

Tracked Paver

# SUPER 1600-3(i)





# 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 700 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

**VÖGELE**



# HIGHLIGHT OVERVIEW

Perfectly equipped



## DRIVE

### 01 Drive concept

- > Powerful and economical drive concept, even when operating at full load in any climate zone.

### 02 VÖGELE EcoPlus

- > The VÖGELE EcoPlus low-emissions package significantly reduces fuel consumption and noise levels.

## QUALITY

### 03 Niveltronic Plus - the System for Automated Grade and Slope Control

- > Fully-integrated system perfectly matched to the machinetechnology of VÖGELE road pavers.
- > Wide range of sensors for flexible use in all fields of application.
- > User-friendly operation and monitoring of all Niveltronic Plus functions.

## MATERIAL MANAGEMENT

### 04 Receipt of mix

- > Large material hopper with a capacity of 13 tonnes ensures optimum feeding with mix.
- > A hydraulically operated hopper front directs the mix inside the material hopper straight onto the conveyors, conveying the entire mix properly in front of the screed.

### 05 PaveDock

- > PaveDock sprung push-rollers reliably absorb any jolts from feed vehicles.

### 06 PaveDock Assistant

- > Facilitates communication during transfer of mix.

## OPERATION

### 07 ErgoPlus 3 operating system

- > ErgoPlus 3 operating system with numerous convenient and automatic functions

### 08 AutoSet Plus functions

- > AutoSet Plus functions for quick and safe repositioning on the job site and for storing individual paving programs.

## VERSATILITY

### 09 Wide range of applications

- > Tracked Universal Class paver with a wide range of applications and pave widths up to 7.5 m\*.

### 10 Screeds

- > Option to combine the tracked paver with the AB 500 and AB 600 Extending Screeds

\*Pave widths of 7 m and 7.5 m are possible with extra equipment (available upon request).





**01** ErgoPlus 3 operating system with numerous convenient and automatic functions.  
**02** Tracked paver with a large range of applications.  
**03** VÖGELE EcoPlus low-emissions package significantly reduces fuel consumption and noise levels.  
**04** The paver operator's platform ensures maximum visibility.  
**05** Automated processes with AutoSet Plus.  
**06** PaveDock spring push-rollers and PaveDock Assistant communication system facilitate optimum feeding with mix.

# THE INNOVATIVE TRACKED PAVER

SUPER 1600-3(i) - a compact powerhouse

**Powerful, manoeuvrable and versatile: the new SUPER 1600-3(i) is simply unbeatable. This typical representative of the Universal Class handles pave widths of up to 7.5 m\* with ease.**

This paver is powerful, reliable and efficient, even when operating under the most cramped and complex conditions. It owes its excellent manoeuvrability to its high-quality drive components and extremely compact design.

The SUPER 1600-3(i) naturally also includes all the "Dash 3" features. For instance, the VÖGELE EcoPlus package reduces fuel consumption and noise emissions significantly. The VÖGELE ErgoPlus 3 operating system has been supplemented by numerous ergonomic and functional features. The paver operator's console comes with a particularly large colour screen ensuring a brilliant display even in poor light.

The PaveDock sprung push-rollers plus the PaveDock Assistant and AutoSet Plus functions also simplify working with this compact powerhouse.

The SUPER 1600-3(i) can be combined with the AB 500 and AB 600 Extending Screeds and an outstanding level of pre-compaction can be achieved using the TV (tamper and vibrators) compacting system.

\*Pave widths of 7 m and 7.5 m are possible with extra equipment (available upon request).





# STATE-OF-THE-ART DRIVE TECHNOLOGY

High output with low consumption

Three main components define the power unit of a SUPER 1600-3(i): its state-of-the-art, liquid-cooled diesel engine, a splitter gearbox flanged directly onto the engine, and a large cooler assembly.

The driving force in this power pack from VÖGELE is its diesel engine. The liquid-cooled 4-cylinder in-line engine is tuned to a perfect degree of efficiency for the overall system and thus ensures minimum expenditure on fuel and overall operation. The machines with an extra "i" in the product name are equipped with the latest engine technology, including exhaust emissions after-treatment. This engine meets the requirements of European exhaust emissions standard Stage V as well as US standard EPA Tier 4f. For less regulated markets, a variant without exhaust emissions after-treatment is available. This corresponds to European exhaust emissions standard stage 3a and US standard EPA Tier 3.

### Perfect cooling

A large cooler assembly ensures that the power unit always delivers its full output. With innovative air routing and a variable-speed fan, temperatures are continually maintained within the optimum range, significantly extending the service life of both the diesel engine and the hydraulic oil. A further advantage is that the machine can operate without difficulty in all climate regions worldwide.

### Powerful three-phase AC generator

The machine can be equipped with an electrical package for the supply of power. This includes a 230 V socket, heating rods for the conveyor scraper and two connections for light balloons. A powerful three-phase AC generator supplies the electrical energy required.

- 116/115 kW**  
diesel engine output
- ECO mode at 1,700 rpm**  
reduces operating costs
- 220 litres**  
Capacity fuel tank
- Generator**  
is oil-cooled and powerful



- = Coolant
- = Charge air
- = Hydraulic oil

## VÖGELE > GOOD TO KNOW

### Exhaust emissions after-treatment on "i" machines and the VÖGELE EcoPlus package

On the engine of the SUPER 1600-3i, 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, so engines of the "i" machines satisfy the strict requirements of European exhaust emissions standard Stage V.

VÖGELE EcoPlus furthermore significantly reduces emissions. This package is capable of reducing consumption and CO2 emissions by up to 25% and likewise reduces noise.



# VÖGELE ECOPLUS

Less is more for the environment

It goes without saying that our road pavers conform to the applicable emissions standards, but we like to go much further. That’s why the machine concept of the “Dash 3” generation uses environmentally friendly innovations in machine technology, resulting in lower consumption, lower emissions and lower costs.

One of these innovations is the VÖGELE EcoPlus low-emissions package. Fuel savings of up to 25% can be achieved with VÖGELE EcoPlus, depending on the application and capacity utilization of the paver. That doesn’t just result in considerable savings for the contractor – it’s good news for the environment too. That’s because every litre of fuel saved reduces carbon dioxide (CO<sub>2</sub>) emissions.



25% fuel saving



25% less CO<sub>2</sub> emitted



Less noise



## VÖGELE > GOOD TO KNOW



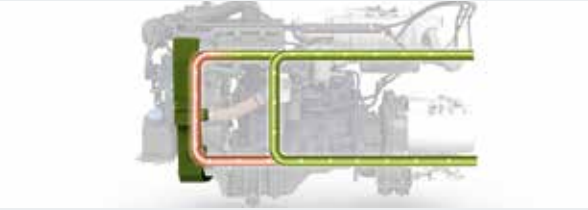
### The technical innovations



**Splitter gearbox with ability to disengage hydraulic pumps**  
When the paver is stationary, all the hydraulic pumps needed for “traction”, “conveyors and augers” and “compaction” are disengaged automatically. The result? Lower fuel consumption.



**Energy-optimized tamper drive**  
The tamper is driven by a variable-displacement pump which always delivers exactly the amount of oil needed for the current tamper speed and not a drop more or less.



**Controlled hydraulic oil temperature circuit**  
A bypass circuit gets the hydraulic oil to its optimum operating temperature very quickly, enabling rapid, fuel-saving operation of the paver.



**Variable-speed fan**  
The variable-speed fan automatically adapts to engine load and ambient temperature. This type of drive saves energy and reduces noise emissions.



# EFFICIENT TRANSLATION OF TRACTIVE POWER

High-quality separate hydraulic drives are essential components of the VÖGELE drive concept. They allow our pavers to operate incredibly cost-efficiently at a high level of performance. Since the traction drive units are directly integrated in the sprockets of the crawler tracks, engine output is translated into pave speed without any loss of power.

The hydraulic systems for the traction drive, conveyors and augers, as well as the compacting systems, all operate in separate closed circuits for maximum efficiency.

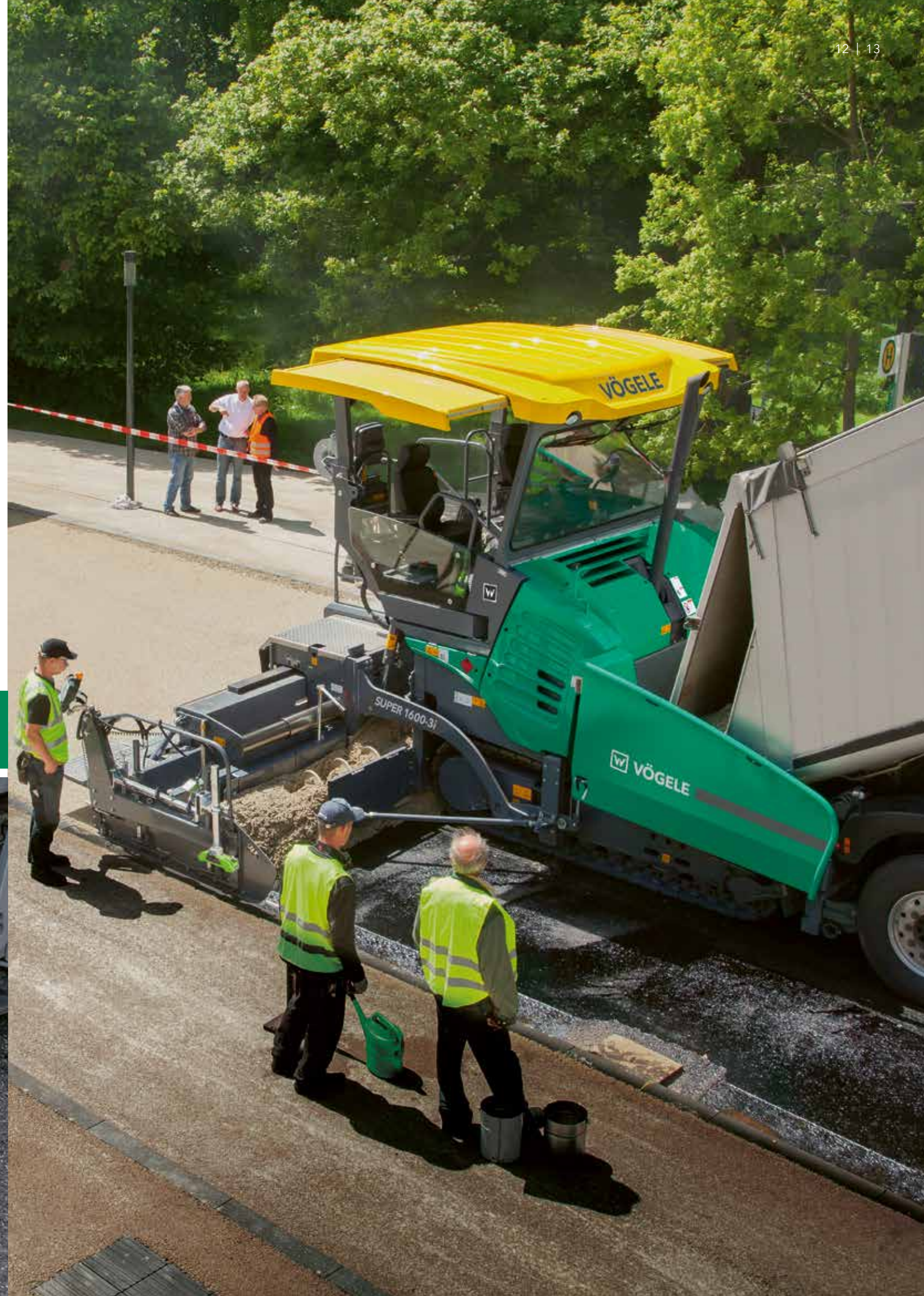
Long crawler tracks with large footprints ensure maximum tractive effort, allowing the paver to progress well at a constant speed even when operating on difficult terrain.

Positive tracking when moving straight and accurate cornering due to separate drive and electronic control provided for each crawler track.

**Hydraulic drives**  
directly in the sprockets

**Consistent straight moving**  
thanks to separate electronically-controlled drives

**Long crawler tracks**  
for maximum traction





# PERFECT MATERIAL MANAGEMENT FOR PERFECT PAVING QUALITY

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.

All our development efforts focus on simple operation and the best possible overview for the paving team.

As with all VÖGELE pavers, supplying the SUPER 1600-3(i) with mix is a clean, safe and swift process. A hydraulically operated hopper front directs the mix inside the material hopper straight onto the conveyors, conveying the entire mix properly in front of the screed.

- > The large material hopper holding 13 t is amply dimensioned so that a sufficient quantity of mix is stored at all times. There is no problem tiding over difficult situations such as paving under bridges, for instance.
- > Easy feeding with mix thanks to low material hopper, wide hopper sides and sturdy rubber baffles fitted to the hopper front.
- > Especially wide oscillating push-rollers for convenient and shock-free docking of feed vehicles, even on bends.



**Large material hopper**  
with a capacity of 13 tonnes

**Deep and wide hopper sides**  
for especially straightforward material feed

**Push-rollers**  
oscillating



- 01** Proportional control and continuous monitoring provided for conveyors and augers guarantee a constant head of mix in front of the screed in line with requirements.
- 02** Large-diameter auger blades (400 mm) for excellent spreading of mix, even when paving in large widths.
- 03** An auger tunnel, easily variable in depth, provides for an optimum flow of mix when large quantities are being laid.



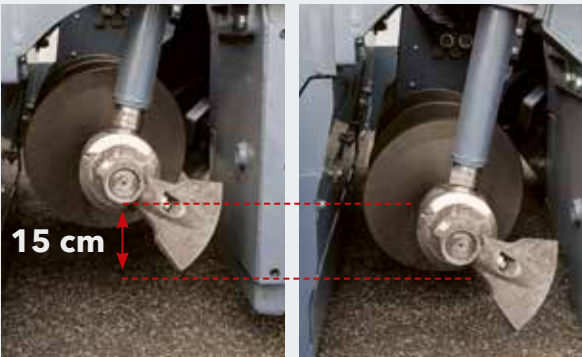
By spreading mix perfectly, the SUPER 1600-3(i) provides the ideal head of material in front of the screed in every paving situation.

Powerful, separate hydraulic drives for conveyors and augers are installed, achieving high laydown rates up to 600 t/h.

## VÖGELE > GOOD TO KNOW

### Adjustable auger height

The height of the auger complete with bearing boxes and limiting plates for the auger tunnel can be hydraulically adjusted by up to 15 cm across the full pave width. This optimizes the head of mix in front of the screed, even when paving thin layers or when layer thickness varies. AutoSet Plus allows the auger to be moved to transport position at the touch of a button and following repositioning, to be returned to the previously-set height in exactly the same way.





# PAVEDOCK ASSISTANT AND PAVEDOCK

Perfect combination for process-reliable material feed

A constant feed of material to the paver is a fundamental prerequisite for high-quality paving. The team consisting of the PaveDock Assistant communication unit and VÖGELE’s PaveDock push-rollers makes an important contribution to the reliability of the mix transfer process.

PaveDock Assistant is the communication system between the paver operator and the feed vehicle driver. It allows particularly fast and reliable transfer of mix to the paver. Core features are the signal lights on the paver and the associated controls on the paver operator’s ErgoPlus 3 console.

The paver has two sets of signal lights, mounted on the right and left of the hardtop. With these lights, the paver operator can give the driver of the feed vehicle unmistakable signals, indicating what needs to be done (e.g. reverse, stop, dump mix). Having two lights, each in an elevated position, ensures that all signals are clearly visible to the feed vehicle driver from all angles of approach.

As an alternative to oscillating push-rollers, we also supply PaveDock, our spring-loaded push-bar. This absorbs jolts from the feed vehicle even more effectively and reliably, thus ensuring that they are not transmitted to the finished pavement.

Together with the “PaveDock Assistant”, the sprung push-rollers maximize process safety during transfer of the mix: a sensor installed in the sprung push-rollers indicates whenever a feed vehicle has docked onto the paver. The signal lights automatically and directly indicate the stop signal. The feed vehicle driver can thus react immediately.



PaveDock sprung push-bar reliably absorbs any jolts from feed vehicles.

## VÖGELE > GOOD TO KNOW

### PaveDock Assistant signals

The signal lights attached to the right and left of the paver hardtop enable the paver operator to give the truck driver unambiguous signals using the associated controls on the paver operator’s ErgoPlus 3 console.

 Dock	
 Stop	
 Raise dump box	
 Lower dump box	
 Drive off	
 Paver is moving	



# AUTOMATED PROCESSES WITH AUTOSSET PLUS

With AutoSet Plus, we have enhanced the efficiency, convenience and quality of key job site processes.

AutoSet Plus has two handy automatic functions. The Repositioning and Transport function greatly facilitates the continuation of work when moving the paver on the job site from one work section to another, or after the paver has been transported. Simply pressing the “Execute” button quickly and reliably readies the machine for travel on the job site, or for transport. Pressing the button again returns it to the previously-stored working position.

The Paving Programs function allows the operating personnel to save the configured machine parameters and store these as a paving program in the menu. This program can then be called up and used whenever needed.

The two convenience functions of AutoSet Plus automate routine tasks, allowing work processes to be carried out more quickly and with greater control. This in turn means that construction projects can be completed faster and more reliably.



### Repositioning function

- > Fast and safe repositioning of the paver on the job site.
- > No settings are lost between paving and repositioning.
- > Also prevents any damage to the augers and deflectors in front of the crawler tracks.

### Paving Programs function

- > Automated configuration of the paver.
- > Storage of all paving-related parameters.
- > Selection of stored paving programs.
- > Reproducible quality.



### VÖGELE > GOOD TO KNOW

AutoSet Plus allows the automation of paving processes to enable quality achieved in the past to be reproduced at the touch of a button. The function is integrated in the paver operator's ErgoPlus 3 console and is especially suitable for projects involving several sections.



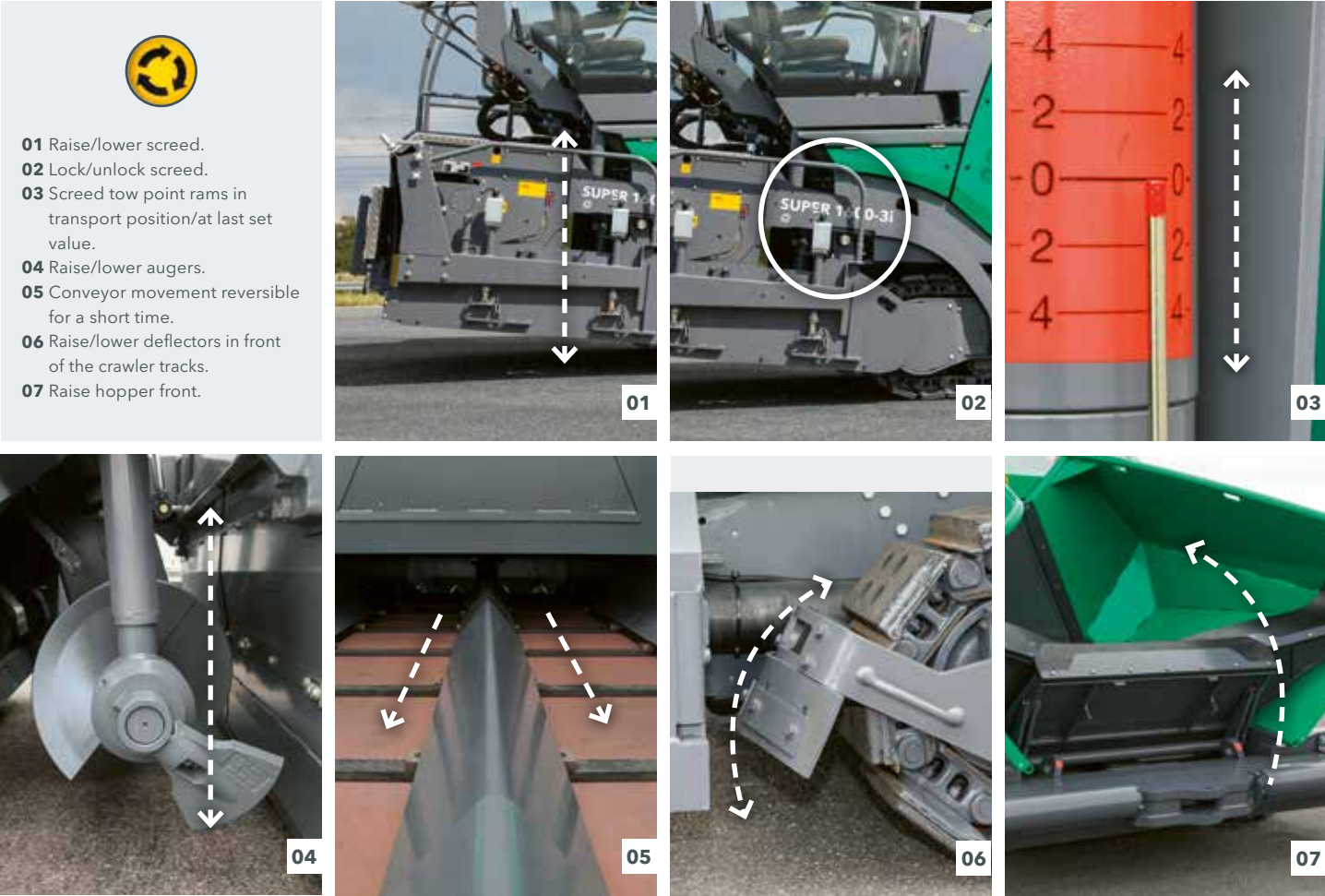
# AUTOSET PLUS REPOSITIONING FUNCTION

The AutoSet Plus repositioning functions are especially helpful when the machine needs to be repositioned on a job site frequently.

The AutoSet Plus Repositioning function is activated just by pushing the “Execute” button. This raises the auger, the hydraulic hopper front and the deflectors in front of the crawler tracks into their top positions. The screed and the screed tow point rams are moved into transport position, and the screed is also locked hydraulically in transport

position. The conveyors are temporarily reversed, preventing mix from falling to the ground as the paver travels.

Once the paver has been repositioned, pressing the “Execute” button again returns all systems to the previously stored working positions. This ensures that no settings are lost when changing from paving to repositioning or transport. It also effectively prevents any damage to the machine.



# AUTOSET PLUS PAVING PROGRAMS



The Automatic function for paving programs allows an operator to create particular paving programmes. All the key parameters for paving a specific layer, e.g. a base course of asphaltic concrete 18 cm thick, can thus be stored.

On the display of his console, the paver operator saves in his program the values set for the compacting systems (tamper and vibrator speed, pressure for the pressure bars), height of the augers, position of the tow point rams, pressure for Screed Assist and pave speed.

He also enters the amount of crown and the screed temperature. The program is completed with additional information on the material being used, layer thickness and pave width.

The stored paving programs can subsequently be selected and used at any time via the menu. In the event of a repeat situation, this ensures that work is carried out with exactly the same settings, maintaining a consistent quality.





## ERGOPLUS 3 OPERATING CONCEPT

Improved efficiency, reliability and convenience

**Even the very best machine with the most advanced technology can only really show its strengths if it can be operated easily and as intuitively as possible. At the same time, it should offer an ergonomic and safe working environment for the operating team.**

That's why the ErgoPlus 3 operating concept is focussed on the operator, ensuring that VÖGELE paver operators retain full control over the machine and the paving job. On the following pages, example illustrations will provide you with more detailed information on the extensive functions of

the ErgoPlus 3 operating concept. ErgoPlus 3 encompasses the operator's stand, the paver operator's console and screed consoles and Niveltronic Plus, the System for Automated Grade and Slope Control.





# ERGOPLUS 3 PAVER OPERATOR'S CONSOLE

Clearly arranged in line with experience from the field

The paver operator's console is extremely clear and has been designed according to practical principles. All functions are combined into logical groups, so that the operator finds each function exactly where he would expect it to be.

On the ErgoPlus 3 console, all push-buttons are easily identifiable by touch even when wearing work gloves. Once a button is pressed, off you go, thanks to the "Touch and Work" principle. This means that a function is executed directly – without the need to confirm.



## 01 Conveyors and augers, traction

All controls for the conveyor and auger are located here. The traction main switch, the operating mode selector and the setpoint adjuster for the pave speed are also included in this function group.

## 02 Material hopper and steering

This function group includes the controls for the material hopper, the steering and the diesel engine. Various options are also operated from here.

## 03 Screed functions

All controls for the screed are grouped at the centre of the paver operator's console.

## 04 Paver operator's console display

The high-contrast colour display delivers brilliant readability even in poor lighting conditions. Essential information is shown on menu level 1. More paving settings, as well as information about the machine, can be found at the secondary levels.

## 05 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.





# CONVEYORS AND AUGERS, TRACTION

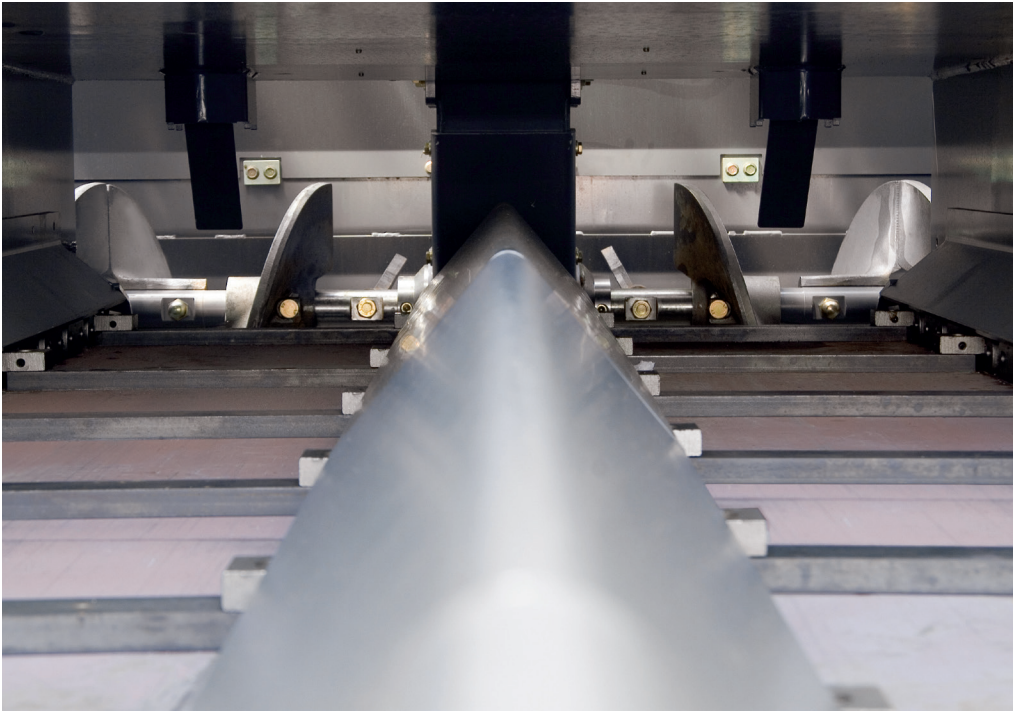
## Module 1

### 01 AutoSet Plus Repositioning function (option)

With the AutoSet Plus Repositioning function, the paver is quickly and safely prepared for a move on the job site at the touch of a button. After the move, all paver components are reset to their previous working positions simply by pressing the button again. This ensures that no settings are lost when changing between "Pave" and "Job Site" modes. AutoSet Plus also effectively prevents damage during transport.

### 02 Choice of operating modes for the paver

All the main paving and machine functions can be controlled directly by individual push-buttons on the paver operator's ErgoPlus 3 console. By pressing the arrow buttons, up or down, the operator changes modes in the following order: "Neutral", "Job Site", "Positioning" and "Pave". An LED indicates the mode selected.



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 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 touch of a button. Reverse movement takes place for a short time only and stops automatically.

### 04 Idling function

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

- 01 AutoSet Plus Repositioning function (option)
- 02 Choice of operating modes for the paver
- 03 Reversing conveyor movement
- 04 Idling function



# MATERIAL HOPPER AND STEERING

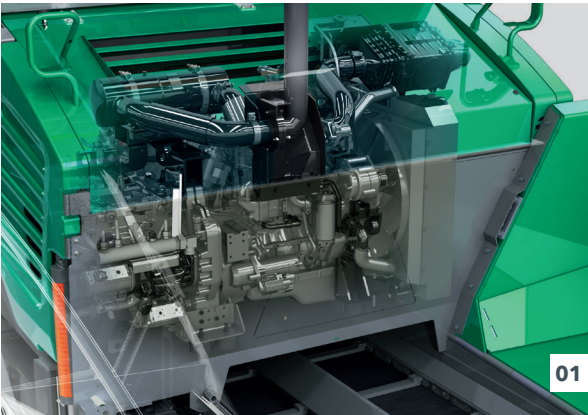
## Module 2

### 01 Choice of engine speed ranges

For the engine, there is a choice of three modes: MIN, ECO and MAX. To switch modes for engine speed, all the operator needs to do is press the arrow up or down buttons. In ECO mode, the engine delivers sufficient power for a great number of paving applications. Running in ECO mode significantly reduces noise and fuel consumption.

### 02 PaveDock Assistant (option)

With the PaveDock Assistant signal lights, the paver operator can give the driver of the feed vehicle unambiguous signals indicating what needs to be done (e.g. reverse, stop, dump mix). The lights are conveniently activated directly from the paver operator's ErgoPlus 3 console.



01 Choice of engine speed ranges  
02 PaveDock Assistant (option)

### 03 Steering

For a large turning circle, fine steering allows pre-setting of a track position which is maintained automatically with no need for manual intervention by the operator.

### 04 Material hopper

The large material hopper with separate hinged sides is designed so that the machine can always be supplied with paving material perfectly and cost-effectively. The two hopper sides can be folded together separately or both together at the touch of a button. The hydraulically-operated hopper front available as an option ensures that the whole of the mix is incorporated in the material handling process.



01 Choice of engine speed ranges  
02 PaveDock Assistant (option)  
03 Steering at a pre-selected steering angle  
04 Material hopper



# SCREED

## Module 3

All the key screed settings can be made from the paver operator’s console. The screed can be raised or lowered here, each of the two sides of the screed extended or retracted or the angle of the screed adapted to suit conditions. This means the paver operator, too, has access to the screed at all times.

### 01 Screed Lock (option)

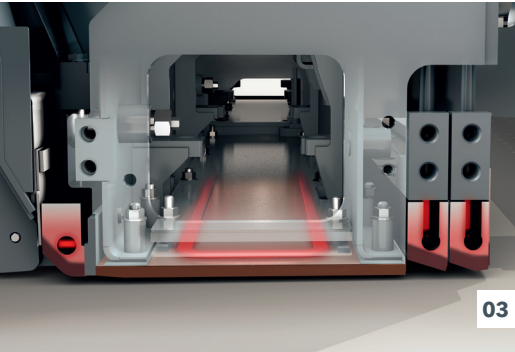
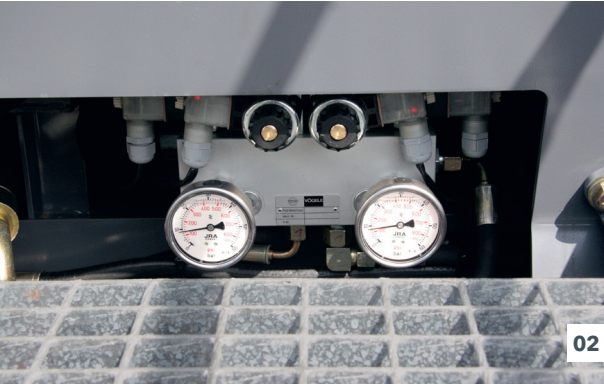
When the paver is in the transport position, the screed is secured by locking bolts. When the screed is raised, the two locking bolts can be retracted by the hydraulic screed lock at the touch of a button.

### 02 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 is floating.



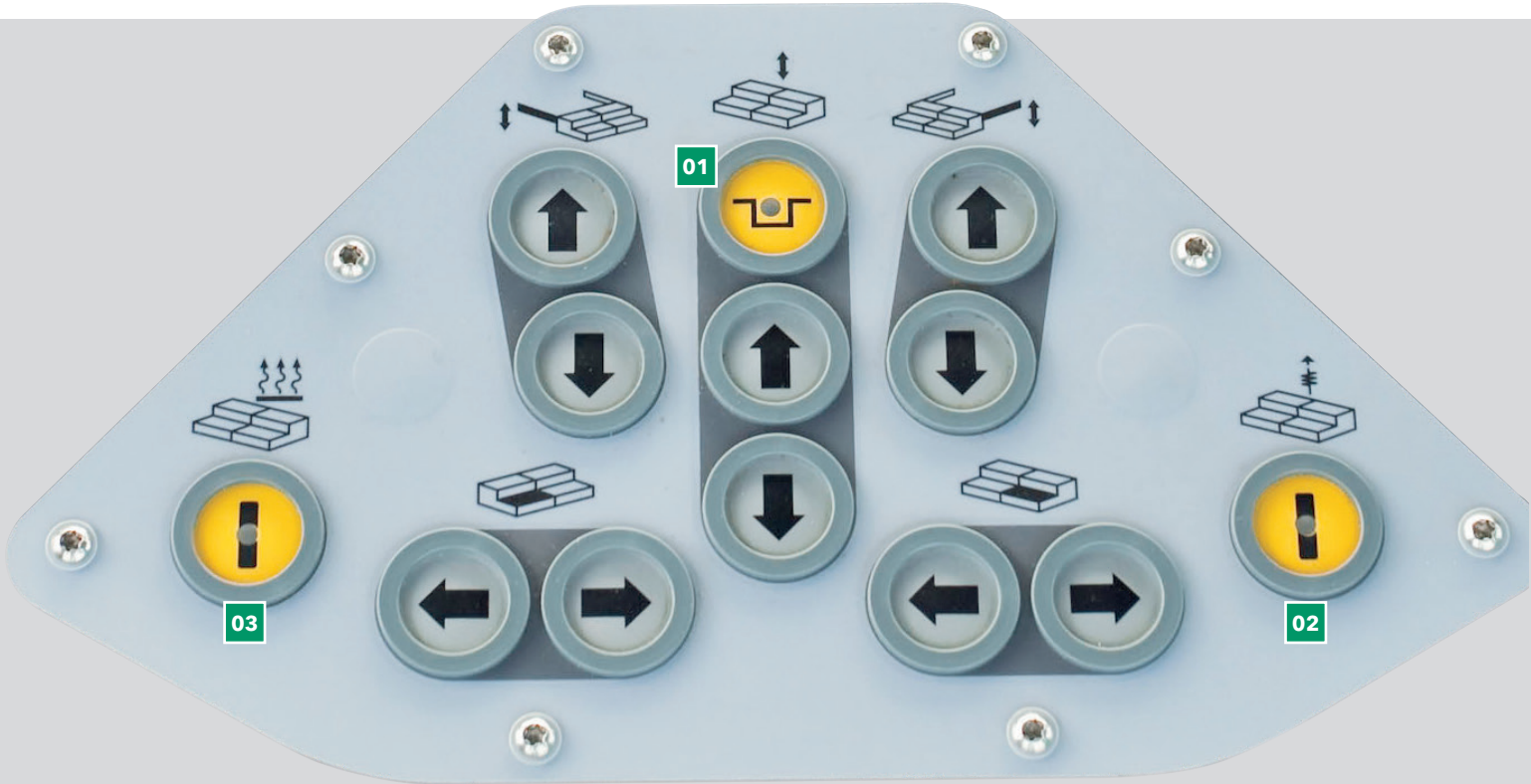
**01** Locking bolts on both sides secure the screed in its transport position.  
**02** When the screed is in the floating position, the Screed Assist feature can also be activated.  
**03** Screed plates are fitted as standard with heating elements which distribute the heat all over the plates.



### 03 Screed Heating

In order to optimise compaction and produce a smooth surface texture, all compacting elements are heated across full screed width. A simple touch of a button is all it takes to switch 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.

- 01 Screed Lock (option)
- 02 Screed Assist (option)
- 03 Screed Heating





# ERGOPLUS 3 SCREED CONSOLE

The screed is crucial for pavement quality, so easy and positive handling of all screed functions is of the utmost importance for high-quality road construction. With ErgoPlus 3, screed operators have the paving process at their fingertips. All functions are easily comprehensible, and all controls are clearly arranged.

Push-buttons in watertight, raised enclosures are provided for the frequently-used functions operated from the screed console. This makes them identifiable blindfold simply by touch, even when wearing work gloves. Important paver and screed data can also be called up and adjusted from the screed console.



**01** The high-contrast colour display provides for brilliant readability even in poor lighting conditions. What's more, the downward-angled high-power LED lighting gives the operator a perfect view of all processes associated with the side plate, even in the dark.

**02** Screed width can be adjusted by means of the SmartWheel.



**01** The screed console display

**02** Ergonomic screed width control in two speeds

**03** Crown adjustment at the touch of a button

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

**02 Ergonomic screed width control at two speeds**  
The screed width can be effortlessly adjusted by means of the SmartWheel. This is done at two speeds: slow, for precision control, such as along an edge; or fast, for quick extension or retraction of the screed.

**03 Crown adjustment at the touch of a button**  
The crown can be conveniently adjusted at the touch of a button on the screed operator's console. When the "plus" or "minus" button is pressed, the set crown value is shown on the display.



# AUTOMATED GRADE AND SLOPE CONTROL NIVELTRONIC PLUS

The Niveltronic Plus System for Automated Grade and Slope Control is an in-house development by JOSEPH VÖGELE AG based on many years of experience in grade and slope control technology. Easy operation, precision and reliability are its hallmarks, ensuring perfect mastery of all grade and slope control jobs.

This fully integrated system is perfectly adapted to the machine technology of VÖGELE pavers with the ErgoPlus 3 operating concept. For example, all wiring and connections are integrated in the tractor unit and screed, effectively eliminating any risk of damage to those components.

VÖGELE of course offers a very wide and practical selection of sensors, permitting versatile use of the Niveltronic Plus system.

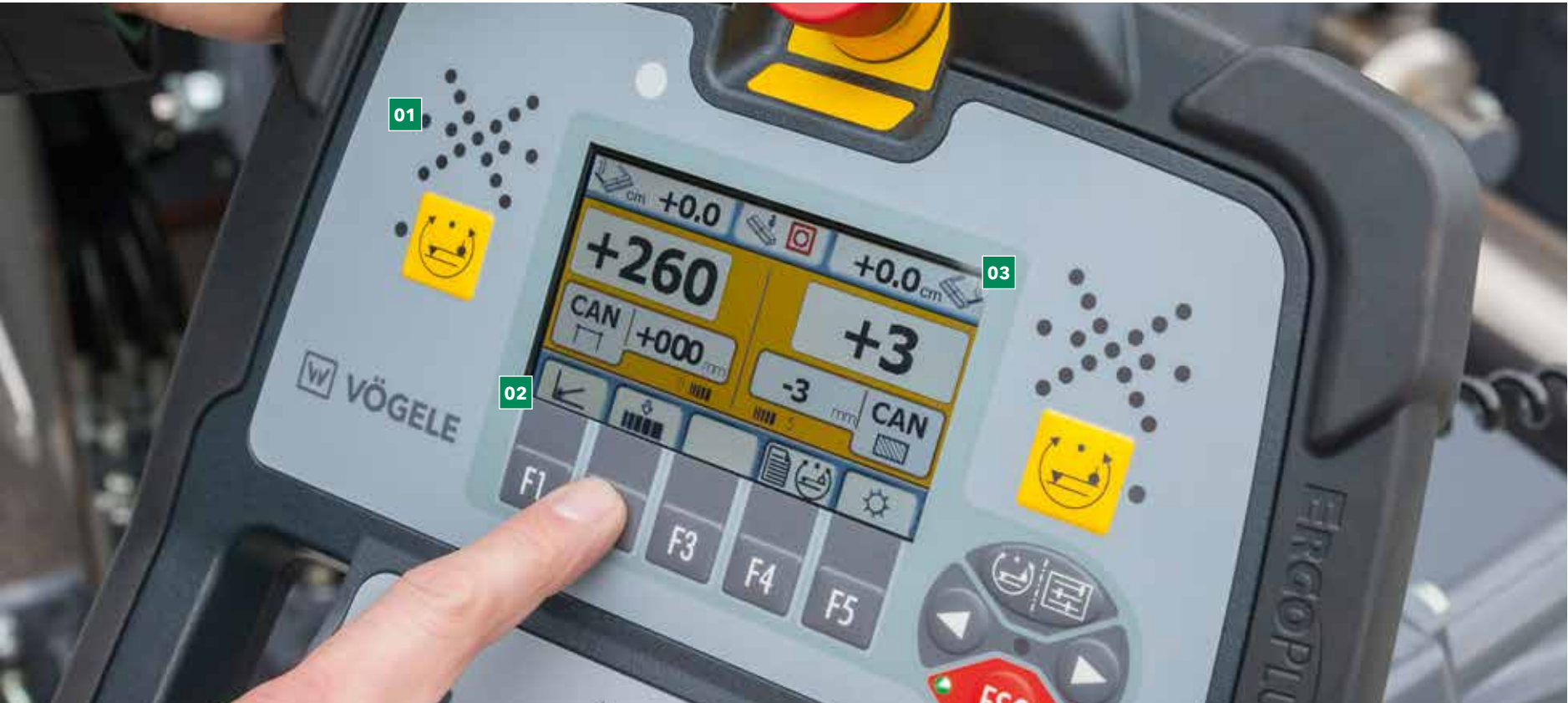
Whether building or rehabilitating car parks, roundabouts or motorways, VÖGELE offers the right sensor for every job site situation.

Sensors can be changed quickly and easily, as Niveltronic Plus automatically detects which sensor is connected, simplifying the configuration process for the user.

The setup tool provides information about the correct distance from the reference as soon as the System for Automated Grade and Slope Control is commissioned. The correct position has been reached when the two centre LEDs on the vertical LED strip come on.



- 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 Plus, in keeping with the machine's extensive and varied range of applications. These sensors extend from a mechanical sensor to non-contacting sonic sensors.
- 03 The two-way split display provides the screed operator with access to both sides of the screed. The symbols provide information at all times including on the height of the tow point rams, the pre-set and actual values, and the pre-set sensitivity of the grade and slope control sensors.



## VÖGELE > GOOD TO KNOW

### Sensors available

#### 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.

#### Single-cell sonic sensor

The single-cell sonic sensor emits a sound cone and consequently copies references 1:1 without calculating an average. It can be used for referencing from the ground (Ground mode) or from a tensioned wire (Stringline mode).

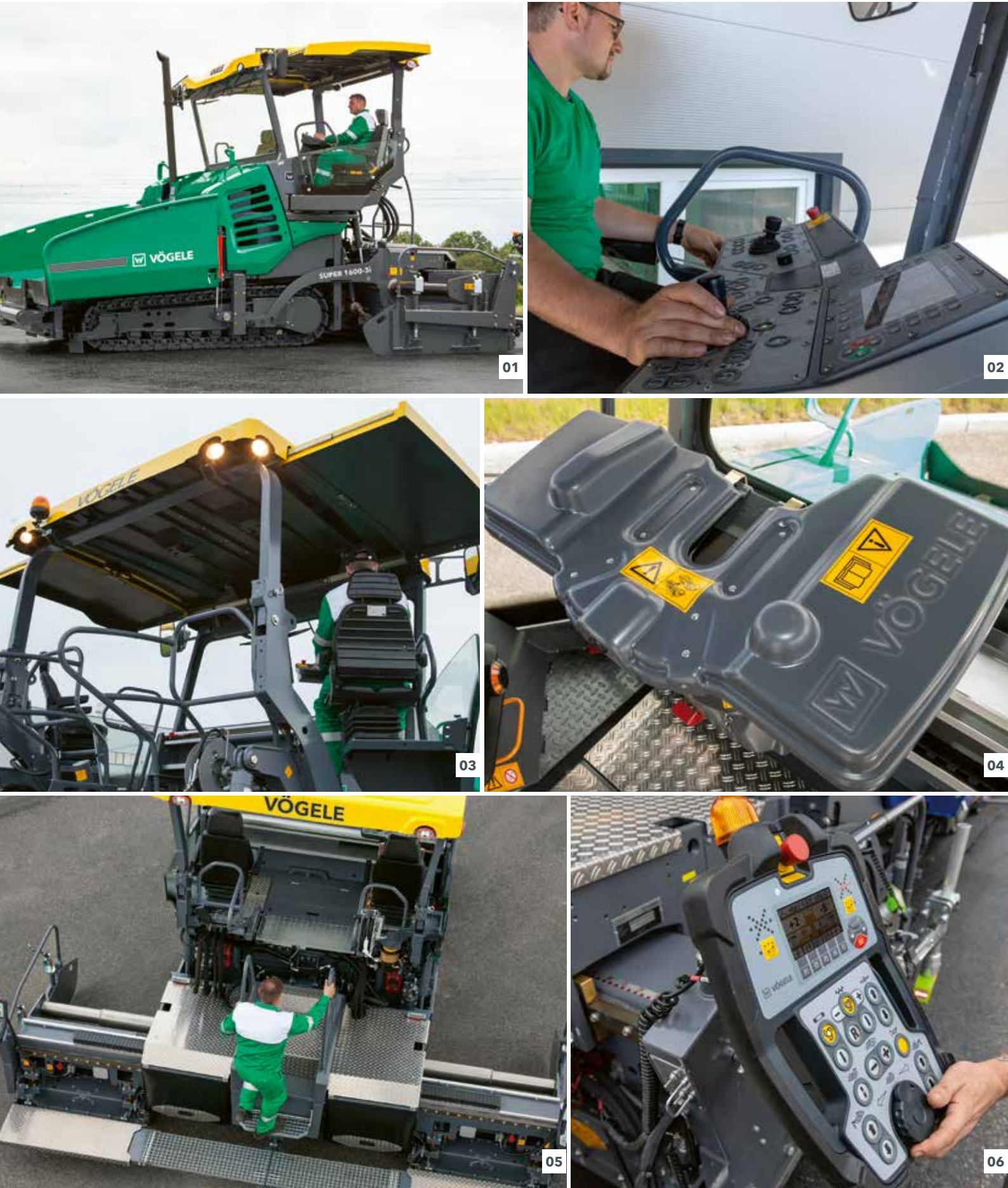
#### Multi-cell sonic sensor

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.





# ERGOPLUS 3 OPERATOR'S STAND

Improved efficiency, reliability and convenience

An ergonomic workstation is of key importance to enable a paver operator to concentrate fully for long periods of time, which is why VÖGELE relies on the paver operator's stand with ErgoPlus 3. The operator's ErgoPlus 3 stand provides plenty of storage space, is clearly arranged and meets stringent health and safety requirements.

Outstanding all-round visibility also increases safety. The operator can monitor everything from his workstation: material feed, material supply and head of mix. With its intelligent design, the ErgoPlus 3 system proves that innovative technology can be controlled ergonomically, efficiently, intuitively and conveniently.

- 01

**The comfortable operator's stand**

> The comfortable operator's stand gives an unobstructed view of all crucial areas on the paver such as material hopper, steering guide or screed.
- 02

**Control console and seats can be moved for an optimum seated position**

> The seats swinging out to the sides and an operator's stand of streamlined design likewise provide maximum visibility of the auger tunnel, permitting the paver operator to keep an eye on the head of mix in front of the screed at all times.

> The paver operator's seat and console on the platform, as well as the screed operator's platforms can now be adjusted even more easily to personal needs.
- 03

**Hardtop gives excellent protection**

> The modern hardtop made of glass fibre-reinforced polymer material shelters the operator come rain or shine.
- 04

**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 operator's console can be protected by a shatter-proof cover to prevent wilful damage.
- 05

**Safe and comfortable ascent**

> The walkway and comfortable central step access on the screed ensure safe and convenient access to the operator's platform.
- 06

**Ergonomic screed console**

> The height and position of the console are easily adjusted. The high-contrast colour display can be read clearly from all angles.



# AB 500 AND AB 600 EXTENDING SCREEDS

The outstandingly adaptable AB 500 and AB 600 Extending Screeds are ideal for paving varying widths and winding roads. Their high-precision, sturdy single-tube telescoping system permits stable and reliable screed width adjustment.

Even with the screed set to its maximum width, the telescoping tubes are extended by no more than half, which means zero flexing.

Electric heating elements get all the smoothing and compacting systems up to the ideal temperature. A constant, even heating capacity for screed plate and tamper is a key factor in high paving quality.

**Uniform screed heating**

of screed plates, tamper bar and pressure bars for uniform surface courses

**Reduced energy consumption**

by the electric heating system thanks to the intelligent generator management system

**Single-tube telescoping system**

guarantees a high level of stability during paving and thus great paving results

**Hydraulic crown adjustment**

The crown can be conveniently adjusted at the press of a button on the screed operator's console.

The AB 500 is the universal screed for all VÖGELE pavers with a basic width of 2.55 m and the ErgoPlus 3 operating concept. Thanks to its single-telescoping system for an infinite variety of pave widths, it is ideal for a wide range of applications. The screed extends hydraulically from 2.55 m to 5 m and bolt-on extensions can be added to create a maximum width of 6.5 m.

The AB 600 Extending Screed has a basic width of 3 m. Equipped with VÖGELE's sturdy single-tube telescoping system, its pave width is infinitely variable up to 6 m. With the addition of bolt-on extensions, strips as wide as 6.5 m can be paved without joints, making this the ideal screed to combine with VÖGELE pavers of the Universal and Highway Classes.

The AB 500 and AB 600 Extending Screeds are available with the TV compaction system (with tamper and vibrators), allowing an outstanding level of pre-compaction to be achieved.

Extra equipment for pave widths of 7 m and 7.5 m is available on request.





AB 500

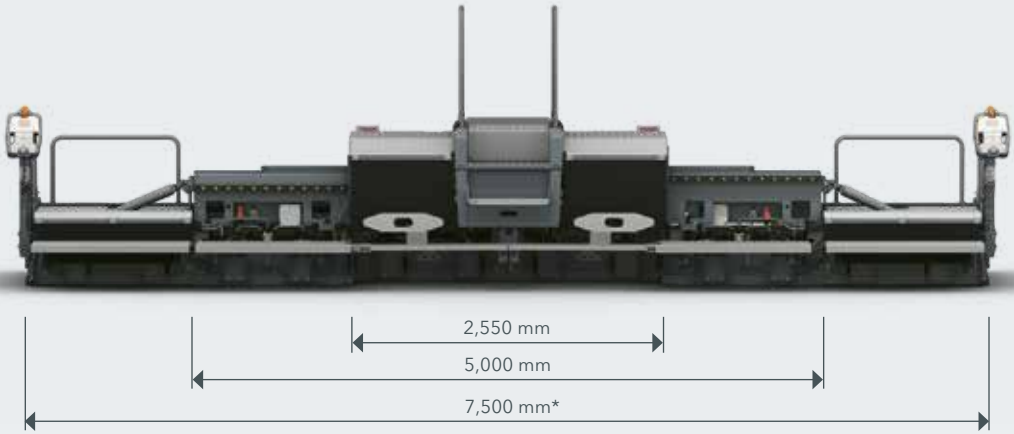
Built up to maximum pave width

Pave widths

- > Infinitely variable range from 2.55 m to 5 m
- > Larger widths if bolt-on extensions up to a maximum of 7.5 m\* are added

Compacting system

- > AB 500 TV with tamper and vibrators



AB 500

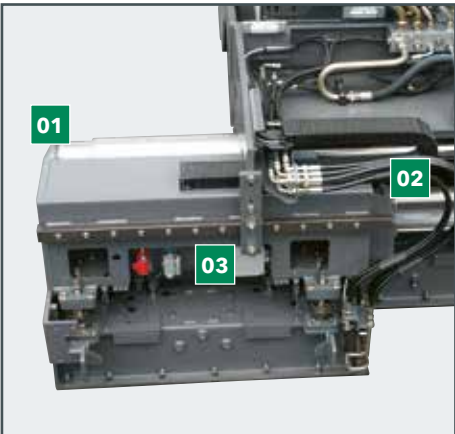
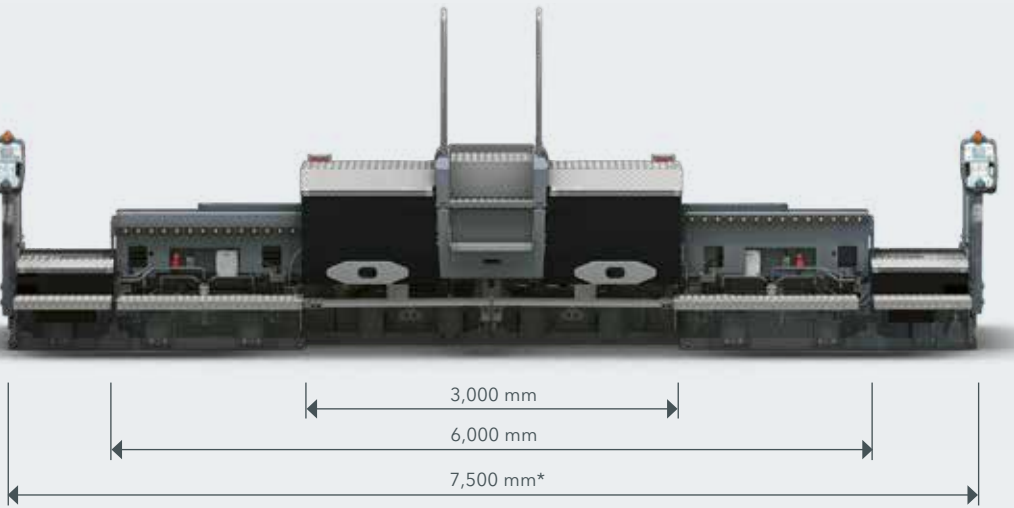
Built up to maximum pave width

Pave widths

- > Infinitely variable range from 3 m to 6 m
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Compacting system

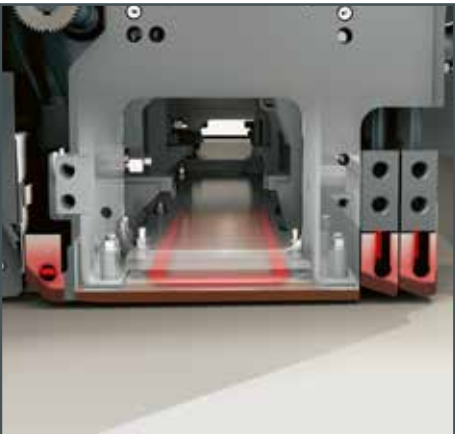
- > AB 600 TV with tamper and vibrators



VÖGELE single-tube telescoping system

The hydraulic extensions of all VÖGELE extending screeds slide in and out smoothly on a single-tube telescoping system. The three-section telescoping tube is amply dimensioned (diameter 150/170/190 mm) and perfectly stabilised. Even with the screed set to its maximum width, each tube section is extended by no more than half.

The 3-point suspension of the screed's hydraulic extensions prevents the screed's telescoping system being affected by the torsional forces exerted on these units by the pressure of the mix. Forces are absorbed at the telescoping tube's point of attachment (01), the bearing of the fixed guide tube (02) and a torque restraint system (03), ensuring that the screed's hydraulic extensions extend and retract smoothly, with no jamming or catching.



Innovative screed heating

In order to optimise compaction performance and to produce a smooth surface structure, all compacting elements are heated across full screed width.

Screed plates are fitted as standard with heating elements which distribute heat throughout the plates. The plates are thoroughly insulated on top so that 100% of the heat is directed to where it is needed: the area of contact with the mix. Tamper bar and pressure bars are fitted with heating rods for quick and uniform heating from the inside. Sophisticated control technology is installed to allow automated management of screed heating.

\*Pave widths of 7 m and 7.5 m are possible with extra equipment (available upon request).



# 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.



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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.

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### 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.

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### 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)

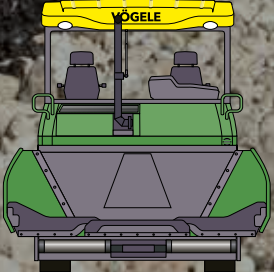
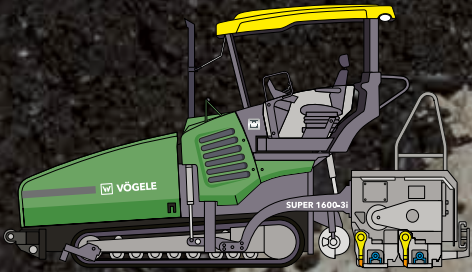
\* Neither WITOS nor JD Link are currently available in all countries.  
Please contact the subsidiary or dealer responsible for you for more information about this.

# ALL THE FACTS AT A GLANCE

SUPER 1600-3(i) Tracked Paver



## TECHNICAL DATA



## SUPER 1600-3(i)

- > Maximum pave width: 7.5 m\*
- > Maximum laydown rate: 600 t/h
- > Layer thickness: max. 30 cm
- > Transport width: 2.55 m

\*Pave widths of 7 m and 7.5 m are possible with extra equipment (available upon request).





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For more information, scan the QR code.