

Wheeled Paver

# SUPER 1803-2



## SUPER 1803-2

Maximum Pave Width 8m

Maximum Laydown Rate 700 tonnes/h

Transport Width 2.55m



# Powerful Wheeled Paver



The SUPER 1803-2 is the most powerful wheeled paver in the range of VÖGELE products. At a high level of perfection, it combines features such as sturdy and reliable material handling, large pave widths up to 8m, excellent mobility and easy transfer under its own power. Thanks to the paver's statically defined undercarriage, permanent ground contact of its powered wheels is always ensured.

Among the machine's highlighting features is ErgoPlus®, the VÖGELE concept for paver handling. ErgoPlus® offers a maximum of clarity, simplicity and ease of operation. Operators have never had it so good. They enjoy a modern workplace of ergonomic design leaving nothing to be desired. The SUPER 1803-2 sets new standards in terms of paver operation and user-friendliness.

Being one of the most powerful wheeled pavers in its class, the SUPER 1803-2 handles a wide range of applications from narrow pave widths through to motorway. Please note a feature truly out of the ordinary for a wheeled paver: SUPER 1803-2 can be combined with a screed coming with the full package of VÖGELE high compaction technology.

## SUPER 1803-2

### At a Glance



- ▶ Maximum pave width 8m
- ▶ Laydown rate up to 700 tonnes/h
- ▶ Maximum layer thickness 30cm
- ▶ Transport width 2.55m
- ▶ Pave speed up to 18m/min.
- ▶ Travel speed up to 20km/h
- ▶ Powerful PERKINS engine rated at 129.6kW
- ▶ Comes with ErgoPlus®, the concept for easy paver handling
- ▶ Hardtop with wide sunshades

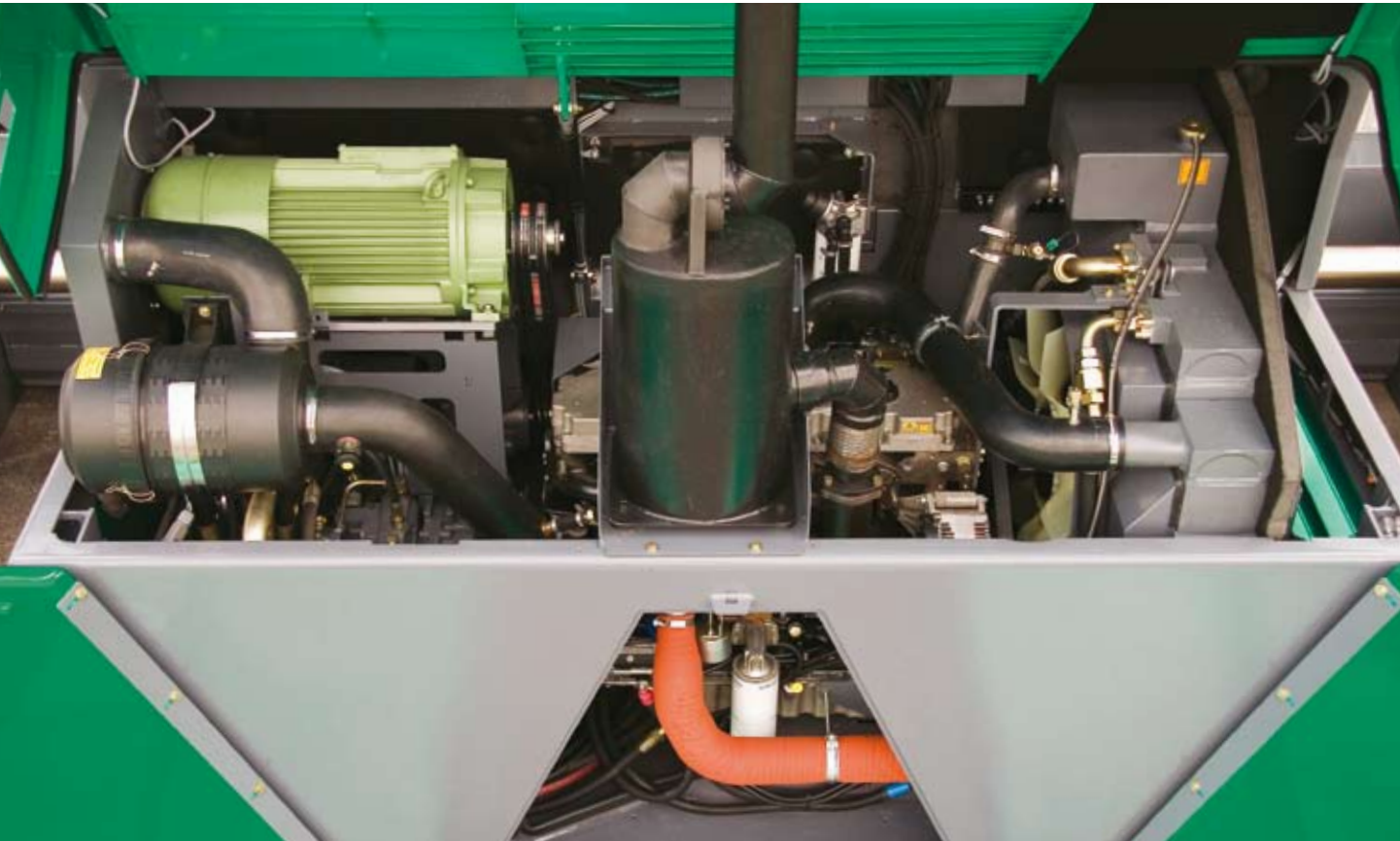


## Wheeled Paver SUPER 1803-2





## Efficient and Eco-Friendly Drive Concept



The SUPER 1803-2 is powered by a modern, liquid-cooled PERKINS engine rated at 129.6kW. The speed ranges MIN, ECO and MAX are available which select conveniently at the push of a button. ECO Mode is sufficient for 70 to 80% of all paving jobs. This mode reduces fuel consumption, wear and noise emissions.

Energy is also saved due to the short time required for heating the screed's compacting systems to operating temperature, even with the engine running at minimum rpm. The right temperature, however, is not important for the screed alone. In all climatic zones the world over, the large cooler assembly and innovative air routing provide for optimal temperature levels of engine coolant, hydraulic oil and charge air, while at the same time keeping noise emissions low.

With the SUPER 1803-2, technology and eco-friendliness go hand-in-hand.



Different speed ranges are available which select conveniently at the push of a button (MIN, ECO, MAX).



- ▶ Powerful PERKINS engine developing 129.6kW at just 2,000 rpm. The modern, low-noise engine complies with exhaust standards COM 3a and EPA.
- ▶ ECO Mode (125kW at 1,800 rpm) is sufficient for many paving applications. Working in ECO Mode further decreases engine noise emission, reduces fuel consumption and wear.
- ▶ A constant pave speed is one of the crucial factors when it comes to achieving excellent pavement quality. Electronic Engine Management, installed in the SUPER 1803-2, ensures a consistent engine output to match the demand.
- ▶ Powerful three-phase A.C. generator with Generator Management controlling generator output in compliance with the pave width. Heating the screed's compacting systems to operating temperature takes a short time only.
- ▶ Thanks to a large cooler assembly with innovative air routing, perfect cooling of engine cooling liquid, hydraulic oil and charge air. Noise emission is very low.
- ▶ A constantly high cooling capacity provides for ideal temperatures inside the hydraulic system and top performance of all drive units even when working under full load, in all climatic zones the world over.
- ▶ For hydraulic functions, powerful separate drives are installed operating in closed circuits, thus delivering highest outputs.



## Mobility on Wheels



The small turning radius and short overall length of the SUPER 1803-2 save manoeuvring back and forth even in tight corners. Thanks to its high tractive power, the paver not only paves quickly, but can also be transferred quickly under its own power. This increases both productivity and efficiency.

- ▶ Small turning radius (outside) of just 6.5m allows easy and quick manoeuvring even in tight corners.
- ▶ Maximum power transmission thanks to separate, hydraulic drives provided for the rear wheels and one set of front wheels (all-wheel drive as an option).
- ▶ Electronic Traction Management guarantees optimum tractive effort and protects the engine against overload.
- ▶ Permanent ground contact due to front wheels with proven, statically defined three-point support.
- ▶ Travels rapidly on roads (up to 20km/h) and moves quickly on the job site.
- ▶ Thanks to its compact design, trucking is easy. Little space required for transport cuts haulage cost.

## Large Material Hopper, Easy Feed with Mix

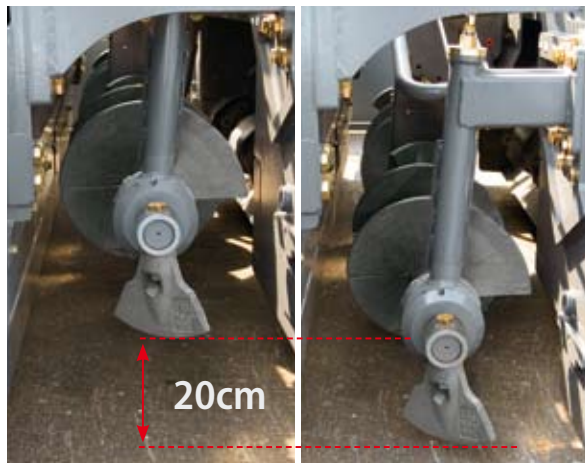


Like all VÖGELE pavers, supply of the SUPER 1803-2 with mix is a clean and safe process passing off swiftly. Thanks to a hydraulically operated hopper front (option), the mix inside the material hopper is directed right onto the conveyors and the entirety of mix properly conveyed in front of the screed.

- ▶ The large material hopper holding 13 tonnes is amply dimensioned so that a sufficient quantity of mix is stored at all times. No problem to tide over difficult situations such as paving under bridges, for instance.
- ▶ Easy feed with mix thanks to low material hopper, wide hopper sides and sturdy rubber baffles fitted to the hopper front.
- ▶ Large oscillating push-rollers for convenient and shock-free docking of feed vehicles, even in curves.



## Perfect Conveyance and Spreading of Mix – A Must for Prime Pavement Quality



Due to perfect spreading of mix, the SUPER 1803-2 provides for an optimal head of material in front of the screed in every paving situation.

Powerful, separate hydraulic drives for conveyors and augers are installed achieving laydown rates up to 700 tonnes/h.

- ▶ Proportional control and continuous monitoring provided for conveyors and augers guarantee a constant head of mix in front of the screed in conformity with the requirement.
- ▶ The height of the auger, complete with bearing boxes and limiting plates for the auger tunnel, is infinitely variable by up to 20cm across the entire pave width. This results in optimal spreading of mix in front of the screed, even when paving thin layers or when the layer thickness varies.
- ▶ Large diameter of auger blades (400mm) for excellent spreading of mix when paving in large widths.

## Easy Maintenance – Long Intervals Between Maintenance Services



The well-thought-out maintenance and service concept is perfectly geared to the requirements of the workshop and service staff.

- ▶ A wide engine hood and large hinged panels give convenient access to service points on the machine.
- ▶ All hydraulic pumps attached to the transfer gearbox. Their clear arrangement and easy access provides for service-friendliness at the highest level.
- ▶ Centralized lubrication system installed to automatically supply required amounts of grease to bearings of conveyors and augers.
- ▶ Sturdy components of highly wear-resistant materials for long service lives minimize downtime.
- ▶ A standardized service concept for all VÖGELE pavers simplifies maintenance and cuts expenditure on training.



# VÖGELE ErgoPlus®

## The User-Friendly Operating System



Even the best machine with the most advanced technology can only really show its strengths if it can be operated easily and as intuitively as possible, and offers to the operator a maximum of ergonomic comfort and workplace safety. Therefore, the ErgoPlus® operating concept focuses on the operator.

The example diagrams on the following pages will provide you with additional information on the extensive functions of the ErgoPlus® operating concept. ErgoPlus® encompasses the operator's stand, the paver operator's and screed consoles and NIVELTRONIC Plus®, the System for Automated Grade and Slope Control.

The operating consoles are designed for optimum clarity, presenting all paver functions in logical groups. There's a place for everything and everything in its place on the operator's stand, and the paver operator has an excellent overview of all the key points of the paver.

All told, the ErgoPlus® operating concept enables the operator to respond to job site working processes and situations more quickly and accurately, giving him total control over the machine and the project.

### The Strong Points of ErgoPlus®

- ▶ Operator platform of streamlined design and well organized for a high level of safety at work.
- ▶ The paver operator's seats and the operating console adjust conveniently and easily in keeping with his personal needs. This provides a maximum of ergonomic comfort.
- ▶ All vital paver functions are clustered in logical groups on the paver operator's console. Their operation is easy to learn.
- ▶ Easy operation of VÖGELE NIVELTRONIC Plus®, the System for Automated Grade and Slope Control, to achieve perfect paving results.
- ▶ The ErgoPlus® paver operator's console is of modular design. This smart concept is not only ideal in practice, but also saves costs. In case of need, it offers the great advantage of easy replacement of single modules without having to replace the entire unit.



ErgoPlus® Paver Operator's Console



ErgoPlus® Screed Console



ErgoPlus® Operator Stand



A man wearing a black cap with a 'VÖGELE' logo and a high-visibility orange and white vest is seated in the operator's seat of a paver machine. He is looking forward, and his hands are on the steering wheel. The machine's console is visible, featuring a steering wheel with a 'V' logo, a central gear shifter, and a large control panel with numerous buttons and a digital display. The background shows a dirt path and green foliage.

# THE ErgoPlus<sup>®</sup> PAVER OPERATOR'S CONSOLE

Full Control for the Machine Operator



# THE ErgoPlus® PAVER OPERATOR'S CONSOLE


## Clear and Logical Arrangement of Controls

The ErgoPlus® paver operator's console has been designed according to practice-related principles. All controls are clearly arranged. Paver functions are clustered in logical groups so that operators find their controls where they suppose these should be.

On the ErgoPlus® console, all push-buttons are easily identifiable by touch even when wearing work gloves. Once a button is pressed, off you go. This is due to the "Touch and Work" principle. This means that a function is executed directly – without a need to confirm.

As darkness falls, the paver operator's console is back-lit automatically, as you have it in your car. This makes night-time work easy and relaxed.


### Examples of Paver Functions




**Reversing Conveyor Movement**  
In order to avoid mix dropping from the conveyors during a move of the paver on the job site, conveyor movement can be reversed at the push of a button. Reverse movement, transferring mix from the rear of the conveyor tunnel back inside, takes place for a short time only and stops automatically.



**No-Load Function**  
The No-Load function is provided for warm up or cleaning of conveyors, augers and tamper.



**Automatic Functions**  
For conveyors and augers, operators can easily select "Manual Mode" or "Automatic Mode". When selecting "Automatic Mode" for the augers, sensors installed for the mix level in the auger tunnel provide that exactly the desired amount of mix is spread in front of the screed.



**Choice of Operating Modes for the Paver**  
On the ErgoPlus® console, 5 different operating modes for the paver are available to select from. By pressing the arrow buttons, up or down, the operator changes modes in the order as follows: "Road Travel", "Neutral", "Job Site Mode", "Positioning Mode" and "Pave Mode". A LED indicates the mode selected. When leaving "Pave Mode", a smart Memory feature stores last settings for paver functions so that, when resuming work after a move of the paver on site, these settings are restored automatically.



● ● ● ● ● ● ● ● **Module 1:**  
Conveyors and Augers, Traction

● ● ● ● ● ● ● ● **Module 2:**  
Screed

● ● ● ● ● ● ● ● **Module 3:**  
Material Hopper and Steering

● ● ● ● ● ● ● ● **Module 4:**  
Display for set-up of vital paver functions on menu level 1.  
Secondary functions on menu level 2.

**Display of the Paver Operator's Console**  
The large, easy-to-read display shows vital information on menu level 1 – such as the positions of the screed tow point rams or the pave speed. Set-up of further paver functions such as speeds for tamper and vibrators or feed rate for the conveyors can easily be made via the display, too. And the display gives access to machine-related information such as fuel consumption or service hours.

**Hopper Sides and Hydraulic Hopper Front (Option)**  
The hydraulically operated hopper front prevents spills of mix when feed lorries change. The two hopper sides can be folded separately or both together at the push of a button.

**Choice of Engine Speed Ranges**  
For the engine, 3 modes exist to select from: MIN, ECO and MAX. To swap modes for engine rpm, all the operator needs to do is press the arrow buttons, up or down. In ECO Mode, the engine delivers sufficient power for a great number of paving applications. Operating in ECO Mode reduces noise emission and fuel consumption considerably.

**Screed Assist (Option)**  
This button switches Screed Assist on (LED lights up) or off. Screed Assist pressure and balance can be set via the display. Screed Assist is active only when the screed floats.



# THE ErgoPlus® SCREED CONSOLE

## Easy Operation Guaranteed

Crucial for pavement quality is the screed. Therefore, easy and positive handling of all screed functions is of utmost importance for high-quality road construction.

With ErgoPlus®, the screed operator has the process of paving at his fingertips. All functions are easily comprehensible and all controls are clearly arranged.



### The Screed Console

The screed console is designed in keeping with the conditions prevailing on the job site. For the frequently used functions operated from the screed console, push-buttons are provided. These are watertight and enclosed in perceptibly raised rings, so that they are identifiable blindfold simply by touch even when wearing work gloves. Important paver and screed data can be called up and adjusted from the screed console, too.



### The Display of the Screed Console

The display of his console allows the screed operator to control and monitor both the left and the right side of the screed. Machine-related parameters such as tamper speed or conveyor speed can be adjusted conveniently via the display panel of the screed console. The clear menu structure, combined with easily understandable, self-explanatory symbols neutral in language, makes operating the display panel both simple and safe.



### NIVELTRONIC Plus® (Option)

NIVELTRONIC Plus®, the cutting-edge VÖGELE System for Automated Grade and Slope Control, is very easy to learn and achieves outstanding paving results. All important functions of NIVELTRONIC Plus® can be accessed directly on menu level 1. The operator is provided with a variety of information, such as the sensor currently selected or the specified and actual values for layer thickness.

An electronic system installed in the screed tow point rams picks up the tow points' positions. Display of the current tow point positions and of the transverse slope on the screed console greatly facilitates set-up of the screed. All sensors connected are recognized automatically by NIVELTRONIC Plus® and can be monitored and controlled from either screed console. An open interface is provided for connection of a GPS system, thus permitting 3D paving.



### Automatic Mode for Augers, Reversing Auger Rotation

Just like the paver operator, the screed operator, too, can select Manual Mode or Automatic Mode for conveyors and augers. Very useful and comfortable in practice is the function of "Reversing Auger Rotation".





# THE ErgoPlus® OPERATOR STAND



## Excellent All-Round Visibility

- ▶ The comfortable operator stand gives unobstructed view of all crucial areas on the paver such as material hopper, steering guide or screed. It allows the paver operator to closely monitor the paver's feed with mix and the process of paving.
- ▶ The seats swinging out to the sides and an operator stand of streamlined design provide for maximum visibility of the auger tunnel, thus permitting the paver operator to keep an eye on the head of mix in front of the screed at all times.

## Working Comfort

- ▶ A few adjustments are all it takes for the paver operator to position his console exactly in keeping with his personal needs. It can be displaced across the full width of the operator's stand, swivelled out to the sides and tilted.
- ▶ When working with the seat swung out, the paver operator's console can be swivelled out together with the operator's seat. In this way, an ergonomically optimized workplace is set up in no time at all. A legroom kept warm adds to operator comfort during the cold season.

## A Place for Everything and Everything in its Place

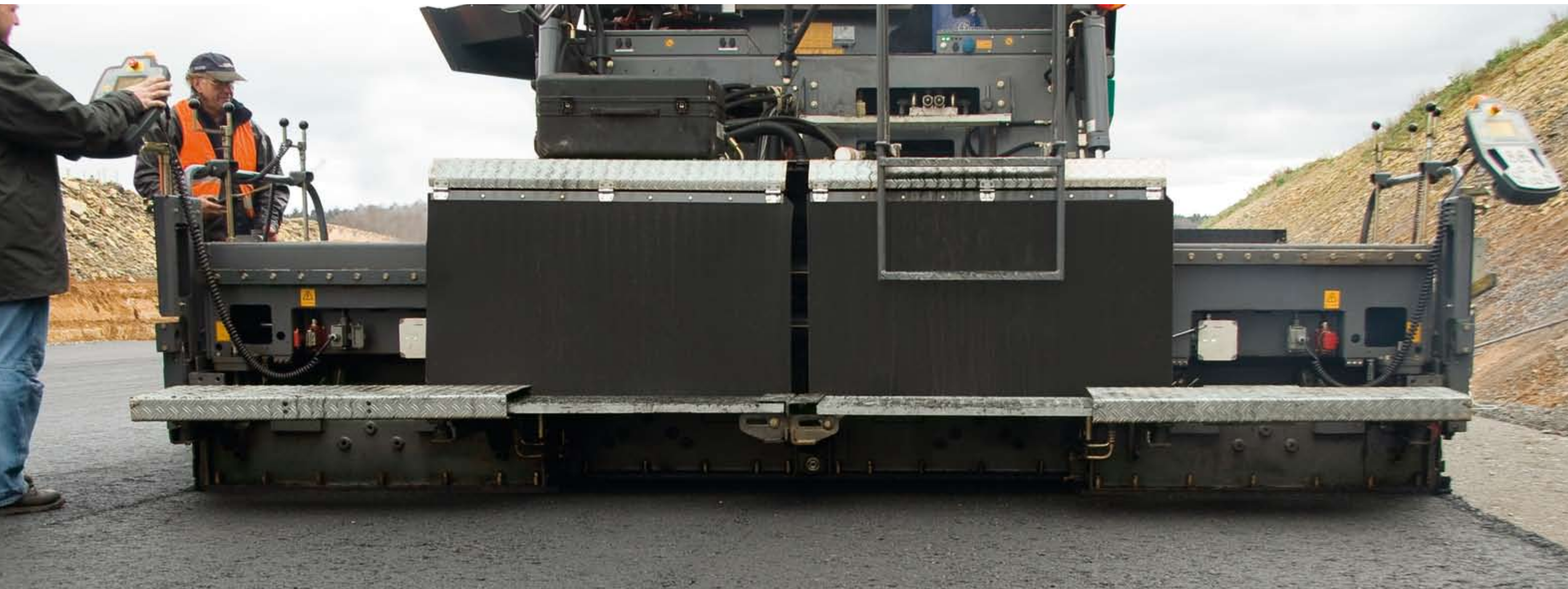
- ▶ The operator's stand of streamlined design is well organized, so that the paver operator enjoys a professional workplace.
- ▶ The operator's console can be protected by a shatter-proof cover to prevent wilful damage.
- ▶ Plenty of stowage space makes it easy to keep the machine tidy. Access to all vital service points on the machine has been designed to be extremely clear and ergonomic.

## Hardtop Gives Excellent Protection

- ▶ The modern hardtop made of glass fibre reinforced polymer material shelters the operator whether rain or shine. The hardtop, including exhaust pipe, raises up or lowers down quickly and with effortless ease by a manually operated hydraulic pump. Wide sunshades, extending easily, give the operator optimal protection when his seat is moved out.
- ▶ Six bright working lights are integrated into the hardtop. Raising the lights in this way floods the job site with light (Xenon lamps available as an option).



## Screed Options for All Paving Applications



A powerful tractor unit calls for a screed to match. Each application has its particular requirements, so that in the end it's up to the users' everyday needs to decide which screed is the right one. For SUPER 1803-2, we offer two screed options available in several versions as far as equipment with compacting systems is concerned.

- ▶ VÖGELE Extending Screeds feature a high degree of variability. The AB 500 and AB 600 come with a sturdy single-tube telescoping system. Working with highest precision, they offer quick screed width control accurate to the millimetre.
- ▶ A feature truly out of the ordinary for a wheeled paver: SUPER 1803-2 also combines with the AB 500 Extending Screed in TP1 version for high compaction, an essential to pavements perfectly built up in layers, true to line and level.

- ▶ The pave width of the AB 500 can be reduced to 2m using cut-off shoes (option) for repair jobs or paving narrow pathways.
- ▶ **Transverse Pavement Profiles**
  - Positive and negative crown can be paved with all screed types.
  - The AB screeds' extending units adjustable in height and spindles provided on either side of each extending unit allow the Extending Screeds to be set up to a variety of additional special profiles.

- ▶ **Electric Screed Heating**
  - Homogeneous surface texture thanks to uniform heating of screed plates, tamper bars and pressure bar(s).
  - Even with the paver's engine running at minimum rpm, the time required for the screed to reach its operating temperature is reduced substantially thanks to an intelligent Generator Management.
  - With paver functions set to automatic, the Generator Management activates Alternating Mode for screed heating (heats the screed alternately to left and right), a feature which is easy on the engine and reduces fuel consumption considerably.



# The Screed Options for SUPER 1803-2



## AB 500

### Pave Widths

- Infinitely variable range from 2.55m to 5m.
- Larger widths by addition of bolt-on extensions up to a maximum of 8m.

### Compacting Systems

- AB 500 TV with tamper and vibrators
- AB 500 TP1 with tamper and 1 pressure bar



## AB 600

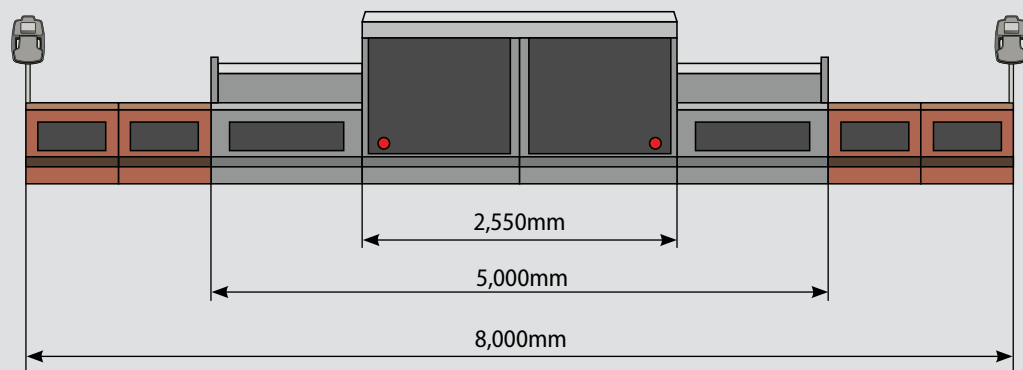
### Pave Widths

- Infinitely variable range from 3m to 6m.
- Larger widths by addition of bolt-on extensions up to a maximum of 8m.

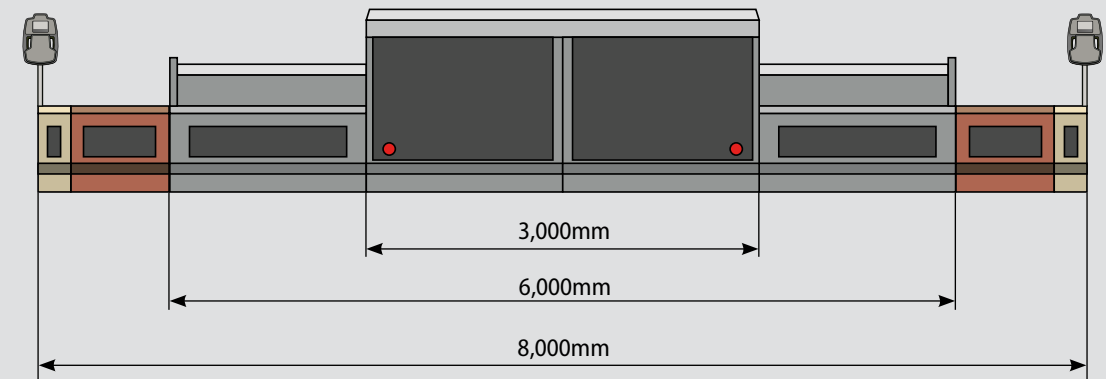
### Compacting System

- AB 600 TV with tamper and vibrators

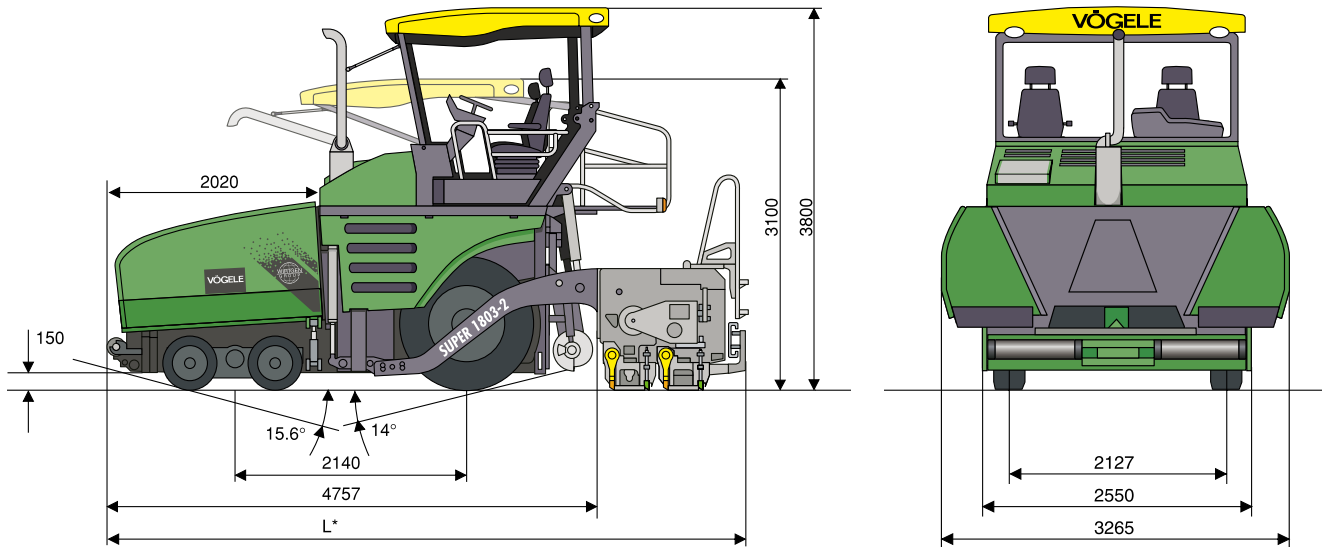
Example: AB 500 TV built up to maximum pave width



Example: AB 600 TV built up to maximum pave width







Dimensions in mm  
L\* = Dependent on Screed Type (see Specification)

#### Power Unit

Engine:	6-cylinder PERKINS diesel engine, liquid-cooled
Type:	1106D-E66TA
Output:	Nominal: 129.6kW at 2,000 rpm (according to DIN) ECO Mode: 125kW at 1,800 rpm
Fuel Tank:	220 litres
Electrical System:	24 V

#### Undercarriage

Front Wheels:	4, mounted on bogies (oscillating axle)
Tyre Equipment:	solid tyres
Tyre Size:	540/300-390mm
Rear Wheels:	2, pneumatic tyres, tubeless
Tyre Size:	14.00 R 25
Drive:	separate hydraulic drive provided for each wheel - Standard: 2 rear wheels and 2 front wheels powered - Option: 2 rear wheels and 4 front wheels powered (all-wheel drive)
Speeds:	- Paving: up to 18m/min., infinitely variable - Travel: up to 20km/h, infinitely variable
Turning Radius:	6.5m (outside)
Power Steering:	hydraulic
Service Brake:	amply-dimensioned multiple-disk brake operated by foot pedal
Auxiliary Brake:	hydrostatic
Parking Brake:	spring-loaded multiple-disk brake, maintenance-free

Speeds:

- Paving: up to 18m/min., infinitely variable

- Travel: up to 20km/h, infinitely variable

Turning Radius:

6.5m (outside)

Power Steering:

hydraulic

Service Brake:

amply-dimensioned multiple-disk brake operated by foot pedal

Auxiliary Brake:

hydrostatic

Parking Brake:

spring-loaded multiple-disk brake, maintenance-free

#### Material Hopper

Hopper Capacity:	13 tonnes
Width:	3,265mm
Feed Height:	594mm (bottom of material hopper)
Push-Rollers:	oscillating, displaceable forwards by 100mm

#### Conveyors and Augers

Conveyors:	2, with replaceable feeder bars, conveyor movement reversible for a short time
Drive:	hydraulic, separate drive provided for each conveyor
Speed:	up to 25m/min., infinitely variable (manual or automatic)

Augers:	2, with replaceable auger blades, auger rotation reversible
Diameter:	400mm
Drive:	hydraulic, separate drive provided for each auger
Speed:	up to 83 revs/min., infinitely variable (manual or automatic)
Auger Height:	- Standard: infinitely variable by 14cm, mechanical - Option: infinitely variable by 20cm, hydraulic (lowest position 5cm above the ground)
Lubrication:	Centralized Lubrication System with electrically driven grease pump for conveyor and auger bearings

#### Screed Options

AB 500:	basic width 2.55m, infinitely variable range 2.55m to 5m maximum width (TV/TP1) 8m
AB 600:	basic width 3m, infinitely variable range 3m to 6m maximum width (TV) 8m

Screed Versions:

TV, TP1

Layer Thickness:

up to 30cm

Screed Heating:

electric by heating rods

Power Supply:

three-phase A.C. generator

#### Dimensions and Weights

Length:

Tractor Unit and Screed in Transport Position:

- AB 500/AB 600 TV: 6m

- AB 500 TP1: 6.1m

Weights:

Tractor Unit with AB 500 Screed in TV Version:

- Pave Widths up to 5m: 17.3 tonnes

- Pave Widths up to 8m: 19.1 tonnes

#### Optional Equipment

Hydraulic hopper front. Hardtop of glass fibre reinforced polymer material. All-wheel drive. NIVELTRONIC Plus® for Automated Grade and Slope Control (various sensors available).

Sonic sensors to monitor head of mix in front of the screed.

Washdown system. Xenon lamps for working lights.

Operator's seat, ergonomic design and heated.

For more optional extras please contact your VÖGELE partner.

Key: T = equipped with Tamper P1 = equipped with 1 Pressure Bar AB = Extending Screed  
V = equipped with Vibrators

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