

Tracked Paver

# SUPER 2180 Li





# PERFECT IN ALL CLASSES

The right paver for every job

VÖGELE’s seamless product range is considered unique in the industry. Whether a service road or a motorway, an airfield or a race track, a new construction or a rehabilitation job, thick or thin, hot or cold – customers will find the right machine in our paver range for every paving task.



## VÖGELE PRODUCT RANGE

### MINI CLASS

- > Maximum pave width 3.5 m
- > Maximum laydown rate 300 t/h

### COMPACT CLASS

- > Maximum pave width 5 m
- > Maximum laydown rate 350 t/h

### UNIVERSAL CLASS

- > Maximum pave width 10 m
- > Maximum laydown rate 1000 t/h

### HIGHWAY CLASS

- > Maximum pave width 18 m
- > Maximum laydown rate 1800 t/h

### SPECIAL CLASS

- > SprayJet
- > InLine Pave

### POWERFEEDER

- > MT 3000-3(i) Standard
- > MT 3000-3(i) Offset



# HIGHLIGHTS

Perfectly equipped

## DRIVE

### 01 Drive concept

> Powerful and economical drive concept with a state-of-the-art diesel engine.

### 02 Efficient transmission of tractive power

> Even difficult terrain is no problem for the SUPER 2180 Li thanks to its powerful crawler tracks and accurate steering.

## MATERIAL MANAGEMENT

### 03 Optimal mix feed

> Easy to feed thanks to extra large material hopper and long chassis.  
> Perfect paving quality thanks to perfect material management.

### 04 Large push-rollers

> Very large oscillating push-rollers ensure convenient and shock-free docking of feed vehicles even on bends.

## VERSATILITY

### 05 Wide range of applications

> Tracked Highway Class paver with a wide range of applications and pave widths up to 13 m.

### 06 The right screed for every application

> AB 570 and AB 600 Extending Screeds for asphalt job sites guaranteeing high quality and high evenness.  
> SB 300 HD Fixed-Width Screed for roadbase applications.

## OPERATION

### 07 ErgoBasic operating system

> Easy operation with the innovative and intuitive ErgoBasic operating system.

### 08 Niveltronic Basic System

> New and easy-to-use Niveltronic Basic System for Automated Grade and Slope Control.







**01** Large material hopper specially adapted to the feed vehicles used as standard in China.  
**02** Powerful separate drives fitted into the sprockets.  
**03** Easy operation with the innovative ErgoBasic operating system.

**04** All the main paving functions can be controlled via the two handy screed remote control units.  
**05** Niveltronic Basic System for Automated Grade and Slope Control.  
**06** Perfect paving quality due to perfect material management.

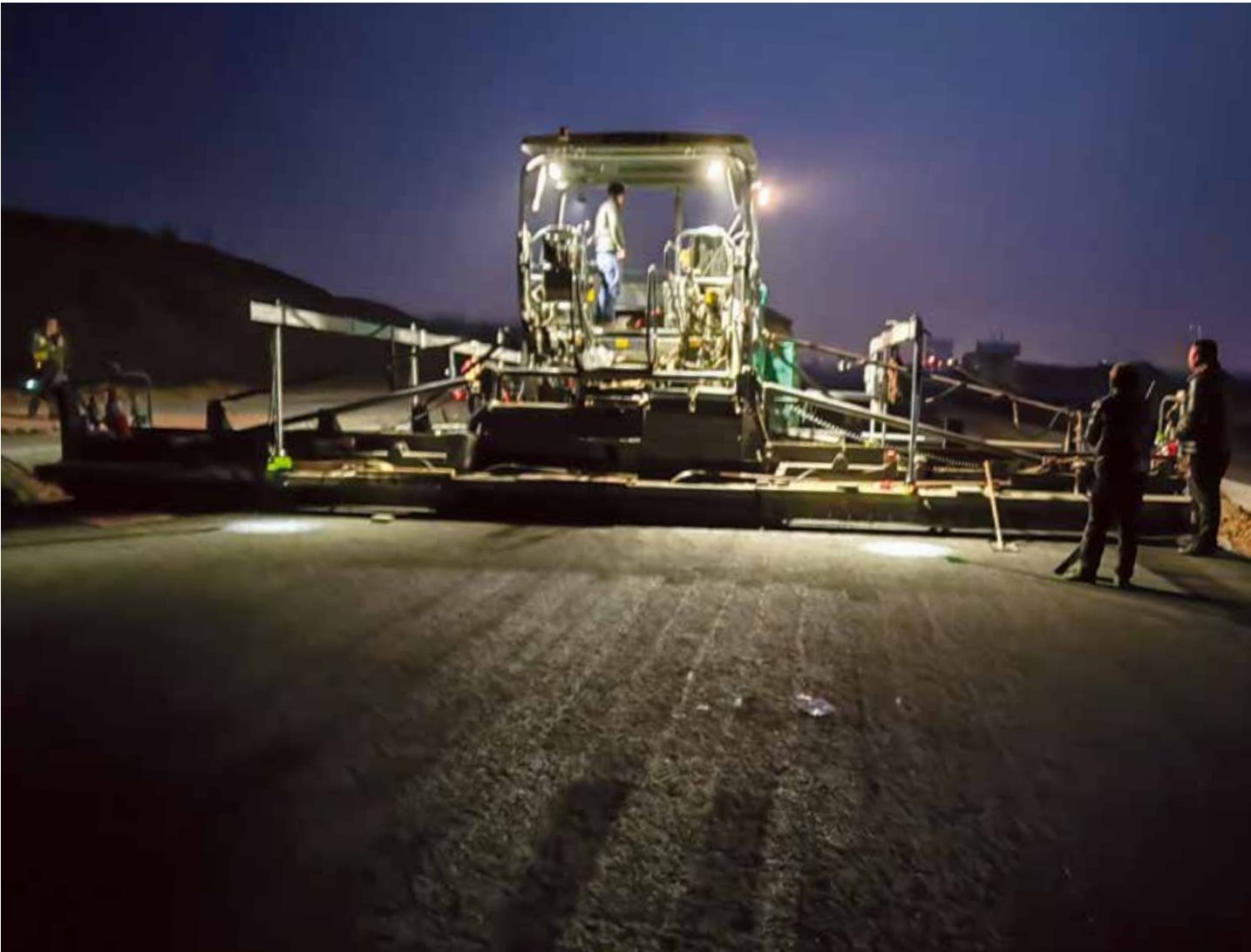
# SUPER 2180 Li

Robust, powerful and easy to operate

**The Highway class from VÖGELE is legendary. No other paver in the world can rival it for popularity among professional road construction teams.**

The SUPER 2180 Li takes and gives a lot. Cement-treated base (CTB) has become the established standard in China for road construction projects. Paving base courses up to 50 cm thick requires extremely powerful and durable pavers. VÖGELE's new SUPER 2180 Li is a cost-efficient, heavy-duty tracked paver designed for paving both water-bound materials and asphalt mixes.

Moreover, with a maximum pave width of 13 m, the SUPER 2180 Li is exactly the right paver for use on motorway projects and rural roads. When it comes to power, the 6-cylinder diesel engine with 191 kW has what it takes to achieve pave speeds of up to 24 m/min.





# MODERN DRIVE TECHNOLOGY

Efficiency, performance and low consumption

**VÖGELE’s modern drive concept is perfectly adapted to the large range of different uses of the multifunctional SUPER 2180 Li. Delivering a powerful drive when maximum performance is called for, this Universal Class paver is exceedingly flexible in everyday operation.**

Low input, maximum output – all drive components operate with maximum efficiency, from the diesel engine to the hydraulic system. Intelligent engine management with ECO mode keeps fuel consumption and noise levels low.

The SUPER 2180 Li is powered by a high-performance 6-cylinder diesel engine rated at 191 kW. The modern engine complies with the NR4 Standard.

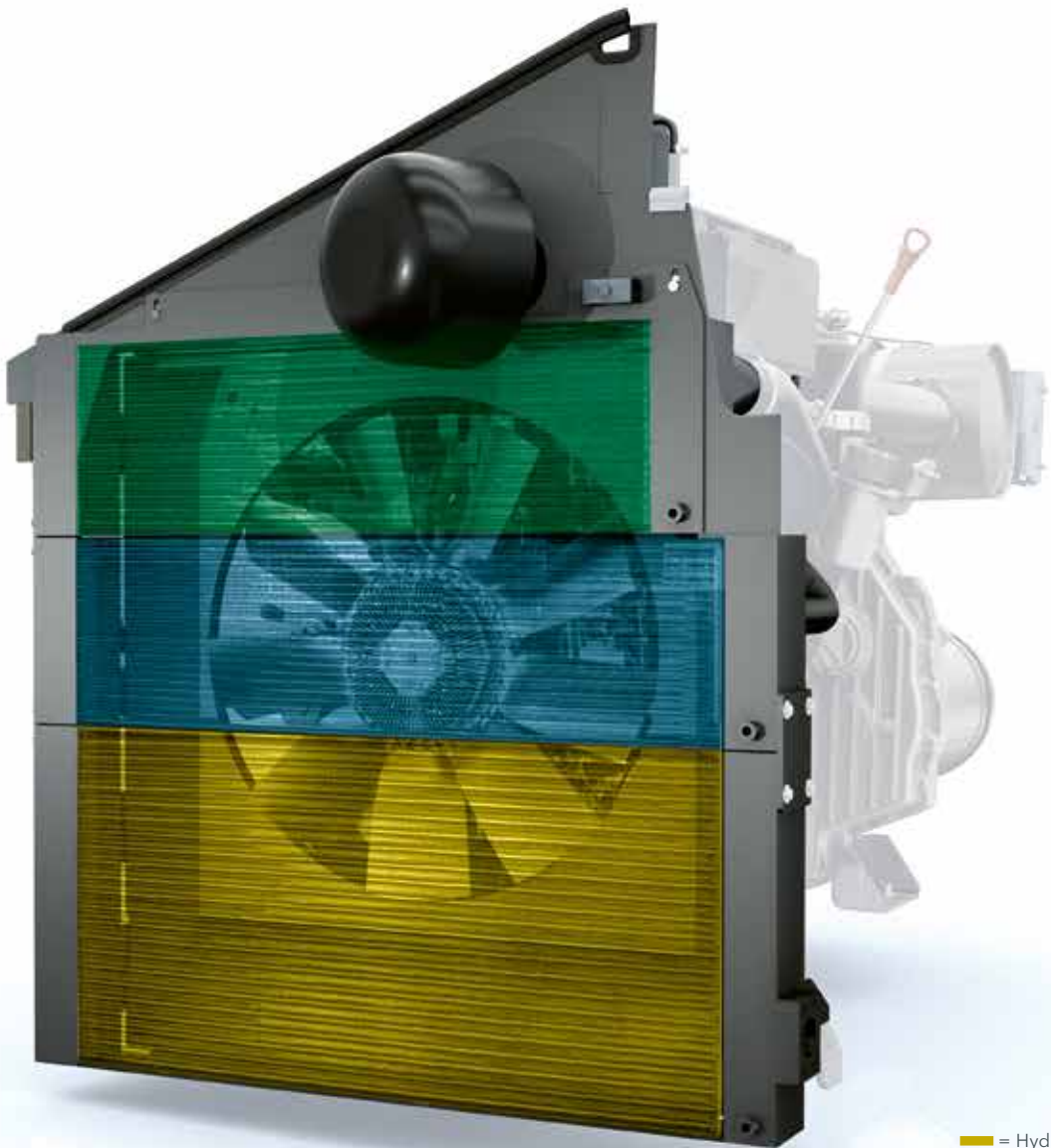
The engine features an ECO mode that reduces the nominal speed from 2,000 rpm to 1,700 rpm. This ECO mode reduces operating costs and noise emissions significantly. A low carbon footprint is guarantees to contribute to a better environment.

A large cooler assembly with innovative air routing is installed for perfect cooling of the engine coolant, hydraulic oil and charge air in all climate zones worldwide. This guarantees the full performance of the engine and a long service life.

**Powerful engine**  
developing 191 kW

**ECO mode at 1,700 rpm**  
cuts operating costs

**Large cooler assembly**  
for perfect cooling at low noise levels



- = Hydraulic oil
- = Coolant
- = Charge air

The large cooler assembly is made up of three parts. It ensures that the engine coolant, charge air and hydraulic oil are maintained at the optimum temperature.

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 climate zones the world over.

## VÖGELE > GOOD TO KNOW

### Exhaust emissions after-treatment

Exhaust emissions after-treatment is provided by the diesel oxidation catalyst (DOC), a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) catalytic converter.

The SUPER 2180 Li complies with the “National Environment Protection Standards of the People’s Republic of China HJ 1014-2020”.



# PRECISION ON TRACKS

The optimized crawler unit with additional track carrier rollers maximizes the quiet running of the paver. The electronically controlled separate drives installed in the sprockets of the crawler tracks permit constant straight movement and precise steering through curves.

- > Thanks to powerful separate drives fitted into the sprockets for crawler tracks, engine output is translated into pave speed with no loss of power.
- > Long crawler tracks with large footprints provide for maximum tractive effort, allowing the paver to progress well at a constant speed even when operating on difficult terrain.
- > New track pads deliver maximum traction on any base. Their high abrasion resistance makes for a long service life. They are also easy to replace during servicing.

## Powerful separate drives

fitted into the sprockets

## Positive tracking when moving straight-ahead

thanks to electronic control for each crawler track





# PERFECT PAVING QUALITY THANKS TO PERFECT MATERIAL MANAGEMENT

A continuous flow of mix is key to ensuring uninterrupted and high-quality paving. That is why we attach such importance to professional material management when designing our pavers.

The material hopper and chassis of the SUPER 2180 Li have been specially designed to the feed vehicles which are customary in China. Any mix lorry can dock onto the SUPER 2180 Li without difficulty, thanks to its great length and low feed height. What is more, the wide, oscillating push-rollers can be moved 150 mm and 75 mm forward for a convenient and jerk-free material supply to the paver from any kind of feed vehicle. The large material hopper holds up to 15 tonnes. This not only permits rapid unloading of the feed lorries, but also ensures that there is an ample buffer of material when changing lorries.

- > Any customary mix lorry can dock onto the SUPER 2180 Li thanks to its length of 2.5 m and low feed height of just 508 mm.
- > Easy feed with mix thanks low material hopper, wide hopper sides and sturdy rubber baffles fitted to the hopper front.
- > The large material hopper holding 15 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.

**Large material hopper holding 15 tonnes**  
specially adapted to the feed vehicles used as standard in China

**Oscillating push-rollers**  
can be moved 150 mm and 75 mm forward



- 01** Powerful, separate hydraulic drives installed for conveyors and augers, thus permitting high laydown rates up to 1,100 t per hour.
- 02** Flexible adjustment of the augers in height, complete with bearing boxes and limiting plates for the auger tunnel.
- 03** The ability to adjust the augers in height also provides for an optimal head of material in front of the screed when placing thin layers or when the layer thickness varies.



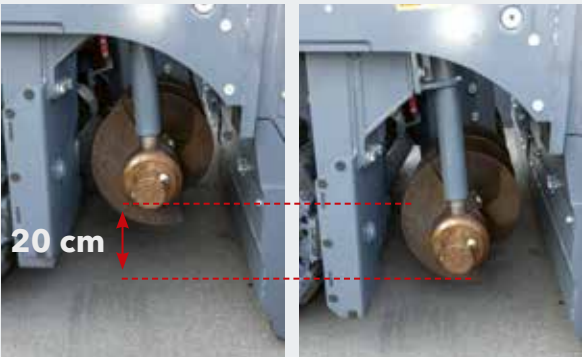
Optimally designed mix conveying system with conveyors ascending towards the rear avoids segregation and diminishes wear of conveyors and conveyor bearings. The proportional

control provided for conveyors regulates flow rates to precisely match the requirement of mix in front of the screed for excellent paving results.

## VÖGELE > GOOD TO KNOW

### Adjustable auger height

The augers of the SUPER 2180 Li are mechanically infinitely variable in height up to 20 cm, even while paving. This provides for quick and easy adaptation to the desired layer thickness across the full pave width.





# ERGOBASIC OPERATING CONCEPT

Ergonomic, simple and intuitive

The ErgoBasic operating concept was developed on the basis of the tried and tested ErgoPlus operating system, but it focuses on the key functions, so offering outstanding value for money.

The aim was to develop an operating system that is just as quick, precise and intuitive to operate as the ErgoPlus 3 system for the "Dash 3" machines. This makes VÖGELE the only manufacturer to offer a standardised operating concept for all paver classes.





# ERGOBASIC PAVER OPERATOR'S CONSOLE

Full control for the operator

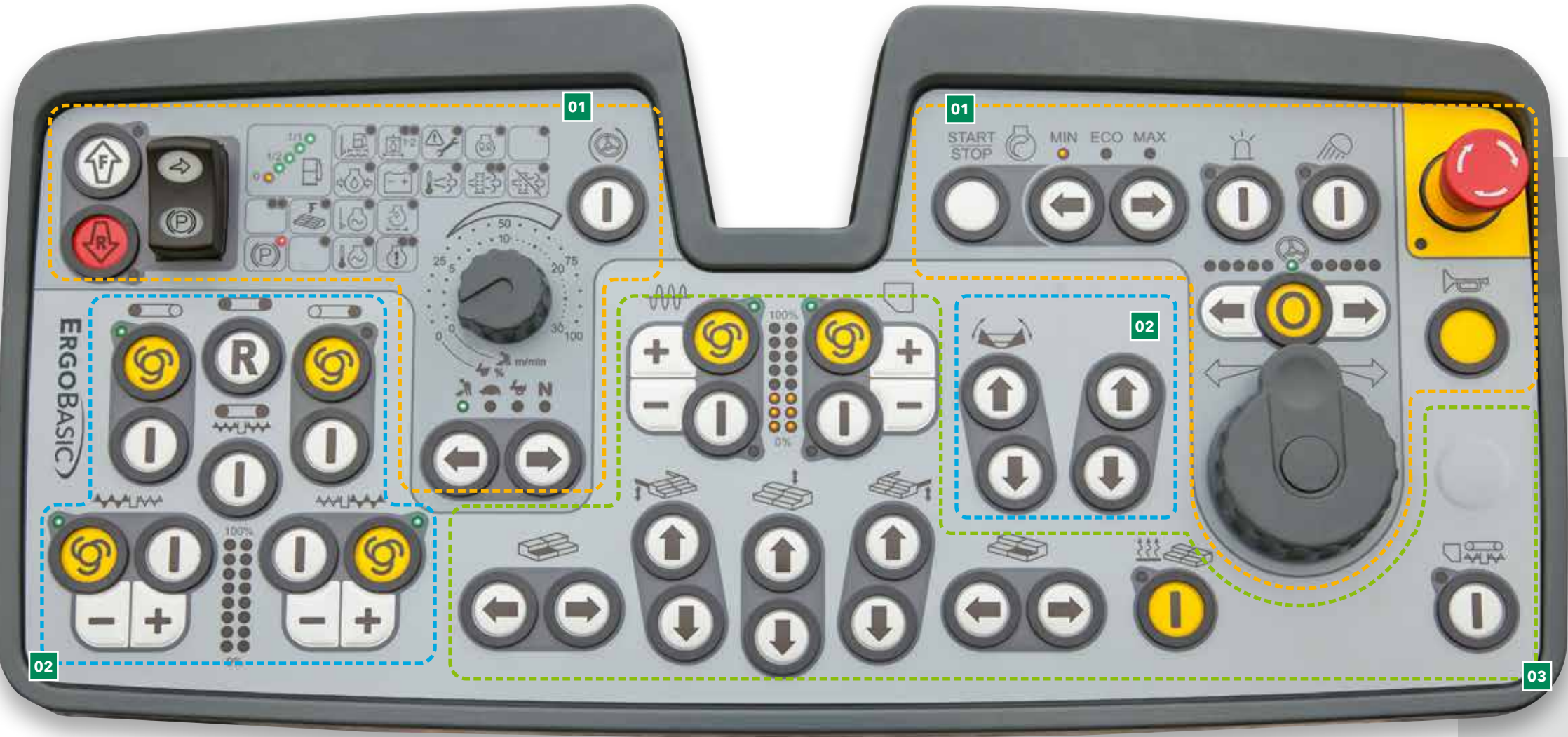
Everything at a glance: The functions are arranged in a clear, logical and practical layout that was heavily inspired by the ErgoPlus operator's console. The type of controls and the symbols used are all in line with those of an ErgoPlus console.

Given the limited number of functions, there is no need for a display. The status of all settings is indicated as a percentage on LED strips immediately next to the relevant functions. LEDs also indicate the set speeds for the augers and the compacting systems as well as the fill level of the fuel tank.



### Safe operation at night

Glare-free backlighting comes on automatically as darkness sets in so that the paver operator can also work safely on night-time jobs.



### 01 Drive and status display function group

All the functions for driving the paver are arranged together here. The status displays also provide an overview of machine status.

### 02 Material handling function group

The material handling function group includes operation of the hopper sides and of the conveyor and auger.

### 03 Screed function group

This function group includes all the screed functions such as settings for the tamper and vibrators and adjustment of screed width and angle.



# DRIVE AND STATUS DISPLAYS

## Module 1

### 01 Function and status indicators

The function and status indicators mean that the operator always has full control over his machine. He can, for instance, read the fill level of the fuel tank directly and identify whether there are any functional faults.

### 02 Choice of operating modes for the paver

At the touch of a button, the paver switches to Pave, Positioning, Job Site and Neutral modes. An LED indicates which mode is selected. On leaving “Pave” mode, the memory function stores all the most recent settings. After moving on the job site, the previously used paving parameters are instantly restored.



- 01 Given the limited number of functions, there is no need for a display.
- 02 The paver is steered by a rotary controller for simple, accurate manoeuvring.



### 03 Choice of engine speed ranges

For the diesel engine, there is a choice of three modes to select from: MIN, ECO and MAX. To switch 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 emissions and fuel consumption considerably.

### 04 Steering at a pre-set angle

The machine is steered by means of an easy-grip rotary controller which enables the driver to manoeuvre the machine easily and precisely even in the tightest spots. For long bends with a constant radius, the desired steering angle can be preselected using arrow keys. The paver then automatically follows the set path until the function is deactivated, allowing the driver to monitor the paving process undisturbed.



# MATERIAL MANAGEMENT

## Module 2

### 01 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 takes place for a short time only and stops automatically.

### 02 Automatic functions for material handling/distribution

These functions ensure that adequate mix for paving is automatically conveyed and distributed in front of the screed. The level of the head of mix in front of the screed is defined by a material sensor and the automatic system ensures that it remains constant. The function is only active during paving - if the paver stops, so does material handling.



The conveyor can be reversed at the touch of a button. Return transport of the mix is automatically stopped. The conveyor can be switched to the no-load function just as quickly.



### 03 Speed of the augers

In Automatic mode, the plus/minus buttons can be used to adjust the maximum auger speed separately for the right and left sides to suit the pave width, without the use of sonic sensors. The value, which is set in percent, is indicated by the LEDs.



# SCREED FUNCTIONS

## Module 3

### 01 Precompaction performance

The speeds of the compacting systems can be set directly on the paver operator's ErgoBasic console. The LED strips from 0 to 100% indicate the set speeds for the tamper and vibrators, allowing them to be adjusted immediately when required.

### 02 Screed settings

All settings can also be made from the paver operator's console, including raising or lowering the screed, extending or retracting either side of the screed, and adjusting the screed pitch to the site conditions. This means the paver operator also has access to the screed at all times.



01 Precompaction performance  
02 Screed settings  
03 Screed Assist (option)



### 03 Screed Assist (option)

This button switches Screed Assist on (LED lights up) or off. Screed Assist is active only when the screed is floating.

### 04 Idling function

Idling function is provided for the warm-up or cleaning of conveyors, augers and tamper.



### Screed heating system

In order to optimise compaction and produce a smooth surface texture, all compacting elements are heated across the full screed width. A simple push of a button is all it takes to switch the screed heating on or off. To ensure the screed heating system is working properly, an automatic function check is carried out when it is switched on.



# ERGOBASIC REMOTE CONTROL UNIT FOR THE SCREED

Safe and easy handling of all screed functions is key to high-quality paving. That is why a remote control unit for the screed was developed specifically for the ErgoBasic operating system of the new SUPER 2180 Li.

The remote control’s keypad is laid out logically according to the functional processes. Designed for robustness, it is well able to withstand tough job site conditions.

Operation is intuitive, and can be learned very quickly, not least because the symbols used in the tried and tested ErgoPlus operating system are found here too.

The ErgoBasic remote control unit for the screed allows all paving-related functions to be set quickly and easily. That includes direct access to the material handling systems and the sonic sensor for the auger.



**01 Speed of the augers**  
Just like the paver operator, the screed operator can also select Manual or Automatic mode for the conveyors and augers. The “Reversing Auger Rotation” function is very practical and user-friendly.



**02 Screed floating**  
When the screed is in the floating position, the Screed Assist feature can also be activated.

**03 Ergonomic screed width control**  
The screed width on one side can be adjusted at any time at the push of a button.



Shown in original size

- 01 Setting of augers and conveyor (automatic/manual)
- 02 Screed floating on/off
- 03 Screed width control, one side
- 04 Adjustment of screed tow point ram



# NIVELTRONIC BASIC

**VÖGELE has also developed a System for Automated Grade and Slope Control to match the ErgoBasic operating system: Niveltronic Basic. It is fully integrated into the machine control system, so perfectly adapted to the specific paver model.**

Another outstanding aspect of Niveltronic Basic is its very simple and intuitive handling, a feature which makes it easy even for less experienced operators to learn their way around the system. This creates ideal conditions for the small paver to work true to line and level on any base.

Each side of the screed is operated by a separate compact and highly robust Niveltronic Basic remote control unit. These units are easily removed from their magnetic brackets, giving operators far-reaching scope so they can always take up the optimum position for every paving job.



01



02



03

- 01** The LED sighting crosses also fitted to the sensor provide continuous, clearly visible feedback to the screed operator indicating whether the actual values match the settings made.
- 02** A variety of sensor types are available for Niveltronic Basic, in keeping with the machine's extensive and varied range of applications. The sensors extend from a mechanical sensor to non-contacting sonic sensors.
- 03** The pre-set and actual values for the grade and slope sensor can be read from the display of the Niveltronic Basic's control panel.



- 01** Deviation from specified values
- 02** Setting: Sensor sensitivity
- 03** Selecting: Referencing mode (Ground, Stringline, Transverse slope)
- 04** Quick set-up
- 05** Sensor calibration

A variety of sensor types is available for Niveltronic Basic, in keeping with the machine's large and varied range of uses. These sensors extend from a mechanical to non-contacting sonic sensors.

The System for Automated Grade and Slope Control can simultaneously be connected to two grade sensors and a slope sensor. The type of sensor used is detected automatically. The kind of reference – ground, tensioned wire or transverse slope – can be easily set on the remote control unit.

## VÖGELE > GOOD TO KNOW

### Available sensors

#### Slope sensor

The slope sensor allows the transverse profile to be determined exactly and then paved accurately. The measuring range is +/- 10 %.

#### Variable mechanical grade sensor

The variable mechanical grade sensor can be equipped with skis for referencing from the ground in 30 cm, 1 m and 2 m lengths.

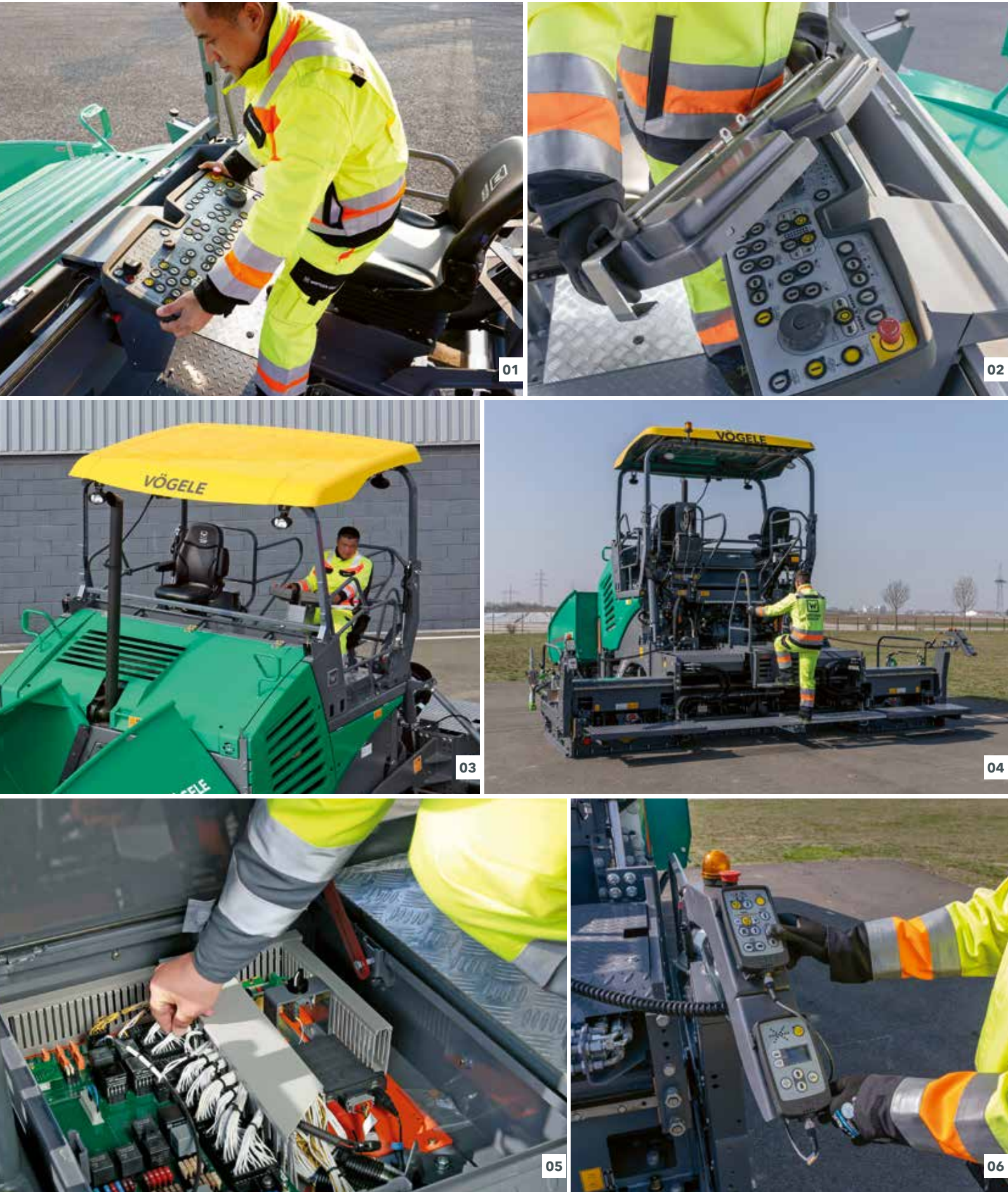
#### Multi-cell sonic sensor

The multi-cell sonic sensor, with its four sensors, is highly versatile. By calculating an average, it can compensate for short irregularities in a reference.

#### Big MultiPlex Ski

The Big MultiPlex Ski compensates for extended undulations. Its 5 to 13 metre beam can be fitted with three multi-cell sonic sensors as standard – or with up to five if required.





# ERGOBASIC PAVER OPERATOR'S PLATFORM

Improved efficiency, reliability and convenience

The user-friendly ErgoBasic paver operator's platform provides an unobstructed view of all key areas on the paver, such as the material hopper, steering guide or screed. It allows paver operators to easily monitor the mix feed to the paver from their seat for example.

**01 Working comfort**

- > Easy displacement of the paver operator's console across the full width of the platform for convenient working in an ergonomic position on either side of the machine.

**02 A place for everything and everything in its place**

- > The operator's stand, with its streamlined design, is well organized, offering the paver operator a professional workplace.
- > The paver operator's console can be protected by a shatter-proof cover.

**03 Hardtop gives excellent protection**

- > The modern hardtop made of glass fibre-reinforced polymer material shelters the operator. The hardtop folds down with effortless ease, thus getting the paver quickly ready for transport.

**04 Safe and convenient access**

- > The walkway and convenient central step on the screed ensure safe and convenient access to the operator's platform.

**05 Economical and service-friendly design**

- > Paver operators have convenient access to all service points on the machine. The clear layout and easy access of all hydraulic pumps attached to the splitter gearbox provide the highest levels of service-friendliness. Sturdy components made of highly wear-resistant materials for long service lives minimise downtimes.

**06 Safe and easy handling of all screed functions**

- > The ErgoBasic remote control unit for the screed allows all paving-related functions to be set quickly and easily.
- > Each side of the screed is operated by two compact and exceedingly robust remote control units. These units are easily removed from their magnetic brackets, giving the operator a large range of action.



# EXTENDING SCREEDS

## AB 570 AND AB 600

The SUPER 2180 Li can be combined with the VÖGELE AB 570 and AB 600 Extending Screeds. Through the addition of bolt-on extensions, the AB 570 build up to a maximum width of 8.7 m and the AB 600 up to a maximum width of 10 m.

The extending screeds come with a sturdy single-tube telescoping system. Working with the highest precision, it offers quick screed width control accurate to the millimetre.

The special tamper geometry of the extending screeds creates a flatter screed planing angle. This makes for a long service life of the screed plates and excellent results in terms of compaction and evenness.

The electric heating warms the screed up to its operating temperature much more quickly, even with the engine running at minimum rpm, thanks to intelligent generator management.

In automatic operation, the screed is heated in Alternating mode, which means that only one half is heated at any one time, thus sparing the engine and saving fuel.



**Uniform screed heating**  
of screed plates and tamper bar for uniform surface courses

**Much shorter preheating time**  
thanks to intelligent generator management of the electric heating system even when the engine is idling

**Alternating mode for screed heating**  
alternately powering one half of the screed heating system

### AB 570

**Pave widths**

- > Infinitely variable range from 3 m to 5.7 m
- > Maximum pave width using bolt-on extensions:
  - > 7.2 m (2 x 75 cm)
  - > 8.2 m (2 x 125 cm)
  - > 8.7 m (4 x 75 cm)

**Compacting systems**

- > AB 570 TV with tamper bar and vibrators

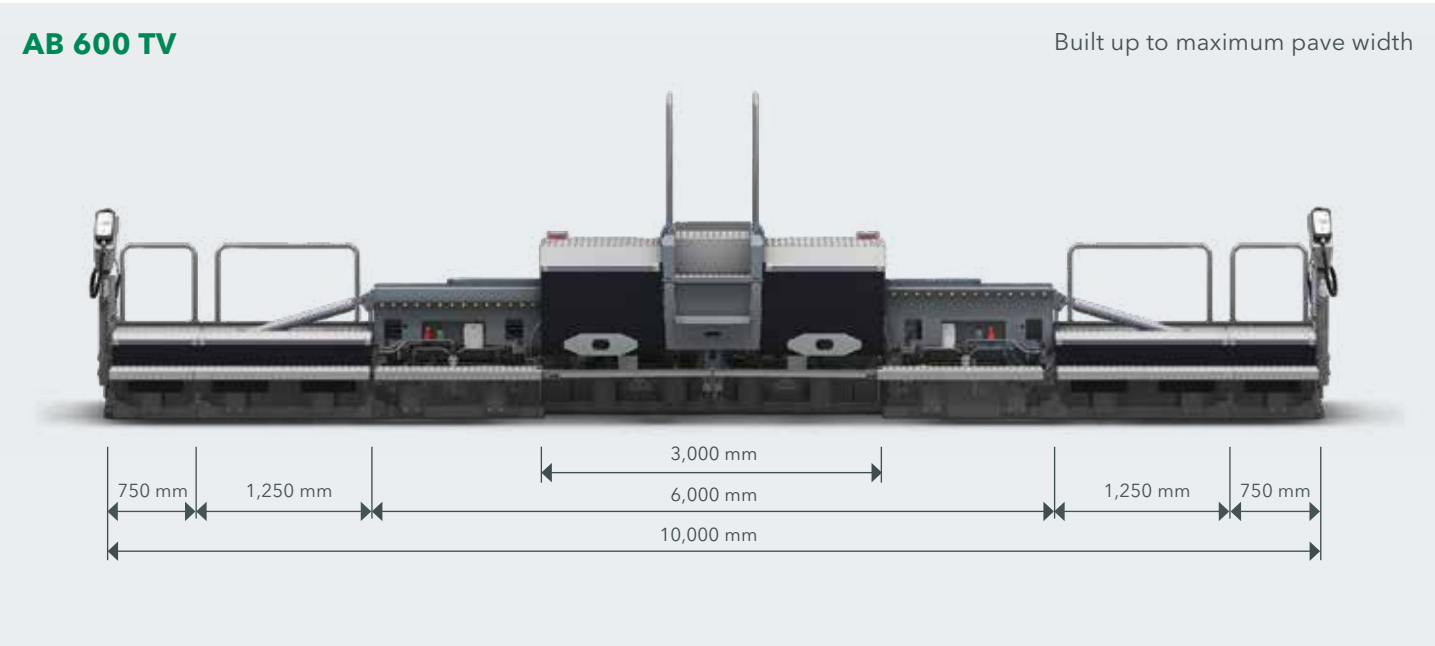
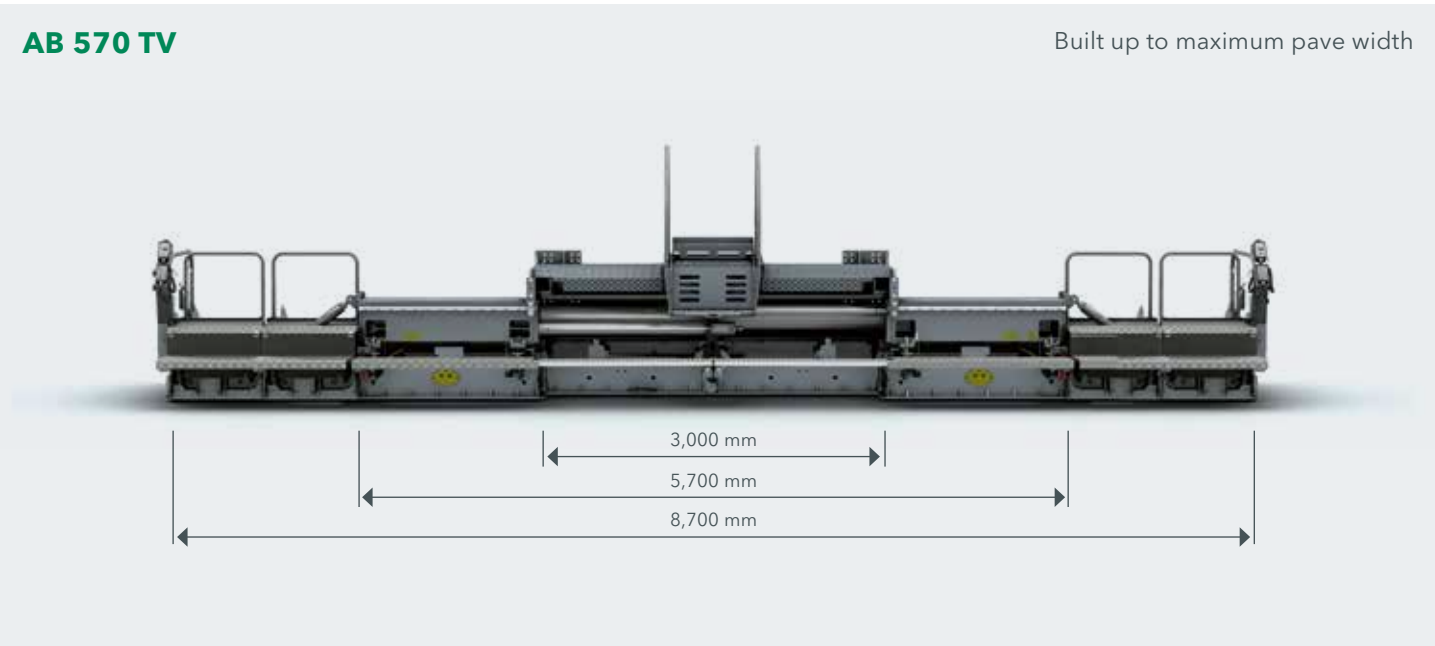
### AB 600

**Pave widths**

- > Infinitely variable range from 3 m to 6 m
- > Larger widths through the addition of bolt-on extensions up to a maximum of 10 m

**Compacting systems**

- > AB 600 TV with tamper and vibrators





# SB 300 AND SB 300 HD FIXED-WIDTH SCREEDS

Fixed-width screeds from VÖGELE deliver absolutely high-quality, perfectly even results. They show their strengths wherever large pave widths need to be handled, when laying down thick layers (e.g. crushed stone base

courses) and where high degrees of precompaction have to be achieved.

The SUPER 2180 Li can be combined with the SB 300 and SB 300 HD Fixed-Width Screeds.



The SB 300 provides numerous user-friendly innovations. A special adjusting system greatly reduces set-up times when mounting the bolt-on extensions. Another benefit for users is that the tamper stroke can now be adjusted hydraulically when required, i.e. simply by pressing a button on the paver operator's or screed operator's console.

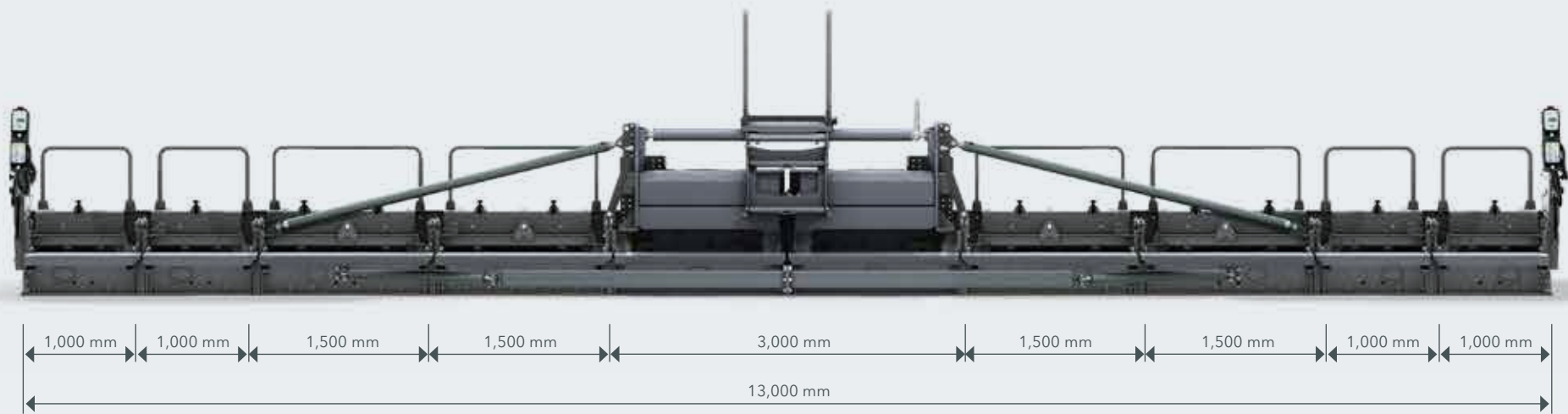
This speeds up processes, especially when working with varying layer thicknesses. The screed is also equipped with a new heating system which heats the screed plate, tamper and pressure bars twice as fast as before and much more uniformly.

Like the SB 300, the SB 300 HD Fixed-Width Screed has a basic width of 3 m. The key difference between them is that this screed was designed specifically for paving non-bituminous mixes in sub-base construction, so has no screed heating. This rugged screed is equipped with a purpose-made tamper which achieves a particularly high precompaction value. This allows crushed stone base courses and anti-freeze layers to be paved efficiently and accurately in high layer thicknesses.



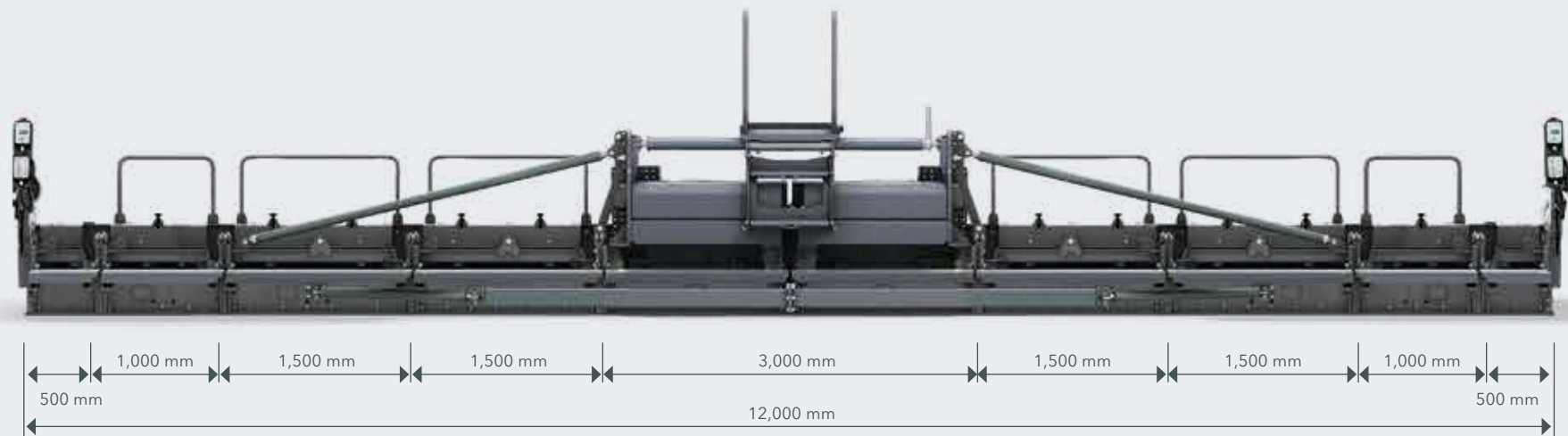
SB 300 TV

Built up to maximum pave width



SB 300 HD

Built up to maximum pave width



SB 300

Pave widths

- > Basic width 3 m. Larger widths if bolt-on extensions up to a maximum of 13 m are added

Compacting systems

- > SB 300 TV with tamper and vibrators
- > SB 300 TP1 with tamper and 1 pressure bar



SB 300 HD

Pave widths

- > Basic width 3 m. Larger widths if bolt-on extensions up to a maximum of 12 m are added
- > Specifically for use in sub-base construction, so no screed heating system

Compacting systems

- > SB 300 HDT with tamper





# WIRTGEN GROUP CUSTOMER SUPPORT

Service you can rely on.

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](http://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](http://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](http://www.wirtgen-group.com/training)



### Telematics solutions

At the WIRTGEN GROUP, construction machinery involving leading-edge technology goes hand in hand with sophisticated telematics solutions. Intelligent monitoring systems such as WITOS or JD Link\* not only make it easier for you to plan the maintenance of your machines, they also increase productivity and efficiency.  
> [www.wirtgen-group.com/telematics](http://www.wirtgen-group.com/telematics)

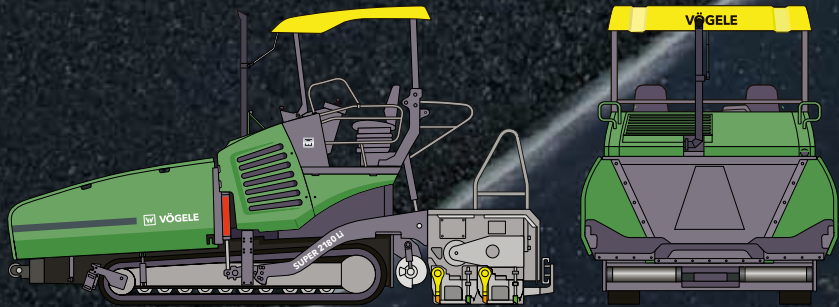
\* Neither WITOS nor JD Link are currently available in all countries.  
Please contact the subsidiary or dealer responsible for you for more information about this.

# ALL THE FACTS AT A GLANCE

SUPER 2180 Li Tracked Paver



## TECHNICAL DATA



## SUPER 2180 Li

- > Maximum pave width: 13 m
- > Maximum laydown rate: 1,100 t/h
- > Layer thickness: max. 50 cm
- > Transport width: 3 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](mailto:marketing@voegele.info)

 [\*\*www.voegele.info\*\*](http://www.voegele.info)