



Recycling-oriented compaction
of film waste and edge trim

FILM COMPACTORS

Pavel Gerätebau GmbH

TRADITION AND INNOVATION -

Reimagined

Our history began in 1962, when Wilfried Pavel laid the foundation for our company with the first automatic packaging machine for clothing. Since then, we have been shaping the market with our Pavel film compactors, which have been setting new standards in the compaction of film waste and edge trim for over 25 years.

High quality, efficiency and a customised focus on modern operating conditions are the key factors here. The focus is on the requirements of our customers. For us, longevity is not just a buzzword, but a conviction we live by: We develop products that will still be around tomorrow.

Put your trust in a partner who combines tradition and innovation to meet your challenges sustainably and future-proof.



FILM COMPACTORS FROM PAVEL

More value from every edge strip

Wherever films are produced or processed, punching waste and edge trims are inevitably generated - for example during the extrusion of flat or thermoforming films, in packaging production, on laminating or cutting machines, during printing or in bag production. These remnants usually cause high costs, as they can generally not be reused and have to be disposed of at great expense.

Flexible connection options

- With existing extraction system:

The compactor can be seamlessly integrated into existing systems. The waste can be fed in via a hopper on or next to the compactor.

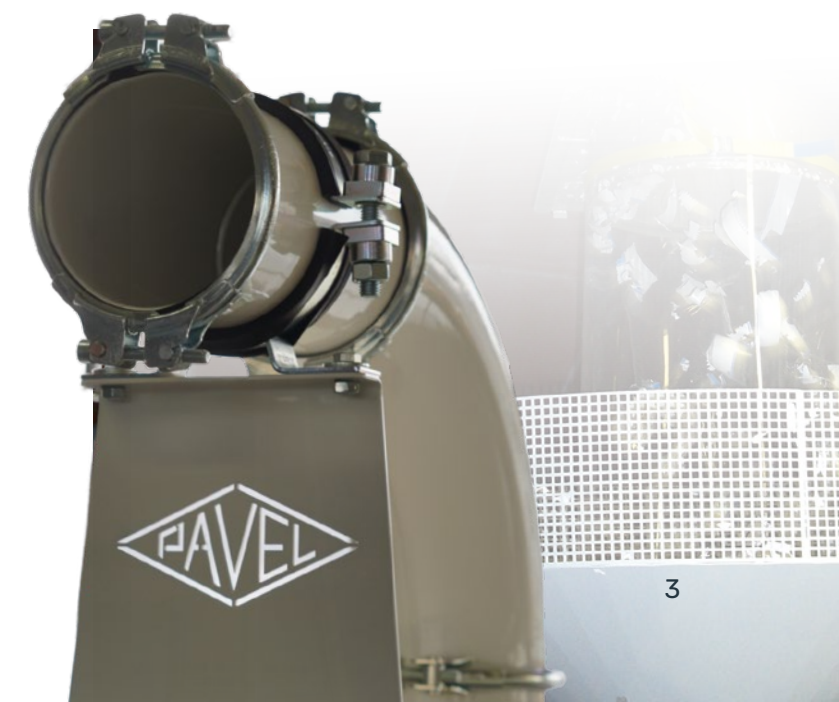
- Without existing extraction system:

Thanks to the integrated suction and compaction system, the compactor also works independently. It thus simultaneously assumes the function of an extraction system.

Why a compactor?

Instead of disposing valuable raw materials in a resource-intensive manner using film winders, shredders or presses, the film compactor from Pavel compacts the waste directly where it is produced. Film residues are picked up on site and processed into compact, handy sticks without any additional aids.

The Pavel film compactor therefore offers an efficient and sustainable solution for recycling your film waste - regardless of whether an extraction system is already in place or not.



THE MODE OF OPERATION

Film compactors KP 200/2000/2000 MAX



It's effortless!

Our **Pavel compactors** can be easily connected via pipework to any production system that produces film waste. Integration into existing extraction solutions is of course also possible.

As soon as the material enters the **suction and compaction channel**, it is automatically drawn in and highly compacted.

A piston then transports the compacted film into the **heating channel**, where the melting ability of the material is utilised to form a stable, firmly welded block.

The resulting **continuous strand** is cut to the required length by a **cutting device** and can then be stored to save space or sent directly for recycling.

Functionality in detail:

1. Absorption of waste:

The compactor sucks film waste and edge trim directly from the production machine into the compaction channel.

2. Compaction:

In this channel, the material is heated and strongly compressed using a piston. The temperature melts the film material partially and forms a stable, firm strand.

3. Cut to length:

An integrated cutting device cuts the endless strands to a manageable length.

4. Issue:

The compacted bars can be collected immediately in boxes or on pallets.



RECYCLING-ORIENTED COMPACTION

Efficient. Space-saving. Cost-cutting.

Efficient film compaction for our production

Our advanced solution enables the **fast**, **space-saving** and **cost-efficient** compaction of film waste and edge trim directly on the extrusion line. The production of stackable, highly compacted rods eliminates the need for bulky intermediate storage and expensive centralised extraction systems – your disposal costs are noticeably reduced.

Powerful and efficient

Thanks to a reliable processing speed of up to 800 m/min, both edge strips of a cutting system can be captured simultaneously. The system can be used for almost all films and composite materials and impresses with its **digital control** and **precise temperature control**.

A user-friendly **touch panel** enables intuitive operation and makes the entire process even more convenient.

Advantages for your business:

Space-saving:

The compact bars take up significantly less storage space.

Cost-efficient:

Savings on expensive disposal methods and less handling effort.

Sustainable:

Single-variety bars are easier to recycle and return to the material cycle.

Process optimisation:

By eliminating additional equipment such as presses or winders, your production becomes more efficient and leaner.

In short:

With the Pavel film compactor, you can turn unavoidable film waste into a valuable, spacesaving raw material that can be easily reprocessed or recycled.

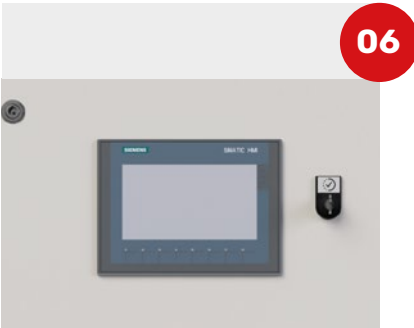
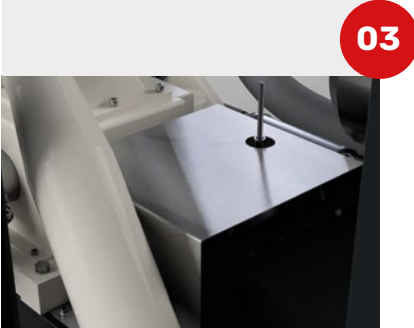
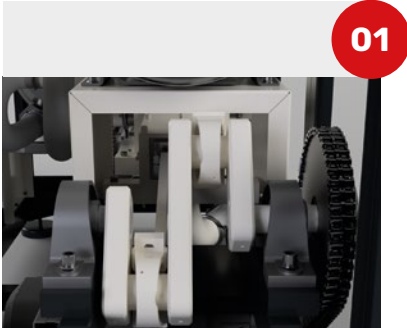
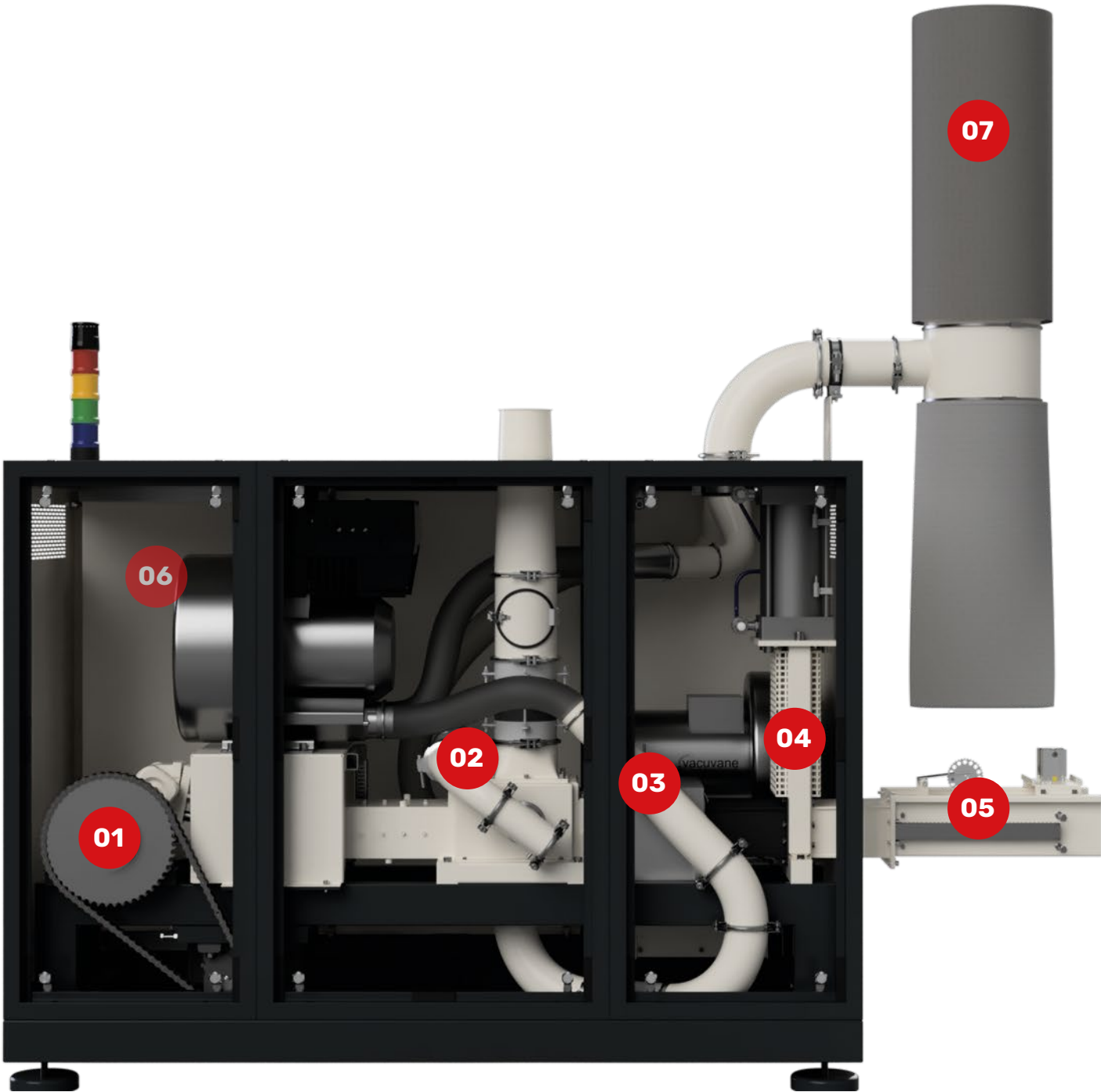
THE TEN KEY ADVANTAGES OF OUR FILM COMPACTORS

- ✓ **Volume reduction of up to 80 %**
Saves storage space and significantly reduces transport costs.
- ✓ **Pure recyclability**
Compact bars make it easier to return them to the recycling cycle.
- ✓ **High efficiency**
Reliable compaction even at high film speeds of up to 800 m/min
- ✓ **Simple integration**
Direct connection to cutting, extrusion or printing lines without separate extraction systems.
- ✓ **Automatic operation**
Continuous film recording, less personnel effort and reduced operating error.
- ✓ **Cost savings**
Less handling, less labour, lower logistics costs.
- ✓ **Robust construction**
Durable and low-maintenance – designed for continuous use in production.
- ✓ **Intuitive control**
Modern Siemens control system with touch panel and recipe management for various the application scenarios.
- ✓ **High security**
Special keys, fire detectors and locked housing parts protect employees and plant.
- ✓ **Scalability**
From the compact KP200 for lower production volumes to the powerful KP2000 MAX for high throughputs.



THE CONSTRUCTION

Film compactors KP 200/2000/2000 MAX



- 01** Crankshaft drive with compressor piston
- 02** Suction and compression channel
- 03** Temperature-controlled heating duct
- 04** Cooling channel with cutting device
- 05** Outlet channel with pneumatic pressure regulation*
- 06** Touch-supported electronic control
- 07** User-friendly exhaust air filter

*The length of the outlet channel varies based on requirements.

FILM COMPACTOR KP200

Overview and areas of application

The **Pavel KP200 film compactor** is the ideal solution if you already have the necessary machine equipment and still want to benefit from the advantages of compacting. With the KP200, you can compact voluminous film edge cuts effortlessly and save valuable resources:

less labour required, easy stacking and significantly less space required. Wherever you currently have to laboriously fill or prepare boxes and cardboard pallets, you can integrate the KP200 to save space and noticeably simplify your operational processes.

Safety first and foremost

Pavel attaches great importance to the protection of your fellow workers. A special **cladding key system** prevents unauthorised access to the machine. In addition, the following safety functions ensure smooth operation:

Smoke detector, overtemperature cut-out, heating cut-out and **protective grille** for the blade as well as a **tower light with siren** for visual and audible warnings.



Control system and software

The control unit is designed to be particularly easy to use and can be operated by key-operated control. This allows users to change settings or load recipes within seconds.

Lowering range:

Customised adjustment of heating and fan parameters.

Software functions:

The suction level and duct pressure can be adjusted via the control panel.

Connection and flexibility

Direct mounting:

The KP200 is supplied as standard with equipped with a suction funnel directly for operation on or in the machine.

Stepped funnel:

If required, a separate hopper can be placed next to the compactor and connected via pipework.

Pressureless feed:

Ideally, the material is transferred into the hopper without pressure via an air separator and then reliably compacted.

Equipment features

- ✓ **Siemens control system**
- ✓ **Recipe management** for different film types
- ✓ **Maintenance counters** for predictive maintenance
- ✓ **Standard and lowering mode** for flexible production phases
- ✓ **Password-free access** thanks to key switch
- ✓ **Optional external control** for integration into existing systems



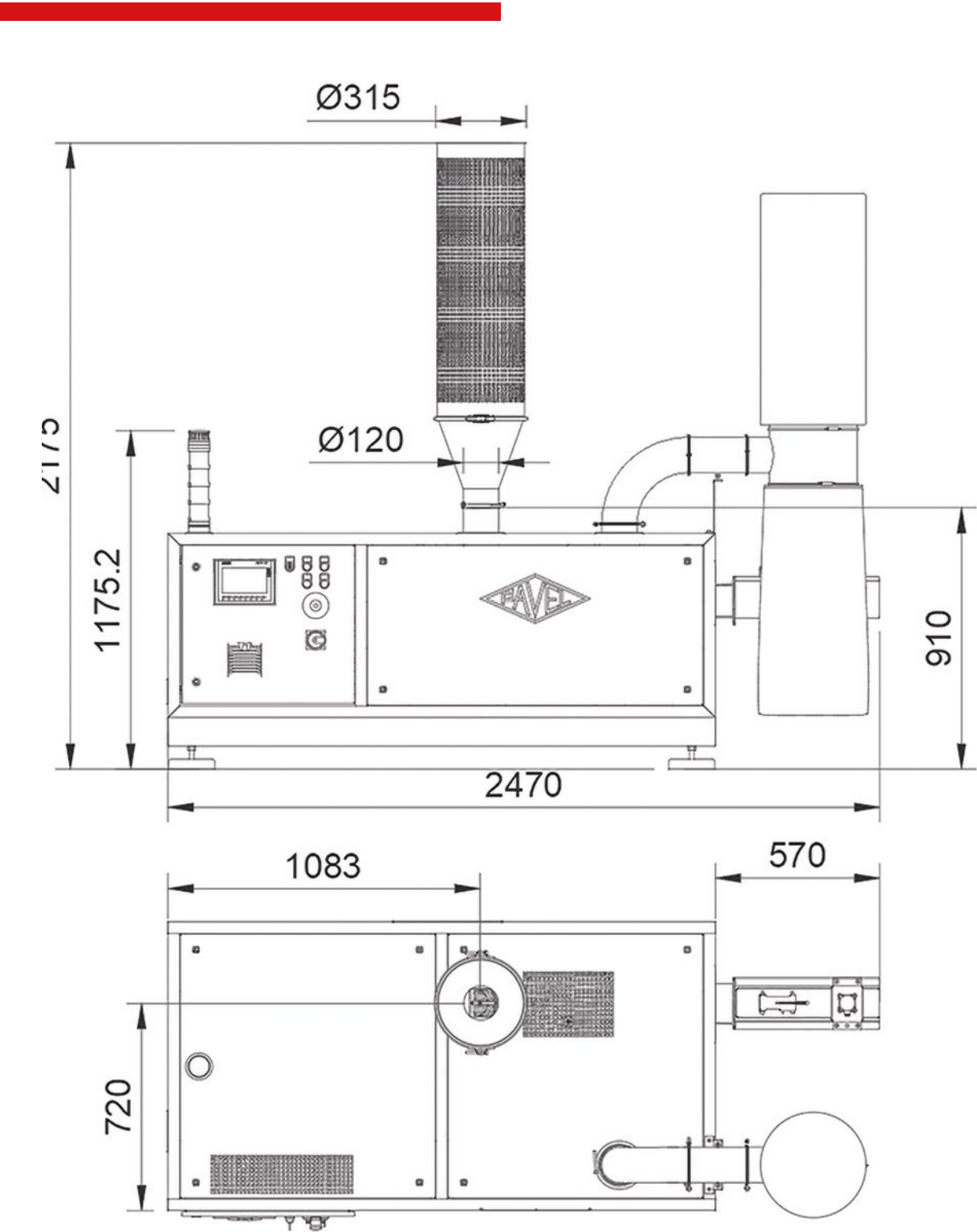
Conclusion

With the **KP200**, you get a compact, high-performance film compactor that fits seamlessly into your existing machine landscape. Benefit from reduced disposal and storage costs, easy handling and the highest safety standards.

This allows you to increase efficiency and cost effectiveness.

FILM COMPACTOR KP200

Specifications



Suction

A vacuum seal with the following specifications is installed in the KP200 film compactor:

Device type	kW	Hz	m³/h	hPa [mbar]	V	A	dB (A)
1x side channel blower with frequency conversion	5,5	50	530	-300/300	3 x 400 V AC [-10%] ... 480 V AC [+10%, 50/60 Hz]	14,8	70
	6,3	60	620	-270/250		14,8	74
	7,5	87	860	-160/140		14,8	82

Airborne noise emissions

A-weighted emission sound pressure level	Tolerance ±3 dB(A)
At 50 Hz	70 dB (A)
At 60 Hz	74 dB (A)

Connection data

Mains connection: 400V, 3~, N, PE, 50 Hz

Back-up fuse: approx. 32 A

Compressed air: up to 6 bar

Control unit: Siemens S7-1212C

Total weight: approx. 650 kg (basic machine)
approx. 750 kg
with base frame

Standard scope of delivery KP200

- 1 Switch cabinet key
- 2 Panelling key
- 3 Operator key
- Technical documentation
- CE Declaration of Conformity (print)
- Operating instructions (print)
- Circuit diagram (print)
- Digital version on USB stick

Optional

- machine base frame
- Individual colouring of the machine
- Individual hopper according to customer requirements



FILM COMPACTOR KP2000

Overview and areas of application

The **Pavel KP2000** film compactor is specially designed for companies that want to compact medium to large film volumes efficiently. Whether punching waste or edge trim - thanks to high performance reserves and modular connection options, you save valuable resources in storage and disposal.

Safety first and foremost

The KP2000 offers maximum operational safety thanks to integrated safety features such as a tower light, fire alarm and locked housing parts that can only be accessed with special keys. All potentially dangerous machine parts are located on the inside so that your employees are optimally protected at all times.



Control system and software

The touch-based control system with Siemens SIMATIC enables intuitive operation. You benefit from recipe management, adjustable parameters and a clear status display. The system is designed to ensure smooth processes and quick adjustments during operation.

Connection and flexibility

The KP2000 can be operated independently or seamlessly integrated into existing production systems. Whether directly on cutting, extrusion or printing lines - the compact and modular design enables easy customisation to individual requirements.

Equipment features

- ✓ **Siemens control system**
- ✓ **Recipe management** for different film types
- ✓ **Maintenance counters** for predictive maintenance
- ✓ **Standard and lowering mode** for flexible production phases
- ✓ **Password-free access** thanks to key switch
- ✓ **Optional external control** for integration into existing systems

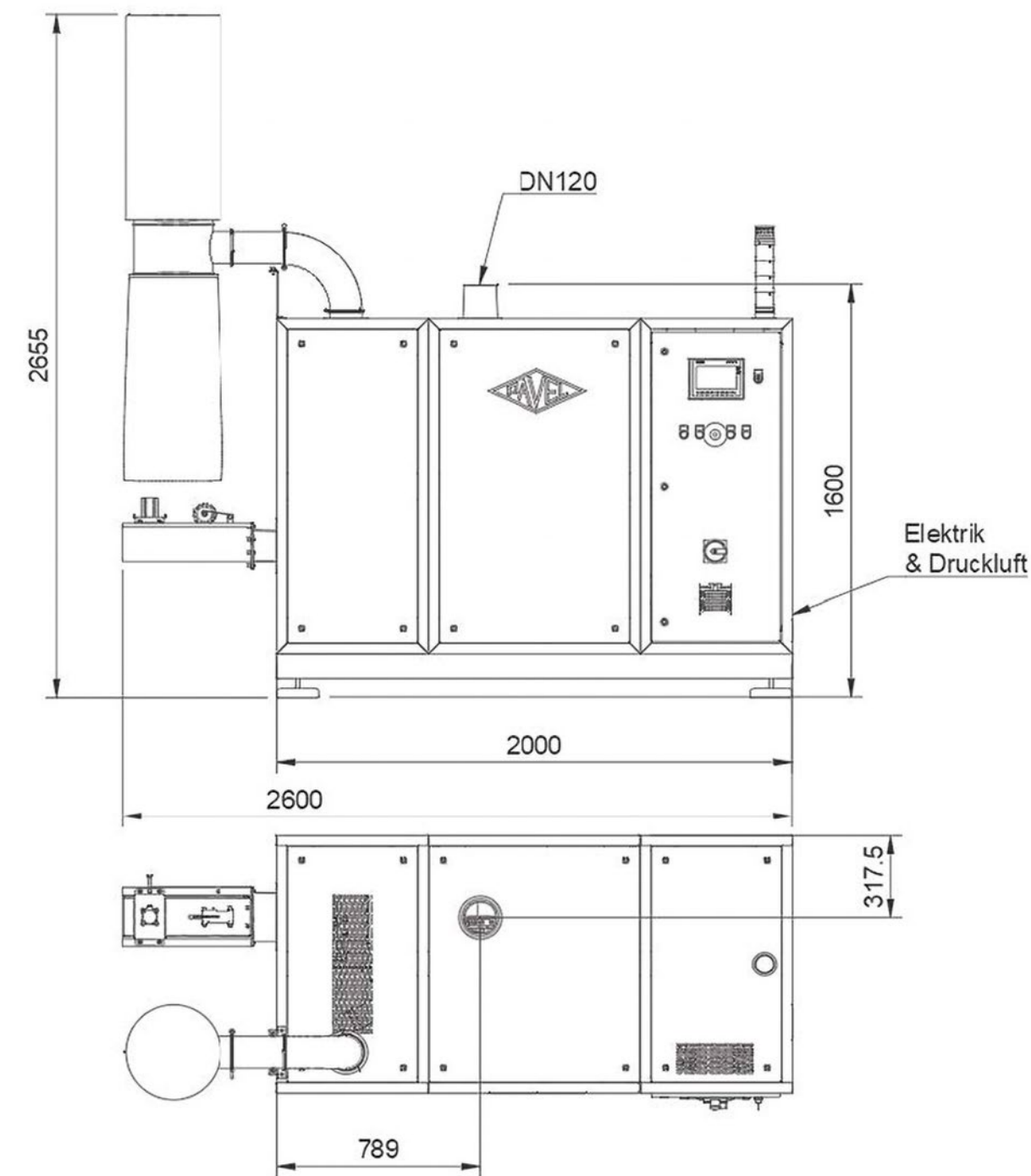


Conclusion

The **KP2000** offers a reliable combination of **high compaction** and **reliability**. Thanks to the powerful vacuum process, the robust Siemens control system and the extensive safety and maintenance functions, the compactor can be flexibly adapted to your production requirements. Reduce your disposal and storage costs in the long term and benefit from a **future-proof, high-performance** compactor system.

FILM COMPACTOR KP2000

Specifications



Suction

The KP2000 has 2 vacuum compressors with the following specifications:

Device type	kW	Hz	m³/h	hPa [mbar]	V	A	dB (A)
1x side channel blower with frequency conversion	7,5	50	700	-305/330	200-240 V / 345-415 Y	28,0 D / 16,2 Y	70
	8,6	60	840	-330/290	200-275 V / 380-480 Y	28,0 D / 16,2 Y	74
	11	87	1200	-105/80	345 D	28,0 D	82

Device type	kW	Hz	m³/h	hPa [mbar]	V	A	dB (A)
1x side channel blower without frequency conversion	5,5	50	700	-200/190	350-450 D / 610-725 Y	11,1 D / 6,4 Y	70
	6,3	60	840	-160/140	400-500 D / 690-725 Y	11,0 D / 6,4 Y	74

Airborne noise emissions

A-weighted emission sound pressure level	Tolerance ±3 dB(A)
At 50 Hz	73 dB (A)
At 60 Hz	77 dB (A)

Connection data

Mains connection: 400V, 3~, N, PE, 50 Hz

Back-up fuse: approx. 63 A

Compressed air: up to 6 bar

Control unit: Siemens S7-1214C

Total weight: approx 950 kg (basic machine)
approx 1150 kg
with base frame

Standard scope of delivery KP2000

- 1 Switch cabinet key
- 2 Panelling key
- 3 Operator key
- Technical documentation
- CE Declaration of Conformity (print)
- Operating instructions (print)
- Circuit diagram (print)
- Digital version on USB stick

Optional

- Individual colouring of the machine
- Individual hopper according to customer requirements



FILM COMPACTOR KP2000 MAX

Overview and areas of application

The **KP2000 MAX film compactor** is the top model in Pavel's KP series and is designed for maximum performance. Thanks to its extra-wide inlet opening and high throughput capacity, it is perfectly suited for production environments with a high throughput capacity.

Safety first and foremost

As with all Pavel film compactors, safety is a top priority:

Cladding key system:

For controlled access to the inside of the machine

The KP2000 MAX is ideal for applications in which large film volumes or bulky materials are processed. With the KP2000 MAX, you benefit from highly efficient and sustainably reduce your disposal and transport costs.

Smoke detector and **overtemperature cut-out** ensure a safe environment **Heating cut-out and protective grille** on the Cutting blades prevent injuries

Tower light with siren alerts you immediately in the event of a fault



Control system and software

Pavel has consistently developed the controls for the KP2000 MAX to offer you maximum control and ease of use:

Extended lowering mode:

Fine adjustment of heating and blower parameters for different film materials

Quick recipe changes:

Load and save customised recipes for different production batches directly via the touch panel

Access via key switch:

Secure and uncomplicated - no passwords required

Connection and flexibility

Extra-wide inlet:

Ideal for large-format films or voluminous edge strips

Modular concept:

The KP2000 MAX can be operated both independently and in combination with existing systems, pipe systems or external hoppers

High integration capability:

From extrusion to printing lines - the KP2000 MAX adapts to your workflow

Equipment features

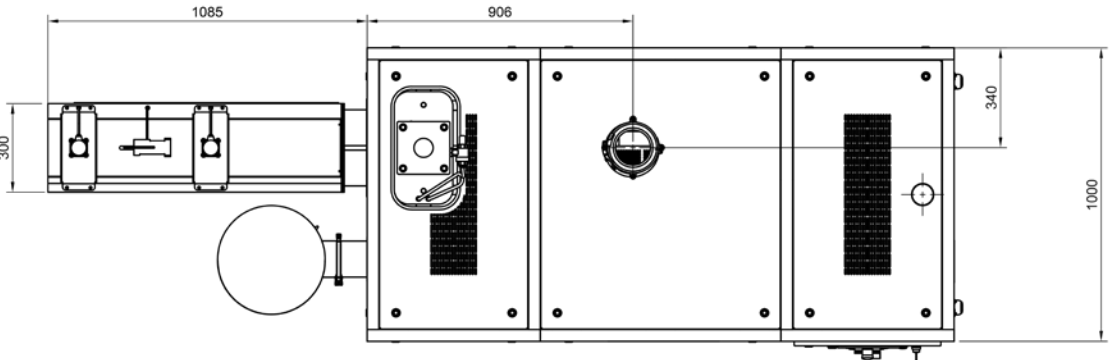
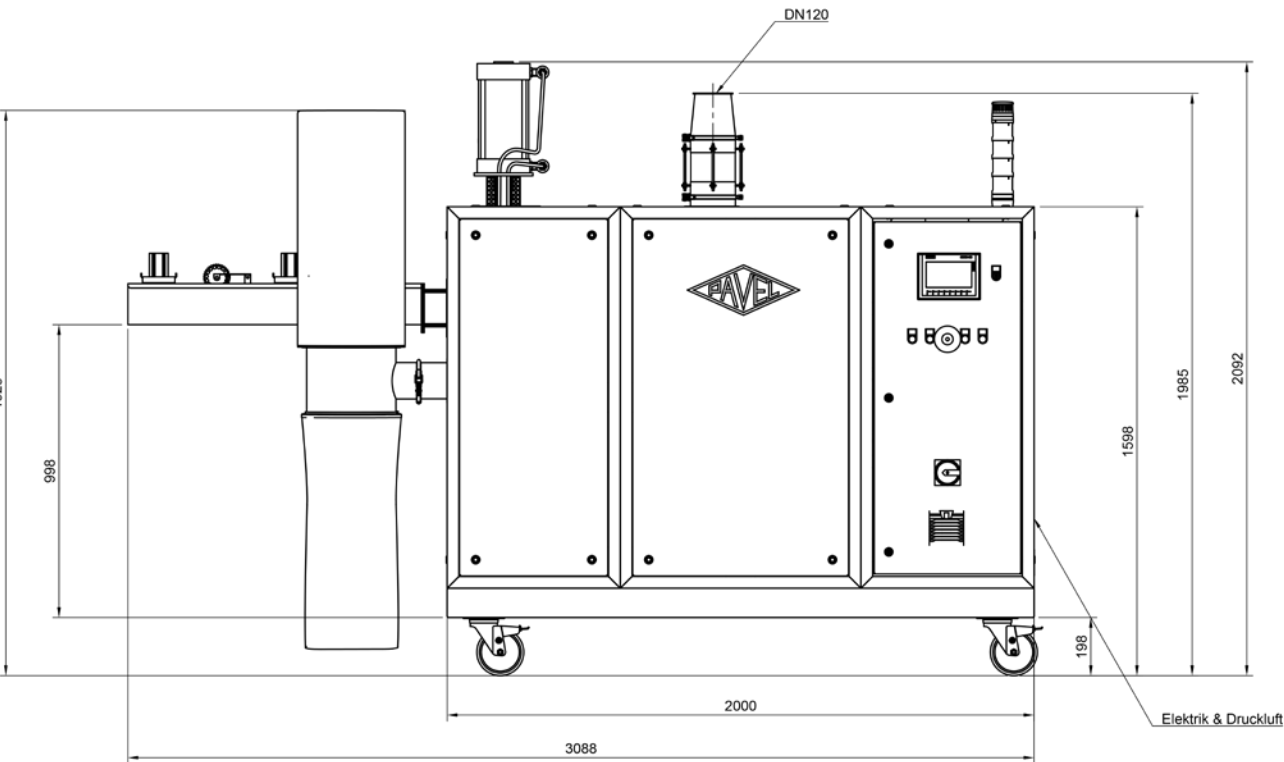
- ✓ **Powerful extraction system** for maximum throughput
- ✓ **Robust design** for continuous use in demanding production environments
- ✓ **Siemens control system** with integrated recipe management
- ✓ **Optional interfaces** for seamless connection to external systems
- ✓ **Optional external control** for integration into existing systems

Conclusion

The **KP2000** offers a reliable combination of **high compaction performance** and reliability. Thanks to the powerful vacuum process, the robust Siemens control system and the extensive safety and maintenance functions, the compactor can be flexibly adapted to your production requirements. Reduce your disposal and storage costs in the long term and benefit from a future proof, high-performance compactor system.

FILM COMPACTOR KP2000 MAX

Specifications



Suction

The KP2000 MAX has 2 vacuum compressors with the following specifications:

Device type	kW	Hz	m³/h	hPa [mbar]	V	A	dB (A)
1x side channel blower with frequency conversion	7,5	50	700	-305/330	200-240 V / 345-415 Y	28,0 D / 16,2 Y	70
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Airborne noise emissions

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Connection data

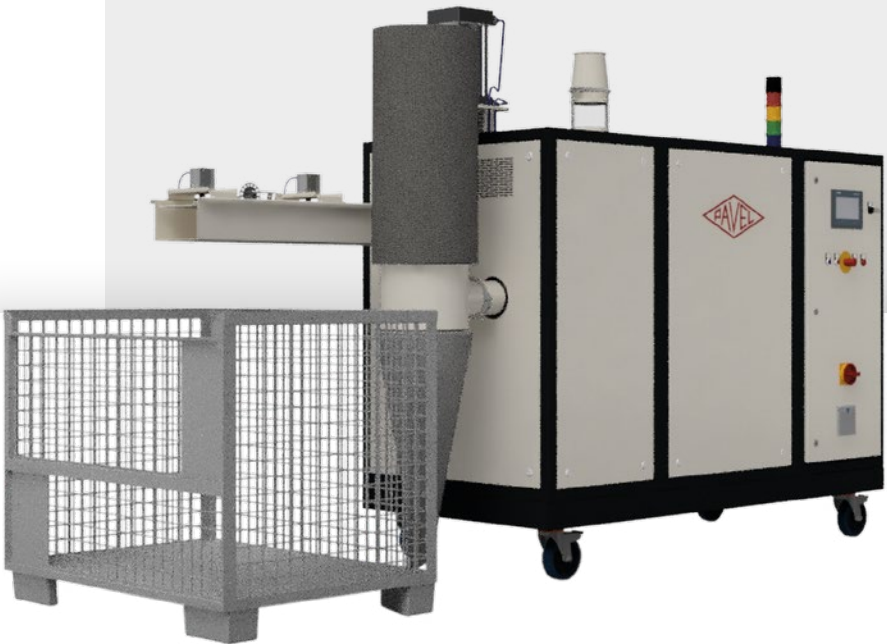
Mains connection: 400V, 3~, N, PE, 50 Hz
Back-up fuse: approx. 63 A
Compressed air: up to 6 bar
Control unit: Siemens S7-1214C
Total weight: approx 1035 kg (basic machine)

Standard scope of delivery KP2000 MAX

- 1 Switch cabinet key
- 2 Panelling key
- 3 Operator key
- Technical documentation
- CE Declaration of Conformity (print)
- Operating instructions (print)
- Circuit diagram (print)
- Digital version on USB stick

Optional

- Individual colouring of the machine
- Individual hopper according to customer requirements



THE COMPACTORS AT A GLANCE

Scalable solutions for every need



KP 200

Hopper operation	
Bar dimensions	110 x 100 mm
Bar length	variable
Electrical connection	400/480 V, 50/60 Hz, 32 A
Compressed air connection	min. 6 bar
Air consumption	from approx. 100 to 225 litres/hour.
Paintwork	RAL 9010 pure white/ RAL 7016 anthracite grey
Dimensions (L x W x H)	3300 x 1000 x 800 mm 2000 mm height with filter
Weight	approx. 650 kg (basic machine) approx. 750 kg with base frame

The KP200 is recommended for smaller quantities of material and impresses with its space-saving design. In future, your new film compactor could be located where you currently collect material in boxes!



KP 2000 MAX

Material pick-up automatic or with hopper	
Bar dimensions	230 x 100 mm
Bar length	variable
Electrical connection	400/480 V, 50/60 Hz, 63 A
Compressed air connection	min. 6 bar
Air consumption	from approx. 132 to 300 litres/hour.
Paintwork	RAL 9010 pure white/ RAL 7016 anthracite grey
Dimensions (L x W x H)	3100 x 1000 x 2100 mm
Weight	approx. 1035 kg

The KP2000 MAX, with its 30% larger channel and extended Maximum efficiency for particularly large volumes.



KP 2000

Material pick-up automatic or with hopper Bar	
Bar dimensions	150 x 100 mm
Bar length	variable
Electrical connection	400/480 V, 50/60 Hz, 63 A
Compressed air connection	min. 6 bar
Air consumption	from approx. 132 to 300 litres/hour.
Paintwork	RAL 9010 pure white/ RAL 7016 anthracite grey
Dimensions (L x W x H)	3300 x 1000 x 1550 mm 2650 mm height with filter
Weight	approx. 950 kg

The KP2000 is designed for medium to high throughput rates and combines Extraction and compacting in a single system.

All three models can be flexibly adapted to different production environments thanks to their modular design. This results in consistent scalability that offers a suitable compact solution for any size of business.



www.pavel-gmbh.de

Pavel Gerätebau GmbH

Discover the perfect
combination of tradition
and innovation - your reliable
partner for durable machines.

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