

Electric asphalt pavers

MINI 500^e / MINI 502^e



EPower

PERFECT IN ALL CLASSES

The right paver for every job

VÖGELE's seamless product range is considered unique in the industry. Whether the project is a service road or a motorway, an airfield or a race track, a new construction or a resurfacing job, whether it involves thick or thin courses or the hot or cold method - customers will find that our range includes the right paver for every paving task.



VÖGELE PRODUCT RANGE

- **MINI CLASS**
 - > Pave width up to 3.5 m
 - > Laydown rate up to 300 t/h
- **COMPACT CLASS**
 - > Pave width up to 5 m
 - > Laydown rate up to 350 t/h
- **UNIVERSAL CLASS**
 - > Pave width up to 10 m
 - > Laydown rate up to 700 t/h
- **HIGHWAY CLASS**
 - > Pave width up to 18 m
 - > Laydown rate up to 1,800 t/h
- **SPECIAL CLASS**
 - > SprayJet
 - > InLine Pave
- **POWERFEEDER**
 - > MT 3000-5 Standard
 - > MT 3000-5 Offset



HIGHLIGHT OVERVIEW

Perfectly equipped

DRIVE

01 Battery/electric drive technology

- > Zero operating emissions, low-noise asphalt paving.
- > Long range lithium-ion battery enables paving operation for up to two working days.
- > Easy and fast charging at the household socket or wallbox.

02 Efficient drive systems

- > All movements on the paver are realised by efficient electric drives.
- > Electric drives reduce the machine's maintenance time.

OPERATION

03 Operating system

- > Just one operator is able to monitor both paver and screed, as well as control paving.
- > Standing operator station with user-friendly, easily accessible controls for simple control by the operator.

EINBAU

04 Range of paving applications

Large range of pave widths from 0.25 m to 1.80 m covers a variety of paving jobs.

05 Replaces manual labour

> Mini pavers allow even the smallest areas to be paved by machine.

06 Screed

> Electric screed heating for quick and even heating.

MATERIAL MANAGEMENT

06 Transfer of material

> Large material hopper with wide, funnel-shaped opening is convenient for either a wheeled or a compact loader to feed with material.

07 Material transport

- > A conveyor made of wear-resistant steel ensures a consistent material transport.
- > The quantity of material can also be controlled using flow gates.
- > Two separately controllable augers distribute the material across the entire screed width under sensor control (optional).

FAHRWERK

08 MINI 500e

- > The crawler tracks ensure optimum traction on a loose roadbase.
- > Their extraordinary manoeuvrability enables tracked pavers to operate in an incredibly tight space.

09 MINI 502e

- > The machine is equipped with two rear drive wheels, whilst the two front wheels for steering are mounted on floating bearings.
- > Thanks to the wheeled chassis, the wheeled machine is particularly suitable for paving radii.



VÖGELE SUSTAINABILITY is our name for innovative technologies and solutions which contribute to the sustainability objectives of the WIRTGEN GROUP.





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MINI 500e / MINI 502e

Quiet, sustainable and revolutionary

Tenders for construction projects increasingly contain stricter emission specifications. Thanks to their battery-electric drive, the MINI 500e and MINI 502e asphalt pavers are predestined for zero operating emissions asphalt paving.

With compact dimensions and variable pave widths from 25 cm to 1.8 m, the MINI 500e battery-electric tracked paver and the MINI 502e wheeled paver are suitable for small-scale construction projects such as the construction of cycle paths and pedestrian walkways, paving between railway tracks and repair work on small, inner-city areas characterised by tight working spaces. Thanks to their emission-free drive, the mini pavers are also suitable for use in halls and enclosed buildings.

The zero operating emissions MINI pavers make an additional contribution to air pollution control, especially in city centres polluted by exhaust fumes. The electric drive is also particularly quiet and extremely smooth-running.

Compact transport dimensions and low weight make travel easy. Both the MINI 500e and the MINI 502e also have a very small turning radius and are therefore extremely agile.



01 Material hopper with a capacity of up to 1.5 tonnes and a large hopper opening for optimum material feed.
02 Ideal for paving asphalt on narrow paths.
03 Compact dimensions and low weight, together with hinged hopper sides and operator platforms, make the machine easy to transport.

04 Simple handling means machine can be controlled by just one operator.
05 Pave width can be reduced to as little as 25 cm using the system for pave width reduction.
06 The screed can be extended to a maximum pave width of 1.8 m using bolt-on extensions.

ZERO OPERATING EMISSIONS PAVING

Powerful electrical components

> Thanks to the electric drives, the pavers operate emission-free and quietly. This makes them ideal for use in noise-sensitive urban areas, e.g. in residential areas or near schools and hospitals. Even inside closed buildings or on a night-time construction site, they hardly cause any disturbance.

> The standard battery lasts a whole day without recharging. With the optional long range battery, the machine is ideally equipped for two days of use.
> The batteries are charged in a very short time using a robust battery charger with an output of 3 kW.

> The lithium-ion battery has a standard capacity of 15 kWh. A large battery with a capacity of 21.5 kWh is available as an option. This reduces the charging cycles and the machine can be operated for longer on a single charge.

> Both mini pavers have an electric drive consisting of two permanent magnet motors, each coupled to an epicyclic gearbox. These motors have negative electromagnetic brakes and are controlled via a potentiometer. This allows the MINIs to be steered precisely and sensitively and to keep perfectly on track.



01 Lithium-ion batteries

> The lithium-ion battery is available in two versions. The standard version has a capacity of 15 kWh and is usually sufficient for one working day. The optional variant with a capacity of 21.5 kWh ensures longer running times.

02 Traction drive

> Powerful electric motors ensure efficient propulsion.
> The traction drive is controlled extremely precisely with a potentiometer. The electromagnetic negative brakes ensure precise and reliable stopping.

03 Electrical and electronic control system

> The paver's electric and electronic control system ensures a high level of travelling comfort: precise, sensitive and linear.

04 Levelling actuator

> The levelling actuator allows the screed's angle of attack and thus the layer thickness to be set very precisely.

05 Screed actuator

> The AB 135 extending screed is also raised and lowered fully electronically and precisely using its own electric actuator.

06 Conveyor and auger

> The conveyor and auger are driven by a powerful and efficient electric drive.

PERFECT DRIVE TECHNOLOGY

Simple and low-maintenance

Thanks to their battery-electric drive, which is perfectly matched to the work spectrum, the wheeled and tracked mini pavers are predestined for zero operating emissions asphalt paving. The traction drives and the drives of all conveyors and augers are exclusively electric - all components have

been completely redeveloped for this purpose and require extremely little energy. All electric components of the new MINI 500e and MINI 502e mini pavers are extremely low-maintenance. This is why there are only a few service points compared to diesel models.

These few service points are both obvious and easy to access. As a consequence, it is very simple to check and replace parts, resulting in rapid servicing and reduced downtimes.



Battery-electric drive

guarantees zero operating emissions paving with consistent output

Fully electric system

The traction drives and the drives of all conveyors and augers as well as the heating of the screed are electric.



VÖGELE > GOOD TO KNOW



Simple and fast charging

- > Perfect battery management system ensures safe control and management of the li-ion battery.
- > The batteries are charged in a very short time using a robust charger with an output of 3 kW.
- > Connect to a domestic or CEE power socket using the mobile charging unit available as an option.

CUSTOMIZED WORK IN THE TINIEST SPACES

Their compact dimensions and variable pave width make the MINI 500e and MINI 502e pavers suitable for small construction projects. These include building cycle paths and footpaths, paving between rail tracks and repair work in small areas which are often cramped.

With an outer track gauge of less than 80 cm, MINI pavers are outstandingly suitable for paving between rail tracks or in milled tracks. Even narrow entrances or gates do not represent any sort of obstruction to MINI pavers - The pavers even negotiate narrow access roads with ease.

As both the wheeled and the tracked paver have a very small turning circle, they are extremely easy to manoeuvre in even the tightest spaces. Thanks to the emission-free drive, the pavers are particularly predestined for paving in closed buildings and halls.



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- 01 MINI pavers are outstandingly suitable for paving asphalt between tracks or in milled tracks.
- 02 MINI pavers are the first choice wherever space is at a premium.

Their compact transport dimensions of maximum (LxWxH) 2.7 m x 0.9 m x 1.5 m, together with their low weight of less than 1.5 tonnes, make MINI pavers cheap and easy to transport.



LARGE HOPPER FOR EASY MATERIAL FEED

The material hopper is fed from the side by a wheel loader or a compact loader. The material hopper has a capacity of up to 1.5 t material. With the powerful conveyor made of wear-resistant steel transporting the material to the augers. The two augers are driven by just one hydraulic motor, but can be actuated separately by a patented system, allowing the head of material in front of the screed to be perfectly controlled across the whole pave width.

Mechanical flow gates allow the quantity of material to be adapted easily to suit the paving situation, a particular advantage in asymmetrical paving.

Large material hopper
with a capacity of up to 1.5 tonnes

Hinged sides
for straightforward travel

Optimum head of material
through optional sensor-controlled flow of material



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- 01** Material hopper with a capacity of 1.5 tonnes and hinged hopper plates enables a simple and clean material feed.
- 02** Adjustable flow gates regulate the supply of material from the conveyor.

VÖGELE > GOOD TO KNOW

Flow of material
Two fully electrically driven augers spread the mix across the entire pave width. The flow of material can be monitored and controlled by a sonic auger sensor. It can also be regulated in three stages by two flow gates, particularly useful in asymmetrical paving.



SIMPLE OPERATING CONCEPT

Optimum overview for the operator

The MINI 500e and MINI 502e mini pavers are very easy to operate and can be learnt in just a few minutes. The functions of the switches are labelled in a language-neutral manner using clear symbols. As the symbols are identical to the ErgoBasic operating concept, it is particularly simple for experienced operators of VÖGELE machines to make the switch. But even inexperienced operators will soon find their way around the clearly-arranged operator's console.

One person is often enough for operation: The entire paving process is simple and convenient to control and monitor from the central operator's console. All functions are clear, practical and logically arranged. There are also two helpful remote control units for the screed to cope with larger pave widths.

Just one operator required

for checking the paver and screed and controlling the paving

Easy operation

thanks to self-explanatory and language-neutral symbols

Optimum overview

for the operator



ELECTRICALLY-HEATED AB 135 V EXTENDING SCREED

Fully electric paving from 0.25 m to 1.8 m pave width

Fully electric screed AB 135 V

MINI pavers are equipped with the AB 135 V Extending Screed which can be extended hydraulically from 0.8 m to 1.35 m. A maximum pave width of 1.8 m can be achieved using two mechanical bolt-on extensions. The screed is heated fully electrically and therefore fits perfectly with the machine concept. Vibration compaction is performed by an electric motor.

Reducing the width of the screed

Once fitted, the pave width reduction system allows pave width to be reduced infinitely from 0.8 m to 0.25 m. This can be effected conveniently from the operator's platform by adjusting screed width - no need to modify any equipment. The pave width reduction system makes it child's play to seal drainage ditches or to pave asymmetrically along a fixed edge.



Range of pave widths

Infinitely variable range from 0.8 m to 1.35 m

Minimum pave width

0.25 m with the system for pave width reduction

Maximum pave width

with bolt-on extensions: 1.8 m



AB 135

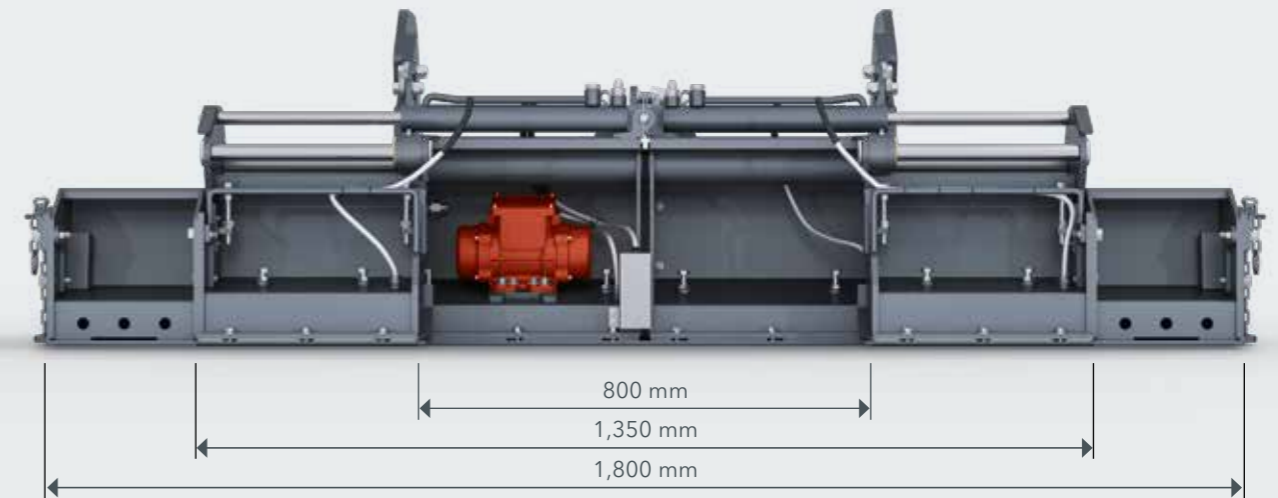
Pave widths

- > Infinitely variable range from 0.8 m to 1.35 m
- > Maximum pave width with bolt-on extensions:
 - > 1.8 m (2 x 22.5 cm)
- > Minimum pave width of 0.25 m with system for pave width reduction

Compacting system

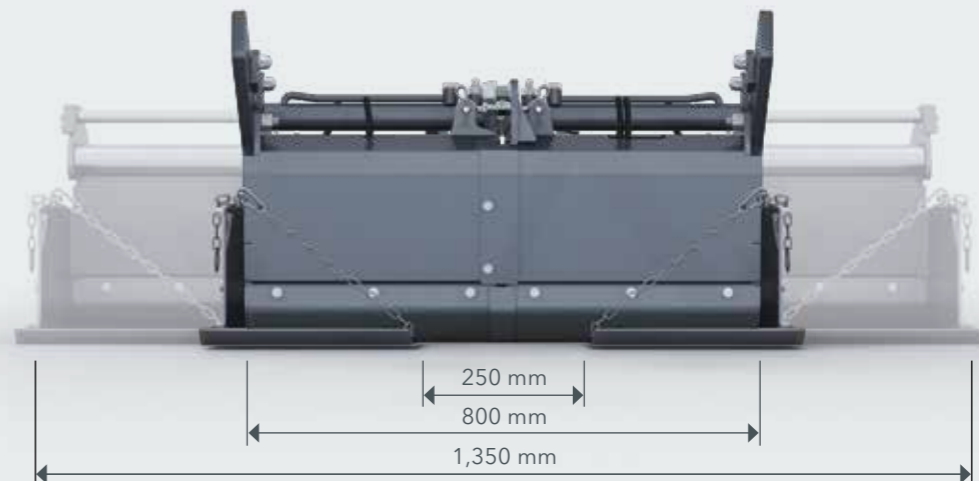
AB 135 V with vibrators

AB 135 V



AB 135 V

AB 135 V with system for pave width reduction (Rear view)



YOUR WIRTGEN GROUP CUSTOMER SUPPORT

Service you can rely on.


**WIRTGEN
GROUP**



You can have confidence in reliable, swift support from us during the entire life cycle of your machine. Our wide range of services is ready with the right solution to every challenge you face.

Service

We keep our service promise with swift, straightforward assistance - on the job site or at our professional workshops. Our service team is trained to a professional standard and dedicated tools ensure that repair, care and maintenance tasks are completed quickly. We can support you with customised service agreements on request.

> www.wirtgen-group.com/service



Spare Parts

WIRTGEN GROUP original parts and accessories assure the long-term reliability and availability of your machines. Our experts will also be pleased to advise you about optimised wear part solutions to suit your application. Our parts are available all over the world at all times and are easy to order.

> parts.wirtgen-group.com



Training

The WIRTGEN GROUP brands are specialists in their field with decades of experience in applications; our customers benefit from this expertise. In our WIRTGEN GROUP training courses, we are delighted to pass our knowledge on to you, customised to suit both operators and servicing staff.

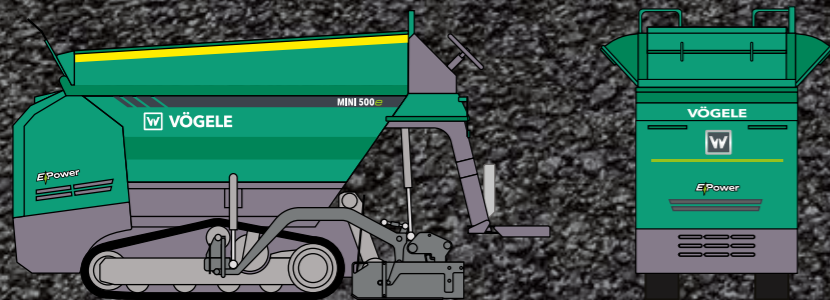
> www.wirtgen-group.com/training

TECHNICAL DATA AT A GLANCE

Electric asphalt pavers MINI 500e / MINI 502e



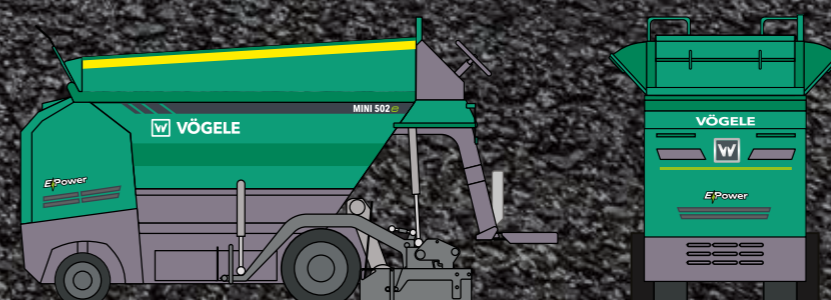
TECHNICAL DATA



MINI 500e

- > Pave widths: 0.25 m - 1.8 m
- > Maximum laydown rate: 20 t/h
- > Layer thickness up to 10 cm
- > Transport width: 0.91 m

TECHNICAL DATA



MINI 502e

- > Pave widths: 0.25 m - 1.8 m
- > Maximum laydown rate: 20 t/h
- > Layer thickness up to 10 cm
- > Transport width: 1.07 m



JOSEPH VÖGELE AG

Joseph-Vögele-Str. 1
67075 Ludwigshafen
Germany

T: +49 621 8105-0

F: +49 621 8105-461

M: marketing@voegele.info

 www.voegele.info



For more information scan the code.