

Tracked Paver

# SUPER 1900-5 X



# PERFECT IN ALL CLASSES

The right paver for every job

VÖGELE's seamless product range is considered unique in the industry. Whether the project is a service road or a motorway, an airfield or a race track, a new construction or a resurfacing job, whether it involves thick or thin courses or the hot or cold method – customers will find that our range includes the right paver for every paving task. The X-Tier pavers of the "Dash 5" generation from VÖGELE set the scene for future technical developments.

## VÖGELE PRODUCT RANGE

### MINI CLASS

- > Pave width up to 3.5 m
- > Laydown rate up to 300 t/h

### COMPACT CLASS

- > Pave width up to 5 m
- > Laydown rate up to 350 t/h

### UNIVERSAL CLASS

- > Pave width up to 10 m
- > Laydown rate up to 700 t/h

### HIGHWAY CLASS

- > Pave width up to 18 m
- > Laydown rate up to 1,800 t/h

### SPECIAL CLASS

- > SprayJet
- > InLine Pave

### POWERFEEDER

- > MT 3000-5 Standard
- > MT 3000-5 Offset



#### LEADING EDGE

Premium edge with innovative technology

# "DASH 5" EQUIPPED FOR THE FUTURE

We deliberately skipped a generation for the new "Dash 5" series of pavers and put all the features of our pavers on the test bench. The aim was to develop a generation of pavers which have maximum output whilst keeping pace with the breakneck speed of technical progress.

To be perfectly set up for both the present and the future requires a flexible, modular system which can accommodate requirements as they come up. We have taken a fresh look at our pavers and identified four central areas which have been, still are and will continue to be key for the development of our machines.



### User-friendly Operation

We always start with activities in the field, evaluating the experience of operating teams and integrating that knowledge in our new developments. We claim to deliver safety, maximum user-friendliness, self-explanatory handling and practical ergonomic features.



### Process Automation

Technology leadership is part of VÖGELE's DNA: We develop our products innovatively on the basis of decades of experience, so that they meet global standards and keep on setting new benchmarks. Automating processes with assistance and control systems assures precision, efficiency and process stability.



### Cost-efficiency

Time, money and cost-efficiency are key factors in the success of road construction. We keep an eye on our customers' absolute costs and find solutions to reduce setup times, improve logistics and increase machine availability.



### Sustainability

Environmental issues and legislation are challenges we are prepared to face. We use the latest drive systems and an efficient paver design to reduce fuel and noise emissions whilst maintaining output at the same level.

# SUMMARY OF HIGHLIGHTS

## Perfectly equipped

### DRIVE

**01 Drive Concept**

- > Powerful and efficient John Deere engine.
- > ECO mode reduces consumption as well as noise and exhaust emissions.

### SUSTAINABILITY | GREEN SOLUTION

**02 VÖGELE EcoPlus**

- > Low-emissions package to reduce fuel consumption and noise emissions even further.

### MATERIAL MANAGEMENT

**03 Receipt of Mix**

- > PaveDock Assistant to improve communication during transfer of material.
- > PaveDock push-rollers for safe feeding with material without jolts.
- > Large material hopper with a capacity of 14 tonnes for simple feeding with material.

**04 Flow of Material**

- > Combined control of conveyor and auger for better paving quality and reduced fuel consumption.
- > Heated prevents material sticking and ensures a perfect flow of material and surface quality, especially with materials which are difficult to process.
- > Power Tunnel for an optimum head of material in front of the screen when paving variable widths without bolt-on extensions.

### OPERATION

**05 ErgoPlus 5 Operating System**

- > Next step in the evolution of VÖGELE's tried and tested operating concept.
- > Better overview, greater convenience and improved ergonomics.
- > Somewhere to store smart devices.
- > Equipped for the future with ErgoPlus 5 Premium Touch.

**06 Convenience Package**

- > Maximises operating convenience for paver operators. The Convenience Package delivers convenience for both paver and screed operators.
- > Paver Access Control makes the paver ready for operation and transport more quickly.

**07 Light Package and Light Package Plus**

- > Greater convenience and safety in the dark.
- > Greater visibility for a more reliable work process.
- > Integrated lighting reduces setup time during night working.

### PAVING

**08 Wide Range of Applications**

- > Wide range of potential applications at pave widths up to 11.5 m.
- > All screeds available with high-compaction technology.

**09 New-Generation Screeds**

- > Tamper Dual Shift for rapid tamper stroke adjustment.
- > Simplified attachment of bolt-on extensions.
- > Optimised screed heating for quicker heating-up.

### AUTOMATION

**10 Pave Assist Plus**

- > Pave Assist Plus functions for safe, rapid repositioning on the job site and for saving individual paving programs.

**11 AutoTrac**

- > Automatic steering and width control from VÖGELE.

**12 Auto Grade Plus**

- > Tried and tested "Dash 5"-generation system for automated grade and slope control delivers a perfect paving result.
- > Particularly simple and user-friendly operation.
- > Wide selection of sensors facilitates flexible application.



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





01



02



03



04



05



06



07

- 01 Pioneering, functional product design.
- 02 ErgoPlus 5 with numerous convenience and automatic functions.
- 03 Pave Assist Plus for more convenient repositioning on the job site.
- 04 Light Package Plus for optimum illumination of the operating area of the screed.

- 05 PaveDock Assistant simplifies communication during transfer of material.
- 06 Well-organised, ergonomic workstation.
- 07 Safe, convenient step onto screed.

# THE NEW GENERATION

SUPER 1900-5 X-Tier - the powerful all-rounder

With the SUPER 1900-5 X-Tier tracked paver, VÖGELE is taking two steps into the future at once: new operator ergonomics, more automated processes and faster setup times, together with reduced noise and exhaust emissions.

The SUPER 1900-5 X has a mighty power pack from John Deere with an output of 149 kW at 2,000 rpm. This engine is characterised by economical consumption and comparatively low noise emissions.

The ErgoPlus 5 operating system makes the SUPER 1900-5 X simple and intuitive to operate. ErgoPlus 5 is characterised by a good overview, great convenience and perfect ergonomics. The optional touch display with expanded functionalities means the operating system is already fit for the future.

Numerous features automate the processes around paving and make it even more convenient and efficient.

Paver Access Control makes the paver ready for operation, Pave Assist Plus ensures consistent paving quality and PaveDock facilitates transfer of material to the paver. The Power Tunnel optimises the head of mix in front of the screed and Logistic Plus simplifies the handling of screed and auger extensions.

The sum of further developments and new features make the SUPER 1900-5 X a paver to equip our customers perfectly for the future. In addition to its technical features, the paver is also forward-looking in terms of its economical consumption and low emissions.



# POWERFUL DRIVE TECHNOLOGY

High output with low consumption

The drive technology of the SUPER 1900-5 X-Tier includes the powerful John Deere engine, the large cooler assembly and the splitter gearbox flanged directly to the engine.

The powerful six-cylinder diesel engine from John Deere delivers 149 kW at 2,000 rpm. Fuel-saving ECO mode which delivers 163 kW at 1,700 rpm is adequate for many applications. This considerably reduces consumption as well as noise and exhaust emissions.

The large cooler assembly ensures that the drive unit always achieves maximum power. With innovative air routing and a variable-speed fan, engine temperatures are always maintained within the optimum range, perfectly equipping the machine for every climate.

The splitter gearbox supplies all hydraulic consumers directly with hydraulic oil. The advantage is that all pumps and valves are centrally located, making them easily accessible. Even the powerful generator for screed heating is flanged directly onto the splitter gearbox, its integrated oil cooling making it completely maintenance-free.

The modern John Deere engine means that you now get full machine service from a single source - the WIRTGEN GROUP.

**149 kW at 2,000 rpm**  
is the diesel engine output

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

**400-litre**  
capacity fuel tank



- = coolant cooler
- = intercooler
- = hydraulic oil cooler



### Exhaust emissions after-treatment, alternative fuels (HVO) and VÖGELE EcoPlus

On engines of exhaust emission Stage V, 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 1900-5 X is also approved for use with alternative fuels such as HVO\*. VÖGELE EcoPlus furthermore significantly reduces emissions. This package is capable of reducing consumption and CO<sub>2</sub> emissions by up to 25% and likewise reduces noise.

\*Hydrogenated vegetable oils

# VÖGELE ECOPLUS

Lower consumption and fewer emissions



Not content with simply ensuring that our road pavers conform to the applicable emissions directives, we like to go much further. The machine concept for the “Dash 5” generation is based on environmentally engineering principles. An important component of this is VÖGELE EcoPlus to reduce consumption and emissions. The package consists of various features which

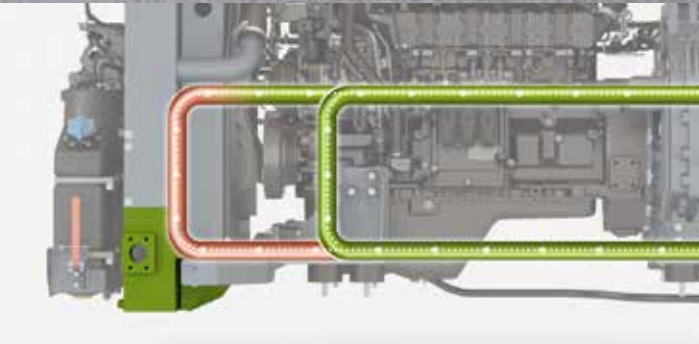
reduce machine consumption. Depending on the application and utilization of the paver, VÖGELE EcoPlus can save up to 25% fuel. This not only means considerable financial savings for companies, but also a positive impact on the environment. That’s because every litre of fuel saved reduces carbon dioxide (CO<sub>2</sub>) emissions.



**Splitter gearbox with hydraulic pump disengagement feature**  
When the paver is at a standstill, all the hydraulic pumps for “drive”, “transfer” and “compact” are switched off automatically. The result: reduced fuel consumption.



**Energy-optimized tamper drive**  
The tamper is driven by a variable displacement pump. This always delivers only the exact amount of oil needed for the current tamper speed. 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.



**Media temperature-managed fan control**  
Media temperature-managed fan control adapts fan output automatically to suit the consumer being supplied. In other words, the temperatures of hydraulic fluid, engine charge air, cooling water and the ambient air are controlled within a closed control circuit and cooler output is adapted accordingly.

# EFFICIENT TRANSMISSION OF TRACTIVE POWER

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

- > The hydraulic systems for the drive, for material handling and distribution and for the compacting systems are arranged in independent closed circuits and achieve the best possible degree of efficiency as a result.
- > Long crawler tracks with a large footprint deliver maximum tractive effort, ensuring a constant forward speed even when operating on difficult terrain.
- > Separate electronically-controlled drives in both crawler tracks ensure positive tracking when moving straight and accurate cornering.

## Hydraulic drives

directly in the sprockets of the crawler tracks

## Consistent positive tracking

when moving straight as a result of separate electronically-controlled drives

## Long crawler tracks

for maximum traction



# PAVEDOCK ASSISTANT AND PAVEDOCK

For a reliable process when transferring material to the paver

### PaveDock Assistant

Among other factors, a constant feed rate is essential for high-quality, even paving. PaveDock Assistant was developed specifically for this purpose. This assistance system handles communication between the paver operator and the truck driver.

The core of this communication system is formed by the signal lights mounted on the right and left of the paver's hardtop and the associated controls on the paver operator's ErgoPlus 5 console. The signal lights have two clear signals - green for "Dock" and red for "Stop".

### PaveDock Assistant

facilitates communication during transfer of material to the paver

### PaveDock sprung push-rollers

guarantee reliable feeding with material without jolts



01

- 01 Two signals which are easy to see, even from a distance: a red and a green diamond.
- 02 Controls for the signal lights on the paver operator's console.
- 03 To make it easier for the material truck to dock, the rubber baffles to the left and right of the hopper front have reflective markings.



02



03

### PaveDock

PaveDock ensures higher pave quality. The sprung push-rollers efficiently absorb jolts from material trucks so that these are not transmitted to the paver and thus to the asphalt.

The push-rollers also oscillate, which even allows trucks to be pushed on bends.



Truck push-rollers which are especially wide and oscillating allow convenient, jolt-free feeding of material by material trucks, even on bends. The push-rollers can be adjusted fully in the longitudinal direction to adapt them to suit the geometry of the material truck.

# PERFECT MATERIAL MANAGEMENT FOR PERFECT PAVING QUALITY

A continuous flow of material is key to ensuring uninterrupted, high-quality paving, which is why we attach such importance to perfect material management when designing our pavers.

All our development efforts focus on simple operation and the best possible overview for the paving team. Like all VÖGELE pavers, the SUPER 1900-5 X, too, is clean, reliable and quick to feed.

Deep and wide container walls and hard-wearing container front skirts make it easy for the truck to load the material. For easier docking of the mix truck, the container front protection skirts have reflective markings on the left and right.

The hydraulic hopper front flap ensures that the complete quantity of mix reaches the material conveying process. The large-volume receiving container offers a capacity of 14 tonnes. This means that even in difficult feeding situations, such as under bridges, sufficient mix is available for paving.



- 01 Proportionally controlled mix feed with permanent quantity monitoring ensures uniform, precisely fitting paving material.
- 02 Optimised blades of the spreading auger ensure perfect distribution of the mix even with large working widths.
- 03 The optional Power Tunnel is ideal for changing installation widths.



The transverse material feed in front of the screed ensures an optimum supply of mix in every paving situation. Powerful individual hydraulic drives of the scraper belt and spreading auger enable high paving capacities of up to 900 tonnes per hour. The control signals of the scraper belt and distribution auger are combined so that a uniform material flow and a consistent mix feed are guaranteed. This not only avoids peak loads, but also reduces fuel consumption.

**Power Tunnel**  
The Power Tunnel is perfect for changing widths when paving without widening. The hydraulically adjustable limiting plates automatically adjust to the screed width and ensure optimum mix placement in front of the screed, even when the screed extensions are fully extended. This increases the paving quality in terms of evenness and pre-compaction.

## VÖGELE > GOOD TO KNOW

### Heated auger plough

The heated plough on the centre bearing block of the spreading auger effectively prevents mix from sticking during paving and makes an important contribution to perfect paving results. In addition, the plough's geometry distributes the mix evenly to both sides. The heated plough particularly facilitates the laying of low-temperature asphalt (NTA).



# PAVE ASSIST PLUS

Paving and repositioning made easy

**Pave Assist Plus makes life easier for site teams by allowing paving-related settings to be saved and then called up again. This assistance system also automates repositioning of the paver between two sections of the job site.**

Pave Assist Plus is especially helpful if the paver needs frequent repositioning around the job site. Just press the Execute button once to raise the auger, the hydraulic hopper front and the deflectors in front of the crawler tracks to their topmost position. The screed and the tow point rams are moved into Travel position. In addition, the screed is hydraulically locked in Travel position. The conveyors are reversed briefly to stop material dropping off during travel. The paver is now ready to travel.

After repositioning, press the Execute button again to return everything to the previously stored operating position; this ensures that no settings are lost when switching between Pave and Travel modes. It also effectively prevents any damage to the paver.

All the settings are saved and can be filed in the form of a paving program. This saves an enormous amount of time, greatly enhancing both safety and consistent paving quality.



- The advantages of Pave Assist Plus:
- > Save time by making automatic settings to the paver when starting work or switching job site
  - > Simple to save and call up all paving-related parameters
  - > Consistently high quality and process reliability
  - > Paver travels rapidly and safely between sections of the job site



Pave Assist Plus likewise effectively eliminates typical damage from travel - to the auger or to the deflectors in front of the crawler tracks, for example. The saved paver and screed values can be activated as presets if required. They are easy to modify and thus adapt to suit paving conditions. Pave Assist Plus also has factory presets for paving a base course, binder course and surface course.

# ERGOPLUS 5 OPERATING CONCEPT

Simple, user-friendly and ergonomic

An innovative machine with the latest technology also includes an advanced operating concept. This must be easy and intuitive to use and at the same time ergonomic. Operating concept ErgoPlus 5 puts the operator at the centre. In this way, we ensure that they always have full control over the machine and the construction project. This starts with the ergonomic workplace on the operating platform, and extends to the intuitive and simple operation of the operator and screed console, right through to the integrated levelling system Auto Grade Plus.

ErgoPlus 5 supports the operator, is self-explanatory and is easy to learn.



**ErgoPlus 5 Paver operator's console**  
Next evolutionary step of the proven operating concept of VÖGELE

**ErgoPlus 5 operator platform**  
Better overview und more comfort and ergonomics

**Auto Grade Plus and Grade Assist**  
Grade Assist improved system for and slope control

**Grade Assist**  
automated grade

Compared to its predecessor, ErgoPlus 5 offers even greater ease of use and improved ergonomics. For example, the low profile driver's control console allows for more legroom and a more comfortable seating position.



- 01 ErgoPlus 5 Driver and screed control consoles**
  - > ErgoPlus 5 Driver control console with lower overall height
  - > SmartWheel for steering, fine steering/steering trim via setpoint generator
  - > Configurable in two expansion stages: with and without touch display on the left side
- 02 Auto Grade Plus and Grade Assist**
  - > Automated grade and slope control for a perfect paving result
  - > Wide range of sensors enables flexible use
  - > Particularly simple and user-friendly operation
  - > Precision paving of predefined cross-sections
  - > Constant monitoring of entered installation parameters
- 03 ErgoPlus 5 operator platform**
  - > Perfect view of all important points
  - > Ergonomic seating position due to individual adjustment options
  - > Fixed roof for optimum weather protection
  - > Convenient and secure access

# ERGOPLUS 5 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. Even with ErgoPlus 5, the function keys can be felt and operated with gloves. Once a button is pressed, off you go. That is due to the "Touch and Work" principle. The desired function is therefore carried out directly - without further confirmation.

Storage options and a 24 V socket for charging mobile devices have also been thought of.

The operation of individual functions such as steering, fine steering, PaveDock Assistant and Pave Assist Plus is considerably simplified and logical to use. The SUPER 1900-5 X is steered with an easy-to-grip SmartWheel. The fine steering is done via a potentiometer. With this, the paver can be finely controlled with extreme precision.

- 01

**Propulsion and steering**  
All functions for moving the paver are grouped here, for example, the main travel switch, the operating mode selector and the setpoint generator for the pave speed. For extended bends with a constant radius, the desired curve can be preselected on the right-hand side of the paver operator's console using the arrow keys for fine steering. The paver automatically follows the desired curve as long as this function is activated.
- 02

**Material management and material containers**  
The material manager function group contains the controls for the hopper walls and for the scraper belt and distribution auger. The operating elements for the material container are also located here.

- 03

**Screed**  
All operating elements of the paving screed are combined in this function group.
- 04

**Display**  
The high-contrast colour display provides for brilliant readability even in poor lighting conditions. Vital 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

**ErgoPlus 5 Premium Touch**  
The ErgoPlus 5 driver's control console is optionally available with additional Premium Touch. The Premium Touch enables an even easier overview and operation of various functions. With Premium Touch, the machine is ideally prepared for digital road construction. The process automation solution Grade Assist and the temperature monitoring of the RoadScan are already clearly presented on the large touch display and can be conveniently operated there.



## VÖGELE > GOOD TO KNOW

### ErgoPlus 5 operator's console standard

The standard version has additional storage options instead of the touch display.



# ERGOPLUS 5 SCREED CONSOLE

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 5, the screed operator masters the paving process perfectly, as all functions are easy to understand and clearly arranged.

Push-buttons are provided for regularly required functions operated from the screed operator's console. These are watertight and enclosed in a perceptibly raised ring, 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 operator's console, too.



- 01** The screed control panel can be connected during operation. With Quick Connect, no more cables are needed.
- 02** The rear of the screed control panel has a powerful LED to illuminate the side shield area.

## Quick Connect

No connection of a connecting cable necessary, simple and process-safe connection possible during ongoing paving operation

## Simpler handling

The flat design allows for easier stowage of the screed control panel



### 01 Display of the screed operator's console

The display of the screed operator's 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 operator's console. 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 width adjustment of the paving screed is now carried out fatigue-free by means of the easy-grip SmartWheel. This can be done in two speeds: Slow, for precise screed width control along an edge, or fast, for rapid extension or retraction of the screed.

## VÖGELE > GOOD TO KNOW

### Hydraulic height adjustment of the side shield

The hydraulically adjustable side plates are now operated via one remote control per side. Process-relevant functions can also be perfectly controlled via this remote control.



# AUTO GRADE PLUS AND GRADE ASSIST

Systems for automated grade and slope control

**The Auto Grade Plus system  
for automated grade and slope control**

The Auto Grade Plus system for automated grade and slope control is an in-house development by JOSEPH VÖGELE AG based on years of experience in grade and slope control technology. Ease of operation, precision and reliability allow any grade and slope control task to be managed perfectly.

The fully integrated system is perfectly coordinated with the machine technology of VÖGELE pavers with the ErgoPlus 5 operating concept. For instance, all the wiring and connections are integrated in the tractor unit and screed, virtually eliminating any risk of damage to these components.

It goes without saying that VÖGELE offers a particularly broad and practical selection of sensors to allow the Auto Grade Plus

system for automated grade and slope control to be deployed with flexibility. Whether the job is to build or resurface car parks, roundabouts or trunk roads, VÖGELE has the right sensor for every job site situation.

Sensors are quick and easy to change, as Auto Grade Plus automatically detects every sensor connected and makes configuration easier for the user.

**Grade Assist (option)**

Grade Assist additionally automates the paving of crown and transverse profiles. The parameters for specified sections are entered on the ErgoPlus 5 operator's consoles and can be monitored accordingly during paving. Grade Assist thus supports the paver operator in paving roads of predefined profiles with precision.



- 01 The LED displays fitted to the sensor, the so-called LED sighting crosses, provide continuous clearly visible feedback to the screed operator to indicate whether actual values are consistent with nominal values.
- 02 With the Grade Assist option, the parameters for paving crown and transverse pavement profiles can be preset and monitored on the screed operator's console and on the touch display of the paver operator's console.
- 03 The two-way split display provides every 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, nominal and actual values or the 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  $\pm 10\%$ .

**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. This allows it to copy 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. Three multi-cell sonic sensors can be attached to its variable 5 to 13 m long carrier.

# AUTOTRAC AUTOMATIC STEERING AND WIDTH CONTROL

**AutoTrac automatic steering and width control allows direction and screed width to be controlled automatically on the basis of a physical reference. With AutoTrac, the paver operator can cope with straight sections, bends and circuits - and operation is convenient, even in poor visibility.**

AutoTrac automatic steering and width control supports the paver operator by accurately adapting pave width to suit conditions. It controls the paver accurate to the centimetre using a reference track created beforehand. This means the ideal operating width of the paver can always be used. The result is an increase in process efficiency and thus in cost efficiency.

A high degree of complexity is always involved in controlling a paver manually to ensure that the paving line is accurate. Automatic steering prevents faulty areas. The paver operator can concentrate fully on monitoring the paving process and keep an eye on the job site surroundings as a whole. The functions of AutoTrac can be combined with one another.



## 01 Screed Width Control

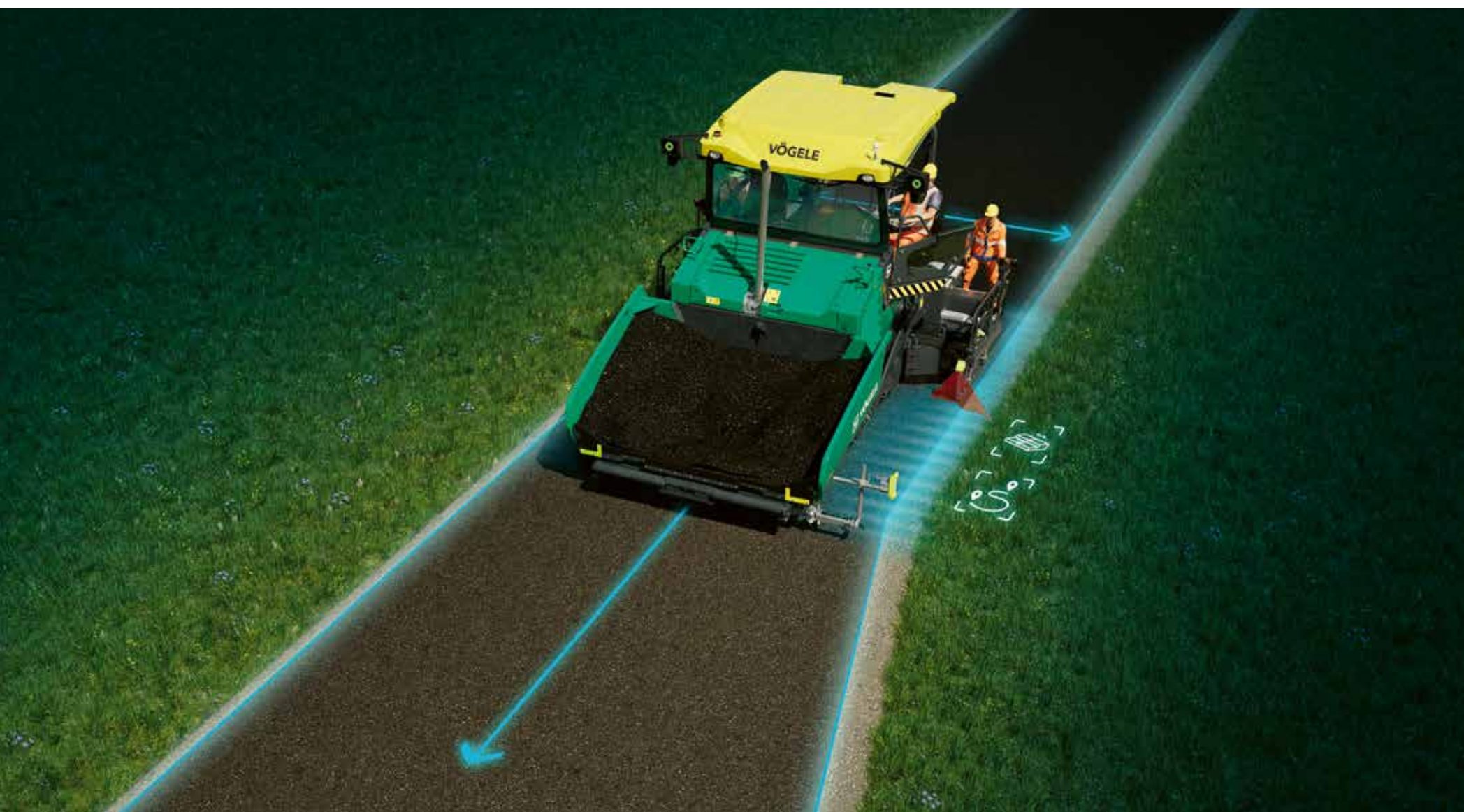
The Screed Width Control function maintains a consistent pave width. If one extending unit is extended or retracted, the opposite extending unit moves with it in the same way, thus keeping the overall width of the screed the same.

## 02 Edge Detection

For paving edges and kerbs, the Edge Detection edge tracker follows rising and falling edges using the laser sensor on the front of the side plate. It can detect edges measuring 2 cm high or more within a 70° measuring range. As soon as Edge Detection is activated, the sensor scans the area ahead of the side plate on the selected side of the screed. The extending unit of the screed adapts pave width accurately and fully automatically to suit the line of the edge.

## 03 Edge Control

The Edge Control tensioned wire tracker facilitates paving along a tensioned wire. Supported by a multi-cell sonic sensor, the extending unit of the screed automatically adapts to suit the line of a tensioned wire.





01



02



03



04



05



06

## ERGOPLUS 5 OPERATOR PLATFORM

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. This is why VÖGELE relies on the paver operator's stand with ErgoPlus 5, too. The operator's ErgoPlus 5 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 5 system proves that innovative technology can be controlled ergonomically, efficiently, intuitively and conveniently.

### 01 Comfortable operator's platform

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

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

- > The seats, which swing out to the sides, and the streamlined design of the operator's platform ensure maximum visibility of the auger tunnel, allowing 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, as well as the screed consoles can now be adjusted even more easily to personal needs.

### 03 Hardtop provides excellent protection

- > The modern, glass fibre-reinforced hardtop with two extending sunshades provides ideal protection - come rain or shine.

### 04 Everything in its place

- > The paver operator's platform, 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. In addition, the optionally available tool holder ensures order and safety on the screed.

### 05 Safe and comfortable ascent

- > The walkway and comfortable middle ascent on the screed ensure safe and convenient access to the operator's platform.

### 06 Perfect access to the maintenance points

- > The highly accessible maintenance points on the paver operator's platform make servicing simple and convenient. The large flaps make maintenance much easier. The tanks for fuel, AdBlue and detergent are located under the left-hand service flap, together with the battery.

# COMFORT PACKAGE WITH PAVER ACCESS CONTROL (PAC)

Comfortable and quickly ready for use

The comfort package makes the operation of the “Dash 5” road pavers even more comfortable, safe and ergonomic than ever before. The comfort package includes the PAC comfort access, Ergonomic Plus driver’s seats, luggage nets and sound insulation in the roof as well as cup holders.

The Paver Access Control (PAC) convenience access included in the package makes daily commissioning and decommissioning of the paver faster, easier and safer.

All necessary functions can be controlled safely and conveniently from the ground via the Paver Access Control Unit integrated in the screed.



- 01 Luggage nets in the roof and bottle holders on the seats keep the operating platform tidier. The insulation in the canopy reduces heat build-up and noise.
- 02 The comfortable and ergonomic Ergonomic Plus driver's seat has adjustable seat heating and can be rotated ± 20°.

When it is dark, the first thing to do is switch on the paver’s lighting. After opening the cover, the diesel engine can be started, the roof erected and the screed lowered for a comfortable climb.

The roof is automatically locked and the machine control is booted. This ensures safety and saves time, as the paver operator cannot forget to lock the screed and can start heating the screed immediately after stepping onto the operating platform.

### Paver Access Control Unit



- 01 Ignition on and booting the machine control
- 02 Starting and stopping the diesel engine
- 03 Folding up and down of the roof including locking mechanism
- 04 Raising and lowering of the screed including locking device
- 05 Switching the lighting on/off

### Paver Access Control (PAC)

For convenient and safe access to the paver

### Hydraulically adjustable canopy

with integrated luggage nets and sound insulation

### Operator's seats Ergonomic Plus

with adjustable seat heating and 20° rotatable

# LIGHT PACKAGE AND LIGHT PACKAGE PLUS

More comfort in the dark

### Light Package

The Light Package makes working in the dark much easier and safer. Good illumination of the workplace reduces the risk of operating errors and accidents.

The Light Package includes the LED lighting of the operator's platform, the two point rams and three freely positionable LED headlights. Also included is a 230 volt Schuko socket and the electrical connections for the light balloons.

### Light Package Plus

The Light Package Plus provides even better illumination in the area of the paving screed. Powerful LEDs are integrated into a specially developed canopy extension that completely illuminates the entire working area up to a pave width of 10 metres.

The luminous efficacy of the LED spotlights is comparable to that of the light balloon, but they have the great advantage that assembly and separate transport are not required. This saves time and money. In addition, the lighting integrated in the canopy is always with you, robust and protected from wind and rain.

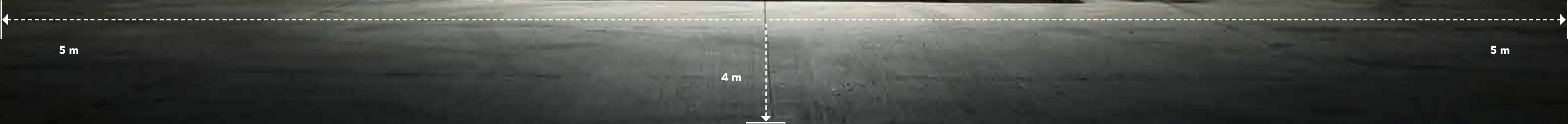


01 Perfect illumination of the working area  
02 Perfect illumination of the operator's platform  
03 Optimum illumination of the tow point rams

With the Light Package Plus, pave widths of up to 10 m and the area 4 m behind the screed are optimally illuminated.



- 01 Integrated LED lighting**  
The LED lighting integrated in the canopy and the transverse guide of the control panel optimally illuminate the driver's workplace and all service points accessible from the platform; this makes working in the dark more comfortable and safer.
- 02 Illumination of the tow point rams**  
The illumination of the tow point rams makes it easier to check their position in the dark.
- 03 Perfectly illuminated access**  
In conjunction with the Comfort Plus Package, activating the comfort access from the screed activates the light in the canopy and optimally illuminates the access to the operator's platform.



# VÖGELE SCREEDS

### Extending screeds

The extending screeds AB 500 and AB 600 are particularly variable and thus ideally suited for changing paving widths and uneven roadway courses. Their sturdy single-tube telescoping system permits top-precision screed-width control. Even with the screed set to its maximum width, the telescoping tubes are extended by no more than half, thus providing for superb screed stability and zero flexing.

### Fixed-width screeds

Fixed-width screeds from VÖGELE deliver absolutely high-quality, perfectly even results. They show their strengths wherever large pave widths have to be handled, when laying down thick layers (e.g. crushed-stone bases) and where high degrees of precompaction have to be achieved. The SUPER 1900-5 X can be combined with the fixed-width screeds SB 300 and SB 300 HD.

### New heating system

for fast and homogeneous heating of the compaction units

### Higher efficiency

through improved insulation of the screed heating

### 24 volt socket

for external light sources and charging smart devices



### Dual power shift tamper

The dual power shift tamper is available for extending screeds as well as fixed-width screeds in any width configuration and compaction variant. With this hydraulic tamper stroke adjustment, the tamper stroke can be adjusted quickly and easily. Two options are available: 2 and 4 mm or 4 and 8 mm tamper stroke. The benefits are optimum paving quality due to the correct adjustment to the respective layer thickness, reduced set-up times due to the hydraulic changeover and an extended range of paving applications.

### Measurement of screed width

The extending screeds and the hydraulic bolt-on extensions of the rigid screeds can be equipped with a screed width measurement. The exact position of the hydraulic extensions is recorded by means of an integrated path measurement in the hydraulic cylinders. Calibration of the system is no longer necessary. The current width is displayed on both the paver operator's and the screed paver operator's consoles.

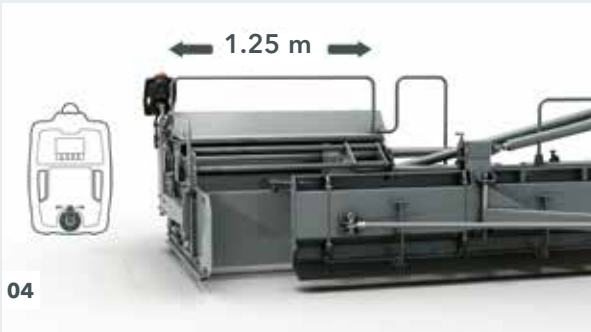
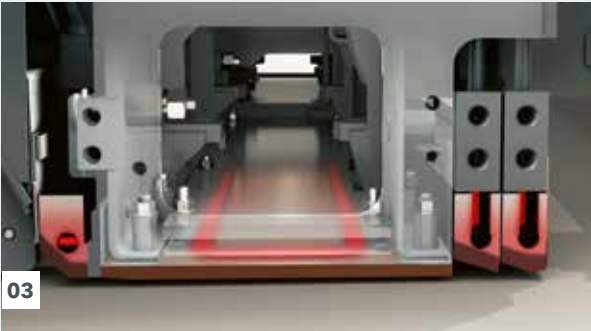
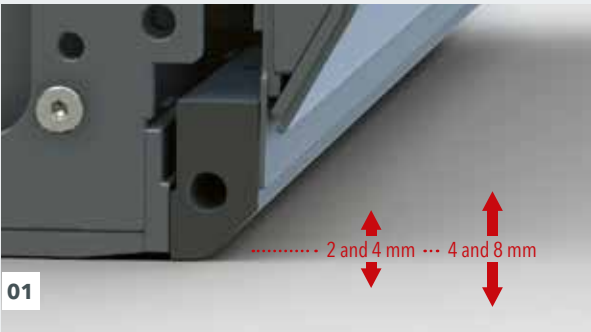
### Innovative electric screed heating

In order to optimise compaction and produce a smooth surface texture, all compacting elements are heated across full screed width. The screed plates are heated as standard with large-area heating elements. They are thoroughly insulated on top so that the heat is directed 100% to where it is needed: the areas of contact with the mix. Tamper bar and pressure bar(s) are fitted with heating rods for quick and uniform heating from inside. In combination with the latest control technology, this means the entire heating capacity can be controlled automatically.

### Great flexibility for fixed-width screeds

High flexibility during installation is offered by the two fixed-width screeds with the extra-wide hydraulic bolt-on extensions. On each side of the screed, the pave width can be adjusted by SmartWheel 1.25 m, thus hydraulically varying the total working width by 2.5 m.

## VÖGELE > GOOD TO KNOW



# EXTENDING SCREEDS



## AB 500

**Pave widths**

- > Infinitely variable range from 2.55 m to 5 m
- > Larger widths if bolt-on extensions up to a maximum of 8.75 m are added

**Compacting systems**

- > AB 500 TV with tamper and vibrators
- > AB 500 TP1 with tamper and 1 pressure bar
- > AB 500 TP2 with tamper and 2 pressure bars
- > AB 500 TP2 Plus with tamper and 2 pressure bars for maximum precompaction



## AB 600

**Pave widths**

- > Infinitely variable range from 3 m to 6 m
- > Larger widths if bolt-on extensions up to a maximum of 9.75 m are added

**Compacting systems**

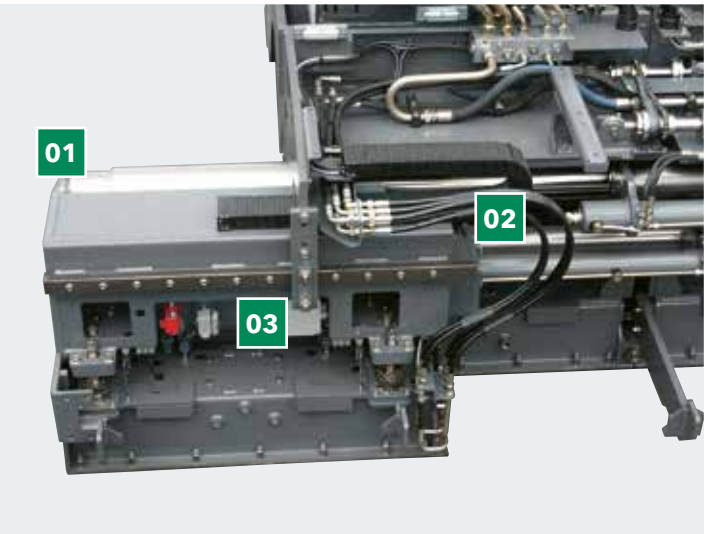
- > AB 600 TV with tamper and vibrators
- > AB 600 TP1 with tamper and 1 pressure bar
- > AB 600 TP2 with tamper and 2 pressure bars
- > AB 600 TP2 Plus with tamper and 2 pressure bars for maximum precompaction



**Logistic Plus: better logistics, shorter setup times**

Logistic Plus allows all the components for the auger and screed, including accessories and fastenings, to be transported safely and tidily. Logistic Plus improves logistics, as well as reducing the set-up time for the paver, and consequently contributes to cost efficiency.

- > Shorter set-up times when attaching bolt-on extensions
- > Process-reliable, rapid attachment of bolt-on extensions due to predefined positioning
- > No dismantling of the covers on bolt-on extensions
- > Fewer sources of errors mean higher paving quality



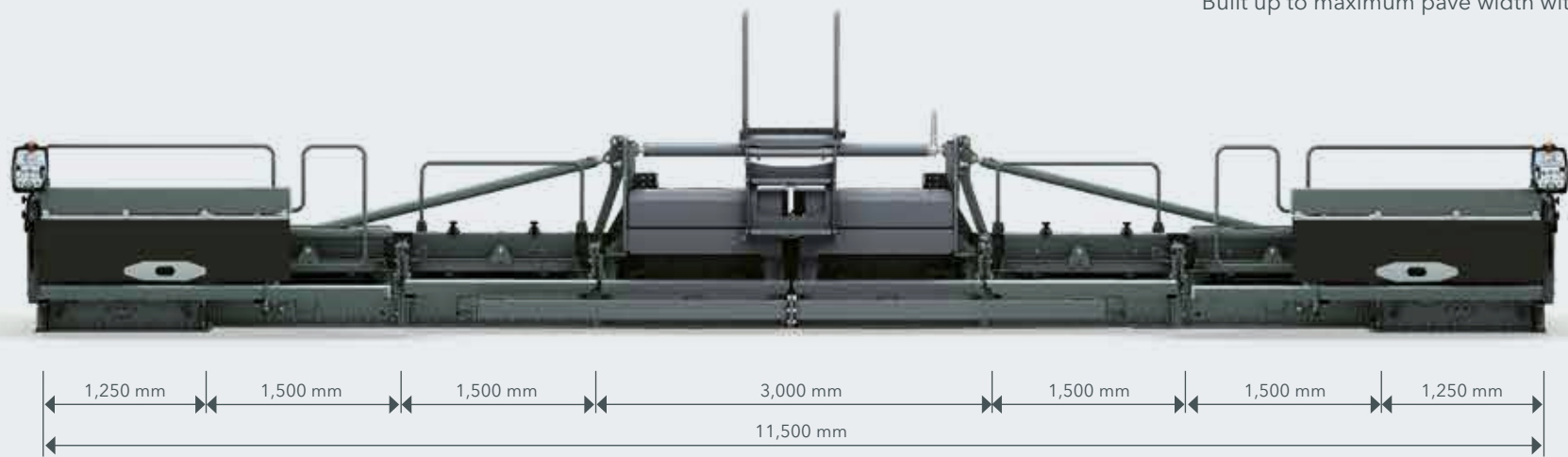
**VÖGELE Single-tube telescoping system**

The hydraulic extensions are adjusted in all VÖGELE extending screeds with a single-tube telescoping guide. The three-part, large-diameter telescoping tube (150/170/190 mm diameter) is optimally stabilised even at maximum extension, as even then it is still half clamped. Thanks to the 3-point suspension of the screed's extending units, torsional forces exerted to these units by pressure of the mix cannot affect the screed's telescopic guidance system. Forces are absorbed at the telescoping tube's (1) outer point of attachment to the extending unit, by a fixed guide tube (2) and a sliding restraint system (3). Thanks to this design, the screed's extending units move in and out smoothly, nothing can jam or get stuck.

# FIXED-WIDTH SCREEDS

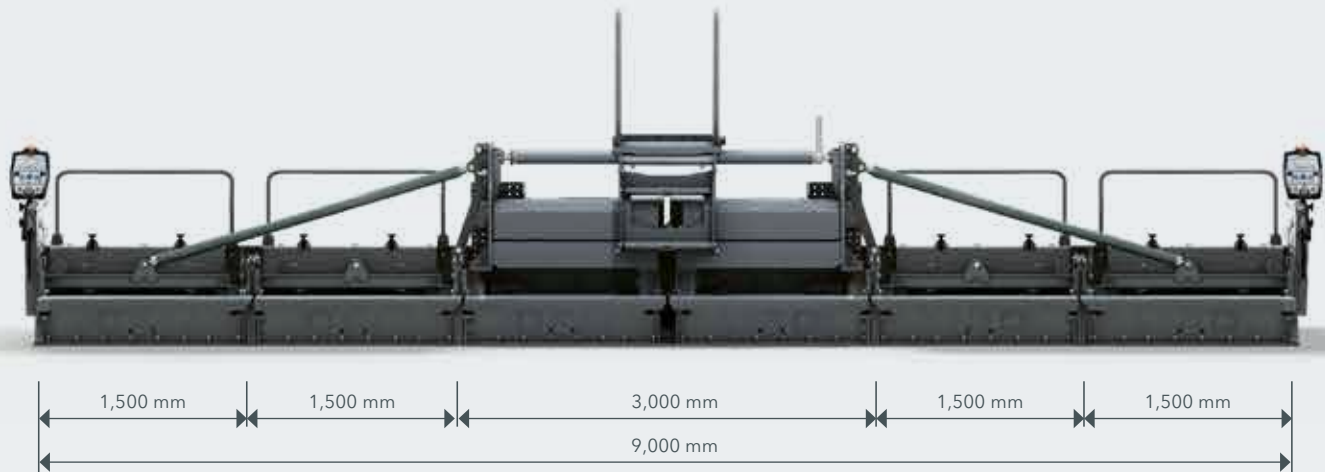
## SB 300 TV

Built up to maximum pave width with hydraulic bolt-on extensions



## 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 11.5 m are added
- > Thanks to 125 cm hydraulic bolt-on extensions, pave width is infinitely variable within a range of 2.5 m

### Compacting systems

- > SB 300 TV with tamper and vibration
- > SB 300 TP1 with tamper and one pressure bar
- > SB 300 TP2 with tamper and two pressure bars

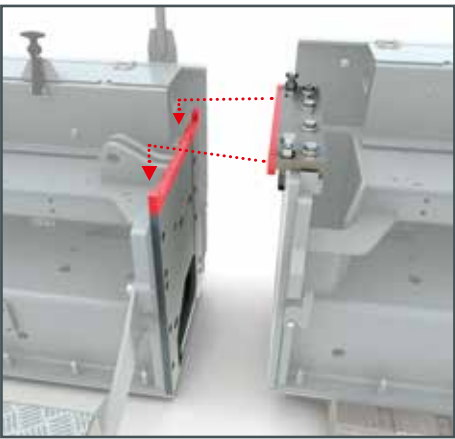
## SB 300 HD

### Pave widths

- > Basic width 3 m. Larger widths if bolt-on extensions up to a maximum of 9 m are added
- > Specially for roadbase applications and therefore without screed heating

### Compacting systems

- > SB 300 HD TV with tamper and vibration



### Convenient and efficient: practical installation aid

To ensure that the SB screeds are quickly ready for use, even when paving large widths, the attachment of bolt-on extensions has been greatly simplified: a newly developed installation aid helps the operator mount the extensions correctly. As a result, the individual bolt-on extensions can be adjusted quickly and easily, considerably reducing set-up times.

# YOUR 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

Construction machines with leading technology and perfected telematics solutions work hand-in-hand in the WIRTGEN GROUP. The Operations Center\* - the digital platform for process, machine and service optimisation - enables you to not only simplify maintenance planning for your machines, but also to increase your productivity and cost-effectiveness.  
> [www.wirtgen-group.com/telematics](http://www.wirtgen-group.com/telematics)

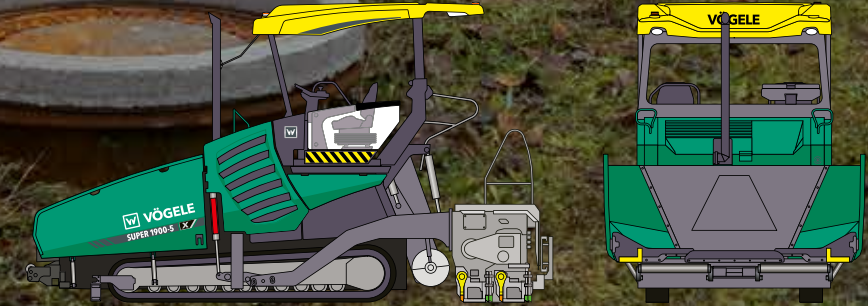
\*The John Deere Operations Center™ (formerly WITOS) is currently not available in all countries. Please consult your responsible subsidiary or dealer if you have any questions.

# TECHNICAL DATA AT A GLANCE

SUPER 1900-5 X Tracked paver



## TECHNICAL DATA



## SUPER 1900-5 X

- > Maximum pave width: 11.5 m
- > Maximum laydown rate: 900 t/h
- > Layer thickness: max. 40 cm
- > Transport width: 2.55 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)



For more information, scan the QR code.