DGUV Test
HO 163012
H3 Reststaubgehalt 0,1 mg/m³ sicher eingehalten (Holzstaub)
DGUV Test
HO 163011
GS geprüfte Sicherheit

Vacumobil 350

Dust extractor

11 kW (IE3)
GS/H3 certified

HÖCKER® POLYTECHNIK
Always one idea ahead

Vacumobil 350.
Flexible dedusting with maximum performance.

The Vacumobil 350 is the most powerful model of the popular Vacumobil series. This powerful dust extractor is perfectly suited for dust extraction from CNC-processing machines or several production machines.

It features impressive performance and compact design, an easily configurable modular system, performance and many flexible applications.The two cleaning processes (jet or vibration) in combination with the discharge systems collecting container, briquetting press or rotary valve allow the realisation of tailor-made solutions.

The drive of the Vacumobil 350 is fitted as standard with efficiency control system (IE3), thus guarantees an extremely environmentally friendly and energy-saving operation. It goes without saying that the Vacumobil Jx/Vx 350 models are tested according to GS-HO-07 and work exclusively with certified filter material.

In the field of process safety, the innovative dust extractors feature a fire suppression system and an integrated explosion-proof non-return flap. [1]

[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

Vacumobil JZ350
with jet cleaning and rotary valve

Vacumobil JP350
with jet cleaning and briquetting press

Vacumobil VT350
with vibration cleaning and bins

Vacumobil Dedusters. Powerful. Safe. Flexible.

- Installation in the work area allowed (depending on type of dust)
- Low residual dust content <0.1 mg/m³ (H3) acc. to TRGS 553
- 100% utilization of heat energy through air return
- Large filling capacity of 4 tons
- Online-cleaning available (supplementary charge)
- Height <2.6 m
- PLC-control system with automatic switch on
- Drive Efficiency Class IE3
- Automatic filter cleaning
- Integrated automatic fire suppression system
- Tested blowback protection integrated
- Pressure relief not required for St1 dusts
- BG-approved filter material (filtration efficiency 99.95%)
- Low energy consumption and high suction performance

The safe deduster

The Vacumobil is supplied ready for connection with phase change plug and can be installed in the work area without further fire protection measures thanks to the integrated fire suppression system. An FSA-tested blowback protection is integrated in the dust laden inlet, which prevents dust from escaping and ensures explosion separation.

The rotary valves of the Vacumobil JZ and VZ are pressure shock resistant and flameproof (Dekra-EXAM tested).

Two Vacumobiles, VZ350 and VZ300, combined to a powerful dust extraction solution. A transport fan takes the dust to the silo.

Two Vacumobil JZ 350 dedusters in outdoor installation.
The filtered air is returned to production hall to avoid head loss

Well combined

They are compact, powerful and flexible - Vacumobils are forming the optimal basis for many projects.

If there is a mix of material to be extracted or space constraint - the Höcker Polytechnik project consultants develop functional and cost sensitive solutions for special tasks with the Vacumobil dedusters. Talk to us!

PLC control with text display, robust membrane keyboard and integrated automatic fire suppression system

Cleaning by compressed air or vibration

Vacumobil Jx 350

For jet or compressed air pulse cleaning, a nozzle is positioned above each filter hose. A short burst of compressed air briefly inflates the filter hoses so the filter cake is loosened. The filter material is regenerated periodically or depending on the differential pressure (according to the degree of contamination of the filters).

Properties:

- low energy requirement
- suitable for almost all materials
- constant high suction power due to low filter contamination
- cleaning can be carried out time-dependently or differential pressure-dependently
- very long service life and durability of the filter hoses
- continuous/online cleaning of the filter material without production breaks (optional)

Vacumobil Vx 350

In the vibration process, the filter cake is shaken off the filter hose by means of a shaker motor. Mechanical cleaning is carried out after interruption of the filtration operation.

Properties:

- discontinuous cleaning of the filter material during production breaks
- low energy requirement
- very long service life and durability of the filter hoses

Vacumobil. Tested pressure shock resistance

Test passed. In 2010, the accredited specialist institute for explosion tests „Dekra-EXAM“ certified the pressure shock resistance of our Vacumobil dust collectors.

All relevant laws and standards (ATEX, DIN EN 16770, industrial safety regulations, VDI guidelines, regulations and rules of the employers‘ liability insurance association) can be easily and safely complied with.

Shock resistance test of the Vacumobil 350 in 2010.

Technical data and options

	Vacumobil Jx 350 Jet- or compressed air pulse cleaning of the filter material. Online cleaning optional.	Vacumobil Vx 350 Vibrating cleaning of the filter material. Cleaning during production breaks.
Power		
Motor	11 kW / 400 V / 50 Hz (IE 3)	
Nom. Volume Flow (V Nom)	6.927 m³/h at 20 m/s	
Max. Volume Flow (V Max)	8.600 m³/h	
Vacuum generated V Nom (2	ca. 3.100 Pa	
Vacuum generated V Nom (3	ca. 2.800 Pa	
Vacuum generated V Vmax (2	ca. 2.000 Pa	
Maximum sound pressure level (1	≤ 73 dB(A)	
Suction connection diamenter	350 mm	
Filter		
Cleaning	Compressed air pulse (offline) (4	Vibration (autom. running time addition)
Online cleaning (continuous)	O	—
Filter area	ca. 35 m²	ca. 35 m²
Discharge		
Collecting bins (JT/VT)	4 bins, ca. 495 Litres max.	
Dimensions / weight (JT/VT)	3.930 x 1.030 x 2.560 mm / 1.080 kg	
Rotary valve (JZ/VZ)	0,55 kW, pressure shock tested	
Briquetting press BriKStar CS3 (JP/VP)	25...50 kg/h, 3kW (space-saving integrated)	
Briquetting press BrikStar CS 4	35...75 kg/h, 4kW (integrated, chip container 1.450 x 860 mm)	
Control		
Switch cabinet	●	PLC control
Automatic switch-on	●	(6 I-coils connectable)
Runtime clock	●	integrated
Accessories		
Suction connection left	●	Jx/Vx-350-L
Suction connection right	O	Jx/Vx-350-R
Return air connection hood	O	horizontal/vertical connection for outdoor installation
Blow back flap	●	type-examined
Automatic fire suppression system	●	with special extinguishing agent (optional: also for metal fires)
Antistatic filter hoses	O	oil and moisture repellent
Blast gate control L1, L4	O	for 1, alternatively 4 machines for automatic blast gate
Blast gate control Z8, Z16	O	for 8, alternatively 16 machines (progr. bypass / min / max volume flow)
Induction coil	O	suitable for L1, L4, Z8, Z16
Emergency-Stop	O	mounted on the front side of the switch cabinet
Ignition protection	O	up to maximum volume flow 10.000 m³/h

● = series equipment, O = option, — = not available

Further configuration options available. Please contact us.

(1 measured according to the EU Machinery Directive subject to free field conditions with 1 m distance of 1.6 m height
(2 in delivery status – non-impinged filter hoses
(3 exposed to test dust acc. to. GS-HO-07
(4 online cleaning optional (for explosive dust-air mixtures only permitted with further protective measures) Attention: Units with online cleaning do NOT have GS and H3 markings.

Model names (cleanings and discharges)

JT = Jet-cleaning / collection bins (tons)
VT = Vibration cleaning / collection bins (tons)
JP = Jet-cleaning / briquetting press
VP = Vibrations cleaning / briquetting press
JZ = Jet-cleaning / rotary valve
VZ = Vibration cleaning / rotary valve

New product!

The IE5-Efficiency Powerpack(4

25% Efficiency benefit

Vacumobile with IE5 permanent magnet motor offer
higher air volumes with **low energy consumption**

Vacumobile with IE5 efficiency power pack(4

The Vacumobil deduster series is characterised by excellent extraction performance with minimum energy consumption. With the newly developed IE5-Efficiency Powerpack for the Vacumobile 350, 300 and 250 the Höcker Polytechnik energy saving professionals make full use of the possibilities of modern permanent magnet technology.

Vacumobil deduster with the best possible motor
With 11 kW motor power, we now achieve the extraction capacity where a 15 kW drive was previously required! A 7.5 kW motor (IE5) can replace an 11 kW motor (IE3), and a 5.5 kW motor (IE5) does the job of a 7.5 kW motor (IE3).
This pays off for you and also for the environment.

How did we manage to achieve that?
Our intelligent electronic control utilises a modern frequency inverter with a permanent magnet motor of the highest energy efficiency class IE5. Each of these three components reduces energy consumption, but the decisive step is the control process.
Permanent magnet motors have specific characteristics that require high control intelligence. The control system for the IE5 efficiency power pack was therefore perfectly matched up with this type of motor by our technicians.

Successful practical and stress test
This IE5 efficiency power pack can pay for itself in a few months. **From day one you will benefit from low energy costs and stronger suction power.** This product also underwent several months of practical and stress testing at a major furniture manufacturer.
A Vacumobil 350 with IE5 efficiency Powerpack worked 5 days a week in two shifts under full load and production conditions.
The result: More performance with reduced energy consumption.

The permanent magnet motor
More range for electric cars as well as more efficiency for your Vacumobil
IE5 permanent magnet motors are characterised by their very high efficiency of approx. 94 %. In electric cars, this increases the range and boosts the efficiency of our vacuum vehicle dust extractors by up to 25 %.

Vacumobil. The safe deduster
The design principle of our Vacumobiles, briquetting presses and rotary valves has been proven 1000 times and has been officially tested.

All relevant laws and standards (ATEX, DIN EN 16770, industrial safety regulations, VDI guidelines, trade association regulations and rules as well as the eco-design guideline) can be complied with easily and safely.

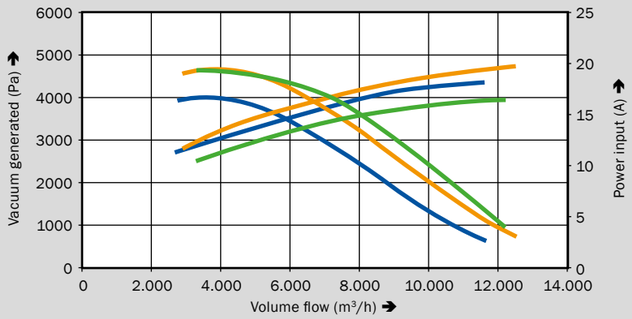
Driven by IE5 Ultra Premium Efficiency
www.hoecker-polytechnik.com

Energy-efficient performance
Permanent magnet motors

Vacumobil with Powerpack

Up to 30% more vacuum

In principle quite simple... The frequency converter gently increases the speed of the motor and provides a power boost.



- Vacumobil JT 350 with Powerpack IE5 (4
- Vacumobil JT 350 with Powerpack IE3
- Vacumobil JT 350 without Powerpack

Example calculation:
- Vacumobil dust collector JP 350 with Powerpack IE5
  Application with a volume flow of 8,000 m³/h
  Productive time: 250 working days @ 8 h per year

Efficiency advantage electricity and air: 25%

Reduction of electricity costs: **1,200 € / per year**
Electricity price: 0.24 Euro/kWh (average commercial Germany)

It pays off for you.

Vacumobil with Powerpack

The advantages:
- 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

Technical data

	11 kW IE5 Efficiency Powerpack(4 11 kW permanent magnet motor (IE5), frequency converter, control electronics	7.5 kW IE5 Efficiency Powerpack(4 7.5 kW permanent magnet motor (IE5), frequency converter, control electronics	5.5 kW IE5 Efficiency Powerpack(4 5.5 kW permanent magnet motor (IE5), frequency converter, control electronics
Energy saving option for	**Vacumobil 350**	**Vacumobil 300**	**Vacumobil 250**
Motor power	11 kW / 400 V / 50 Hz (IE5) (1	7,5 kW / 400 V / 50 Hz (IE5) (1	5,5 kW / 400 V / 50 Hz (IE5) (1
Motor efficiency	max. 94 %	max. 94 %	max. 94 %
Nom. Volume Flow (V Nom)	6,927 m³/h at 20 m/s	5,100 m³/h at 20 m/s	3,535 m³/h at 20 m/s
Max. Volume Flow (V Max)	10,000 m³/h	9,000 m³/h	7,500 m³/h
Vacuum generated V Nom (2	ca. 3,800 Pa	ca. 3,400 Pa	ca. 3,600 Pa
Vacuum generated V Max (2	ca. 2,400 Pa	ca. 2,500 Pa	ca. 2,800 Pa
Maximum sound pressure level (3	≤ 73 dB(A)	≤ 73 dB(A)	≤ 73 dB(A)
Options for your Vacumobil	Configure your energy-efficient Vacumobil as you wish: Choose the optimum filter cleaning jet or vibration and the desired discharge via chip bin, briquetting press or rotary valve. Please also refer to the product brochures for the Vacumobil 350, 300 or 250.		

(1 In exchange for the standard IE3 motor (2 In delivery status – non-impinged filter hoses (3 measured according to the EU Machinery Directive subject to free field conditions with 1 m distance of 1.6 m height at V Nom (4 The Vacumobiles with IE5 Efficiency Powerpack are currently not yet GS-certified. However, the testing and certification of the Vacumobile with IE5 Efficiency Powerpack is currently in the concrete preparation phase. Status: 10/2020

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