a wide variety of working environments.

Innovative filter cleaning methods such as jet pulse or vibration technology, combined with multiple discharge systems – from dust collection bins and briquette presses to rotary airlocks – allow for custom solutions tailored to individual requirements. These extractors stand for efficiency and versatility, ensuring a clean and productive work environment.

Equipped as standard with IE4 efficiency class motors, BG-certified filter media, an integrated fire suppression system, and an explosion-resistant backdraft damper, these units provide environmentally friendly operation and maximum safety. ¹⁾



Up to 25% energy savings with the optional IE5 Efficiency Powerpack

Vacumobil units with IE5 synchronous motors significantly reduce energy consumption and increase airflow performance.

The IE5 Efficiency Powerpack consists of: IE5 synchronous motor (replacing standard IE4 motor), Frequency inverter, Specially calibrated control electronics. Available for Vacumobil series 250, 300 and 350.

Vacumobil units have proven their reliability thousands of times in daily use across both craft workshops and industrial settings.

Perfectly suited for the extraction of dusts ¹⁾ and chips from the following materials:

- Wood
- Cellulose
- Tissue
- Paper
- Plastics
- Metal (particle size >500 µm)
- And much more...



A wide range of equipment variants and configuration options can be found in the table on page 12/13 – further expanding your Vacumobil's field of application.

¹⁾ Approved for organic dusts of dust explosion class St1 with a minimum ignition energy >10 mJ and a lower explosion limit of at least 30 g/m³.

Your partner for workshop and production first-class extraction of dust and chips

Vacumobil units can be individually configured for your specific application. Installation within work areas is permitted (depending on the dust type), and they are also suitable for outdoor use. Either way... they deliver the performance you need!



- 1** Blow back damper
- 2** Super premium efficiency drive IE4 / IE5 (optional)
- 3** 100 % utilization of heat energy through air recirculation
Low residual dust content < 0.1 mg/m³ in accordance with TRGS 553
- 4** Tested filter material (separation efficiency > 99.95 %)
- 5** Height < 2.6 m / Width ≈ 1.0 m
- 6** Fully automatic filter cleaning during shut down (online cleaning optional)
- 7** Integrated automatic fire suppression system
- 8** Powerpack control and frequency drive (optional) with patented bin changeover mode
- 9** Large dust collection volume with up to four bins. Multiple discharge options to choose from: bin unit, briquetting unit or rotary valve

No pressure relief required for St1 dusts

Vacumobils. The safe dust extractors.

1 Pressure surge tested

All Vacumobil models are factory-tested to meet the highest safety standards. The renowned testing institute Dekra-EXAM certified the pressure surge resistance of our Vacumobil dust extractors back in 2010. Our rotary airlocks have also been successfully tested for both pressure surge resistance and flame breakthrough protection by Dekra-EXAM.

2 Integrated fire protection

Additional safety is ensured by the built-in fire suppression system. This means Vacumobil units can be installed directly in the workspace without the need for additional fire safety measures. An FSA-tested, explosion-proof backdraft damper is integrated at the raw gas inlet. It prevents the escape of dust and ensures effective decoupling in case of incident.

3 Vibration-based filter cleaning

In vibration cleaning mode, the filter cake is mechanically shaken off the filter sleeves by a vibrating motor with dual shaft ends and imbalance weights. This mechanical cleaning occurs after the filtration process has stopped.

Features:

- Intermittent cleaning of the filter media during production breaks
- Low energy consumption
- Very long filter sleeve service life

4 Jet pulse (compressed air) filter cleaning

In jet pulse cleaning mode, each filter sleeve is equipped with a nozzle. A brief blast of compressed air expands the filter sleeves, causing the filter cake to detach. The regeneration of the filter media occurs periodically or based on differential pressure (depending on the contamination level).

Features:

- Low compressed air consumption
- Suitable for almost all materials and dust types
- Consistently high extraction performance due to reduced filter clogging
- Cleaning can be time-controlled or pressure-controlled
- Very long service life of filter sleeves
- Optional: continuous online filter cleaning without interrupting production



1



2



3



4



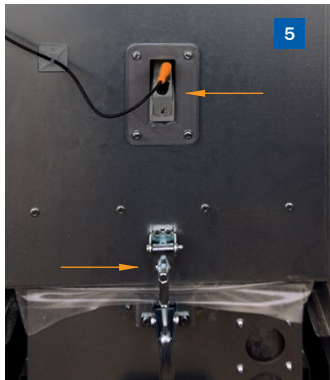
Accessories for enhanced productivity and safety

5 Full detector for dust collection bins

A wide range of accessories and options enables you to perfectly tailor your Vacumobil dust extractor to your specific requirements. For example, users of Vacumobil JT / VT models with the optional full detector will be alerted in time to empty the container.

Features:

- Laser light sensor in a plastic housing monitors the fill level of a dust bin or chip container
- Prevents unnecessary production downtime due to overfilling
- Improves cleanliness in the work environment
- Can be connected to a flashing warning light (optional)
- Can be installed in one of several bins/containers for representative level monitoring
- Retrofit-compatible with existing extractors

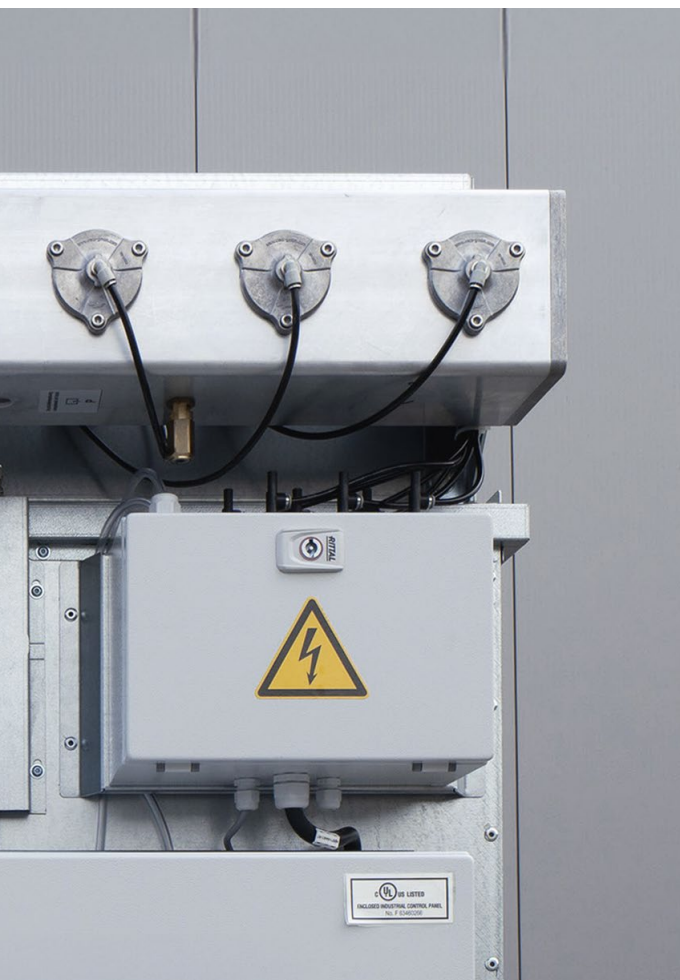


Legal compliance & smart add-ons

Compliance with laws and standards

All relevant legal regulations and standards (ATEX, DIN EN 16770, German Ordinance on Industrial Safety and Health, VDI guidelines, and employer's liability insurance rules) can be easily and safely met.

Units equipped with the optional frequency inverter benefit from a patented software mode that enables low-emission container changes.



- 1) Pressure surge test of the Vacumobil 350 conducted in 2010
- 2) PLC control with 7" touch display and integrated fire suppression system
- 5) The laser light barrier monitors the fill level of the dust collection bin

Vacumobil 250

Dust extractor

Extract up to 5,500 m³/h (V_{max}).

Equipped as standard with a **5.5 kW IE4 motor**.

Optional for even greater efficiency:

The IE5 Efficiency Powerpack, consisting of a frequency inverter, optimised PLC control system and modern **5.5 kW IE5 synchronous motor**.

See additional configurations in the options overview on pages 12/13.



Technical data	Vacumobil 250	Vacumobil 250 (IE5)
Power		
Efficiency class	IE4 – Super Premium Efficiency	IE5 – Ultra Premium Efficiency
IE5 Efficiency Powerpack	○	●
Rated motor power	5.5 kW / 400 V / 50 Hz (IE4)	5.5 kW (IE5) ⁵⁾ / 400 V / 50 Hz
Frequency control	○	●
Nom. Volume Flow (V _{Nom})	3,535 m ³ /h at 20 m/s	3,535 m ³ /h at 20 m/s
Max. Volume Flow (V _{Max})	5,500 m ³ /h	6,200 m ³ /h ⁶⁾
Vacuum generated at V _{Nom} ²⁾	≈ 3,100 Pa	≈ 3,250 Pa
Vacuum generated at V _{Max} ²⁾	≈ 3,000 Pa	≈ 2,850 Pa
Vacuum generated at V _{Nom} ³⁾	≈ 2,800 Pa ⁷⁾ ≈ 2,950 Pa ⁸⁾	≈ 3,000 Pa ⁶⁾
Vacuum generated at V _{Max} ³⁾	≈ 1,500 Pa ⁷⁾ ≈ 2,200 Pa ⁸⁾	≈ 1,700 Pa ⁶⁾
Maximum sound pressure level ¹⁾	≤ 73 dB(A)	≤ 73 dB(A)
Suction connection diameter	250 mm	250 mm
Dimensions		
Length x width x height	2,650 x 1,030 x 2,500 mm	
Weight with bin unit	≈ 760 kg	
Filter		
Cleaning	Vacumobil Jx 250 Jet pulse cleaning (offline) ⁴⁾ Jet or compressed air pulse cleaning of the filter media.	
	Vacumobil Vx 250 Vibration cleaning (offline) ⁴⁾	
Online cleaning (continuous) ⁴⁾	○	
Filter area	≈ 20.5 m ²	

● Standard equipment ○ Optional feature

¹⁾ Measured according to the EU Machinery Directive

²⁾ Delivery condition – clean filter socks

³⁾ Production condition – dust loaded filter socks

⁴⁾ Optional online filter cleaning (only permitted for explosive dust-air mixtures if additional safety measures are taken) Note: Units with online cleaning do not carry H3 certification

⁵⁾ IE5 motor replaces standard IE4 motor

⁶⁾ With Powerpack configuration

⁷⁾ For vibration cleaning

⁸⁾ For jet cleaning

Vacumobil JP 250
with jet pulse cleaning and briquette press



Vacumobil VZ 250
with vibration cleaning and rotary airlock



Extraction from a panel saw in plastics processing using the Vacumobil JT 250, discharging into chip bins.

Vacumobil 300

Dust extractor

Extract up to 6,000 m³/h (V_{max}).

Equipped as standard with a **7.5 kW IE4 motor**.

Optional for greater efficiency:

The IE5 Efficiency Powerpack, consisting of a frequency inverter, optimised PLC control system and modern **7.5 kW IE5 synchronous motor**.

See additional configurations in the options overview on pages 12/13.



Technical data	Vacumobil 300	Vacumobil 300 (IE5)
Power		
Efficiency class	IE4 - Super Premium Efficiency	IE5 - Ultra Premium Efficiency
IE5 Efficiency Powerpack	○	●
Rated motor power	7.5 kW / 400 V / 50 Hz (IE4)	7.5 kW (IE5) ⁵⁾ / 400 V / 50 Hz
Frequency control	○	●
Nom. Volume Flow (V _{Nom})	5,100 m ³ /h at 20 m/s	5,100 m ³ /h at 20 m/s
Max. Volume Flow (V _{Max})	6,000 m ³ /h	7,000 m ³ /h ⁶⁾
Vacuum generated at V _{Nom} ²⁾	≈ 3,000 Pa	≈ 3,700 Pa
Vacuum generated at V _{Max} ²⁾	≈ 2,500 Pa	≈ 2,700 Pa
Vacuum generated at V _{Nom} ³⁾	≈ 2,700 Pa	≈ 3,400 Pa
Vacuum generated at V _{Max} ³⁾	≈ 2,200 Pa	≈ 2,500 Pa
Maximum sound pressure level ¹⁾	≤ 75 dB(A)	≤ 75 dB(A)
Suction connection diameter	300 mm	300 mm
Dimensions		
Length x width x height	3,210 x 1,030 x 2,500 mm	
Weight with bin unit	≈ 900 kg	
Filter		
Cleaning	Vacumobil Jx 300 Jet pulse cleaning (offline) ⁴⁾ Jet or compressed air pulse cleaning of the filter media.	
	Vacumobil Vx 300 Vibration cleaning (offline) ⁴⁾	
Online cleaning (continuous) ⁴⁾	○	
Filter area	≈ 28 m ²	

● Standard equipment ○ Optional feature

¹⁾ Measured according to the EU Machinery Directive

²⁾ Delivery condition – clean filter socks

³⁾ Production condition – dust loaded filter socks

⁴⁾ Optional online filter cleaning (only permitted for explosive dust-air mixtures if additional safety measures are taken) Note: Units with online cleaning do not carry H3 certification

⁵⁾ IE5 motor replaces standard IE4 motor

⁶⁾ With Powerpack configuration

Vacumobil JZ 300
with jet pulse cleaning and rotary airlock



Vacumobil JP 300
with jet pulse cleaning and briquette press



Vacumobil JT 300 used in wood processing, installed outdoors with return air and chip discharge into collection bins.

Vacumobil 350

Dust extractor

Extract up to 8,000 m³/h (V_{max}).

Equipped as standard with a **11 kW IE4 motor**.

Optional for greater efficiency:

The IE5 Efficiency Powerpack, consisting of a frequency inverter, optimised PLC control system and modern **11 kW IE5 synchronous motor**.

See additional configurations in the options overview on pages 12/13.



Technical data	Vacumobil 350	Vacumobil 350 (IE5)
Power		
Efficiency class	IE4 - Super Premium Efficiency	IE5 - Ultra Premium Efficiency
IE5 Efficiency Powerpack	○	●
Rated motor power	11 kW / 400 V / 50 Hz (IE4)	11 kW (IE5) ⁵⁾ / 400 V / 50 Hz
Frequency control	○	●
Nom. Volume Flow (V _{Nom})	6,927 m ³ /h at 20 m/s	6,927 m ³ /h at 20 m/s
Max. Volume Flow (V _{Max})	8,000 m ³ /h	10,000 m ³ /h ⁶⁾
Vacuum generated at V _{Nom} ²⁾	≈ 3,100 Pa	≈ 3,600 Pa
Vacuum generated at V _{Max} ²⁾	≈ 2,300 Pa	≈ 2,400 Pa
Vacuum generated at V _{Nom} ³⁾	≈ 2,600 Pa	≈ 3,200 Pa
Vacuum generated at V _{Max} ³⁾	≈ 1,900 Pa	≈ 2,000 Pa
Maximum sound pressure level ¹⁾	≤ 73 dB(A)	≤ 73 dB(A)
Suction connection diameter	350 mm	350 mm
Dimensions		
Length x width x height	3,930 x 1,030 x 2,560 mm	
Weight with bin unit	≈ 1.080 kg	
Filter		
Cleaning	Vacumobil Jx 350 Jet pulse cleaning (offline) ⁴⁾ Jet or compressed air pulse cleaning of the filter media.	
Online cleaning (continuous) ⁴⁾	○	
Filter area	≈ 35 m ²	

● Standard equipment ○ Optional feature

¹⁾ Measured according to the EU Machinery Directive

²⁾ Delivery condition – clean filter socks

³⁾ Production condition – dust loaded filter socks

⁴⁾ Optional online filter cleaning (only permitted for explosive dust-air mixtures if additional safety measures are taken) Note: Units with online cleaning do not carry H3 certification

⁵⁾ IE5 motor replaces standard IE4 motor

⁶⁾ With Powerpack configuration

Vacumobil JP 350
with jet pulse cleaning and briquette press



Vacumobil JT 350
with jet pulse cleaning and bin units



Two Vacumobil JZ 350 units installed outdoors. The cleaned air is returned to production, preserving valuable heat energy.

Your Vacumobil can do more!

Options	Vacumobil 250	Vacumobil 250
Power		
Efficiency class	IE4 - Super Premium Efficiency	IE5 - Ultra Premium Efficiency
IE5 Efficiency Powerpack	○	●
Rated motor power	5.5 kW / 400 V / 50 Hz (IE4)	5.5 kW / 400 V / 50 Hz (IE5) ¹⁾
Conversion for North American network (UL-compliant)	–	○
Filter		
Online cleaning (continuous) ²⁾	–	–
Discharge Options		
Dust collection bins	3 bins	
Rotary airlock	○	○
Briquette press BriKStar CS 3	○	○
Briquette press BriKStar CS 4	○	○
BigBag discharge	○	○
Swiss standard container	○	○
Sulo waste container	○	○
Control		
Control cabinet with 7" HMI and PLC	●	●
Start signal: 1x external gate valve control 4x machine tool start contacts (24 V DC) 4x gate valves (24 V DC EPN)	●	●
Runtime accumulation (integrated)	●	●
Accessories		
Suction connection left	●	●
Suction connection right	○	○
Full detector incl. bracket (for 1 bin)	○	○
Return air connection hood	○	○
Blow back damper	●	●
Automatic fire suppression system with special extinguishing agent (optional for metal fires)	●	●
Antistatic filter socks (oil/moisture resistant)	○	○
Gate valve control L1, L4 for 1 or 4 machines with automatic shut-off valves	○	○
Gate valve control Z8, Z16 for 8 or 16 machines, incl. programmable bypass/min/max airflow	○	○
Induction sensor for Z8/Z16 Sensor/PLC for L1/L4 and PLC	○	○
Emergency stop on front of control cabinet	●	●
Spark protection system	○	○
Filter Cleaning		
Vibration cleaning	●	●
Jet pulse cleaning	●	●

● Standard equipment ○ Optional feature – Not available

Would you like a customized configuration? Contact us!

Special versions of the Vacumobil Series

The dust extractors in the Vacumobil series are available in flexible, customised configurations tailored precisely to your requirements. Whether you need discharge into BigBags, containers or collection bins, special trailer-mounted setups, or weather-protected enclosures for briquette presses – the possibilities are virtually endless. Thanks to their compact design, Vacumobil units can be easily integrated into a wide range of production environments.



1 Vacumobil 350 with rotary airlock discharge into large waste containers

2 Vacumobil 350 with rotary airlock discharge into BigBags

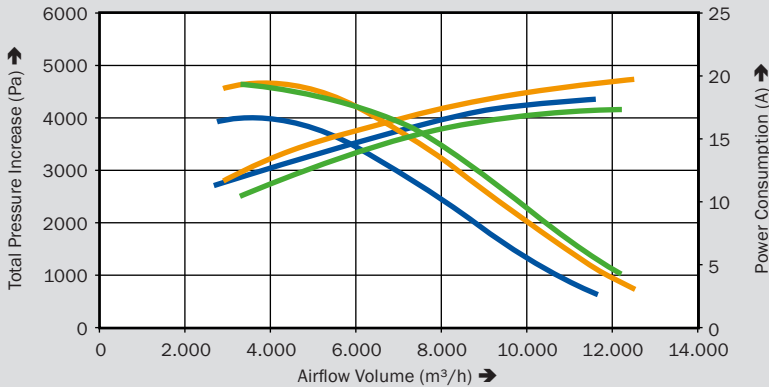
3 Vacumobil 350 with rotary airlock discharge into trailer

4 Vacumobil 350 with weatherproof enclosure for briquette press operation

5 Vacumobil 350 with rotary airlock discharge into external container

Up to 30% more vacuum

The principle is simple: The frequency inverter gently increases motor speed – enabling a noticeable performance boost.



- Vacumobil JT 350 with Powerpack IE5
- Vacumobil JT 350 with Powerpack IE4
- Vacumobil JT 350 without Powerpack

Example Calculation:

- Vacumobil JP 350 with IE5 Powerpack
Operating with 10,000 m³/h airflow
Usage: 250 working days per year, 8 hours/day
Energy and airflow efficiency gain: 20%

Annual electricity cost savings: €1,500
(Based on average commercial electricity rate in Germany: €0.30/kWh, 2024)

Energy Efficiency Pays Off!

We are happy to advise you on BAFA subsidy programmes for this innovative product. Government support may significantly reduce payback periods.



It pays off.

Vacumobil with Powerpack

Your benefits:

- Increased negative pressure compared to comparable standard Vacumobil
- Efficiency advantage ensures a worthwhile return on investment
- Most modern technology available on the market
- All Vacumobil options available
- Supports ISO 50001 energy management systems
- Supports sustainability through resource conservation



The new IE5 Efficiency Powerpack

Up to 20% lower energy consumption

Vacumobil – perfectly powered:

The Vacumobil dust extraction series delivers outstanding extraction performance with minimal energy input. With the newly developed IE5 Efficiency Powerpack for the Vacumobil 250, 300 and 350 models, Höcker Polytechnik's energy-saving experts are tapping into the full potential of the latest motor technology.

With just 11 kW motor power, we now achieve extraction performance that previously required a 15 kW drive! A 7.5 kW IE5 motor can replace an 11 kW IE4 motor, and a 5.5 kW IE5 motor can handle the workload of a 7.5 kW IE4 motor. It pays off – for your business and the environment.



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