

Tracked Paver

SUPER 2100-3 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 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

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

> VÖGELE EcoPlus low-emissions package for a low carbon footprint significantly reduces fuel consumption and noise levels.

MATERIAL MANAGEMENT

03 Receipt of mix

> Large material hopper with a capacity of 15 tonnes ensures optimum feeding with mix.
> The material hopper and chassis of the SUPER 2100-3 Li have been specially adapted to the feed vehicles which are customary in China. Any mix lorry can dock without difficulty, thanks to its great length and low feed height.

04 Large push-rollers

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

OPERATION

05 ErgoPlus 3 operating system

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

06 Niveltronic Plus - the System for Automated Grade and Slope Control

> Fully-integrated system perfectly matched to the machine technology of VÖGELE road pavers.
> Wide range of sensors for flexible use in all fields of application.

VERSATILITY

07 Wide range of applications

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

08 Screed options

> Can be combined with the AB 600 Extending Screed and the SB 300 and SB 300 HD Fixed-Width Screeds.



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POWERFUL, ECONOMICAL AND QUIET

The SUPER 2100-3 Li unites modern design, added comfort and convenience as well as high performance with minimum consumption.

When developing the SUPER 2100-3 Li, the VÖGELE engineers' focus was above all on eco-friendly, economical and ergonomic aspects.

The powerful 6-cylinder diesel engine rated at 186 kW is the driving force behind this Highway Class paver. The VÖGELE EcoPlus Package for a low carbon footprint, for instance, significantly reduces fuel consumption and noise levels.

The popular ErgoPlus 3 operating system, too, has been provided with a number of additional ergonomic and functional features. The paver operator's console now comes with a large colour display ensuring brilliant readability even in poor lighting conditions.

All of these features make this Highway Class machine a true SUPER paver.

01 ErgoPlus 3 operating system with numerous convenient and automatic functions.
02 Tracked paver with a large range of applications.
03 Large material hopper specially adapted to the feed vehicles used as standard in China.

04 Safe and convenient step.
05 VÖGELE EcoPlus low-emissions package significantly reduces fuel consumption and noise levels.
06 The paver operator's platform ensures maximum visibility.



MODERN DRIVE TECHNOLOGY

Efficiency, performance and low consumption

Three main components define the power unit of a SUPER 2100-3 Li: 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 VÖGELE power pack is its diesel engine. The six-cylinder engine delivers 186 kW at 2,000 rpm, though ECO mode is sufficient for many applications. And even then, the SUPER 2100-3 Li still has a full 187 kW at its disposal. Moreover, the machine generates even less noise when running at just 1,700 rpm.

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 continuously 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.

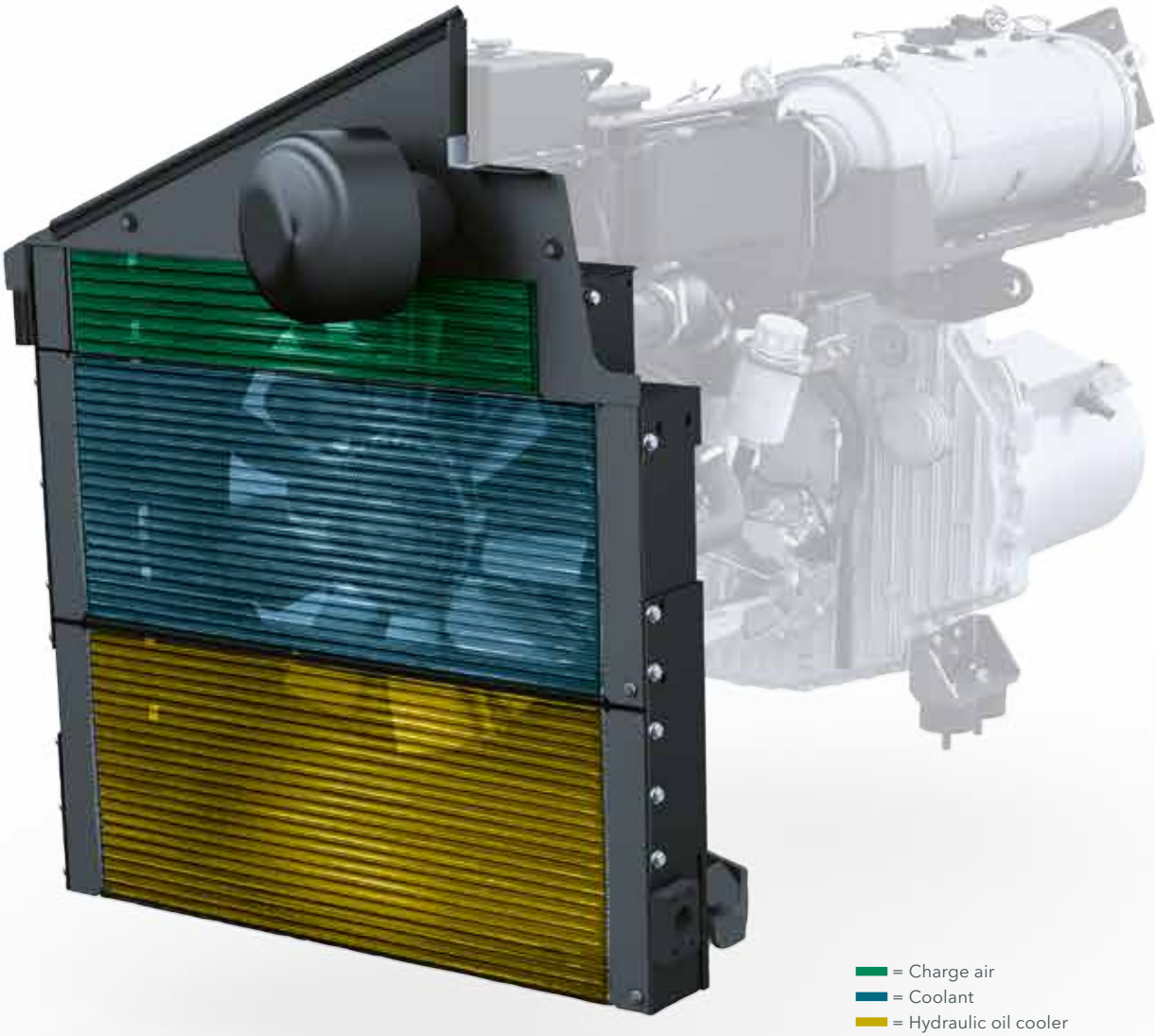
All hydraulic consumers are directly supplied with hydraulic oil via the splitter gearbox. The advantage is that all hydraulic pumps and valves are centrally located, making them easily accessible for servicing. Even the powerful generator for screed heating is flanged directly onto the splitter gearbox;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

186 kW
diesel engine output

ECO mode at 1,700 rpm
reduces operating costs

380 litres
Capacity fuel tank

Generator
is oil-cooled and powerful



The large cooler assembly is made up of three parts. It ensures that 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 2100-3 Li complies with the “National Environment Protection Standards of the People’s Republic of China HJ 1014-2020”.

VÖGELE ECOPLUS

Less is more

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 (CO₂) emissions.



25% fuel saving



25% less CO₂ emitted



Less noise



VÖGELE > GOOD TO KNOW



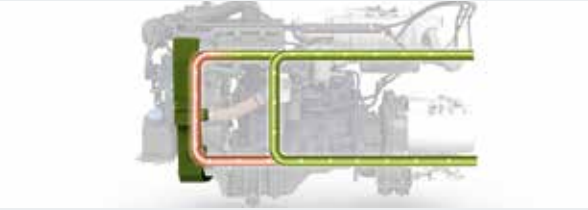
The technical innovations



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.

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

Powerful separate drives
fitted into the sprockets

Positive tracking when moving straight-ahead
thanks to electronic control for each crawler track



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.

The material hopper and chassis of the SUPER 2100-3 Li have been specially adapted to the feed vehicles which are customary in China. Any mix lorry can dock onto the SUPER 2100-3 Li without difficulty, thanks to its great length and low feed height. What's 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 even in curves. 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 2100-3 Li thanks to its length of 2.42 m and low feed height of just 57 cm.
- > The large material hopper holding 15 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 is possible thanks to low material hopper, wide hopper sides and sturdy rubber baffles fitted to the hopper front.



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



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- 01 Powerful, separate hydraulic drives installed for conveyors and augers, permit high laydown rates up to 1,100 t per hour.
- 02 Large-diameter auger blades (420 mm) for excellent spreading of mix, even when paving in large widths.
- 03 Hydraulic adjustment of the augers in height, complete with bearing boxes and limiting plates for the auger tunnel, allows the paver to be moved on the job site without a need for conversion, a benefit that saves time and money.



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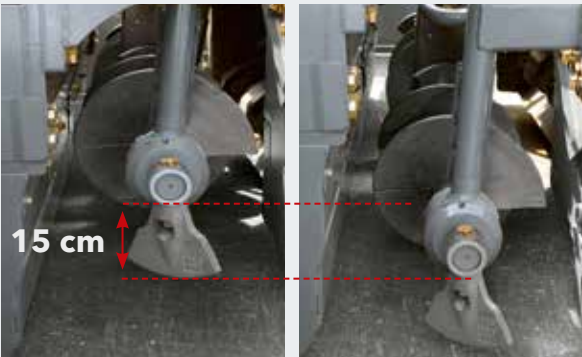
03

The augers of the SUPER 2100-3 Li are hydraulically infinitely variable in height up to 15 cm, even while paving. This provides for quick and easy adaptation to the desired layer thickness across the full pave width.

VÖGELE > GOOD TO KNOW

Adjustable auger height

The height of the augers 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.



15 cm



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.

The ErgoPlus 3 operating concept accordingly focuses on the operator. With VÖGELE pavers, the user consequently retains full control over the machine and the construction project.

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 platform, 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

Full control for the machine operator

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 Automatic Functions

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

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 Automatic Functions
- 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 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.



01 Steering at a pre-selected steering angle
02 Choice of engine speed ranges

03 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 Steering
- 03 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)

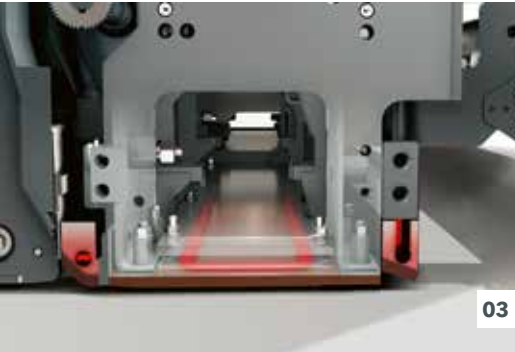
When the paver is in the transport position, the screed is secured by locking bolts. When the screed is raised, the two locking bolts can be retracted by the hydraulic screed lock at the touch of a button.

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

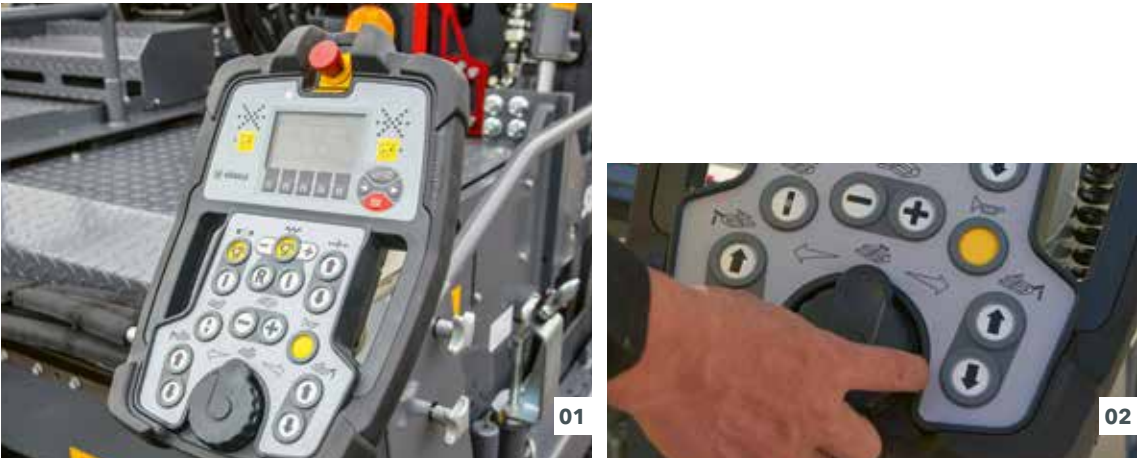


ERGOPLUS 3

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.



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- 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.



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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

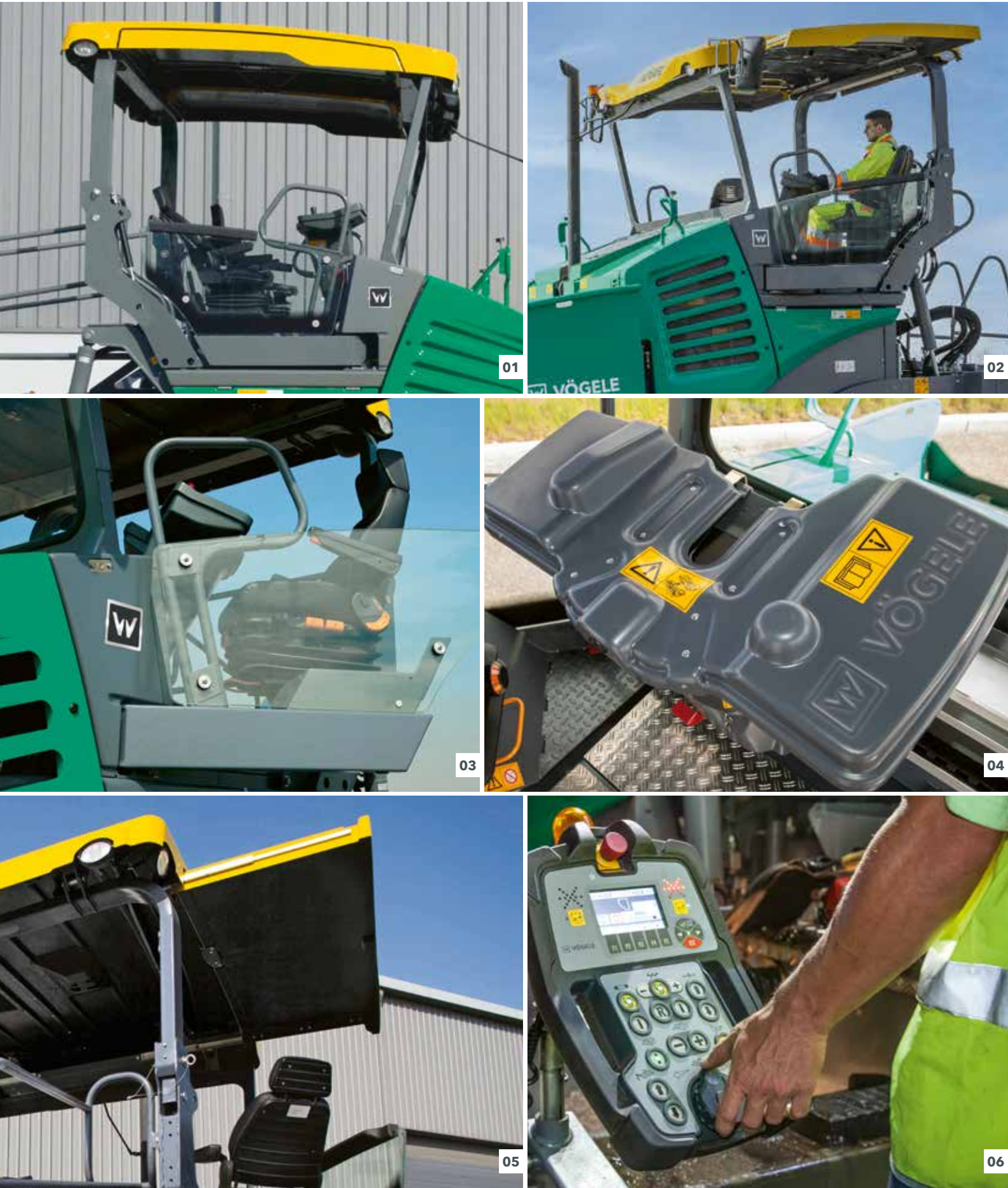
The variable mechanical grade sensor can be equipped with skis for referencing from the ground in 30 cm, 1 m and 2 m lengths.

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.



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. It allows the paver operator to closely monitor the paver's feed with mix and the process of paving.
- 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.
- 03 Working comfort**

> 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.
- 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 Hardtop gives excellent protection**

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

SCREED OPTIONS FOR ALL PAVING APPLICATIONS

The SUPER 2100-3 Li stands out through superb adaptability, a feature making it perfectly suited to most varied paving tasks. Whether it comes to building large traffic areas, highway or motorway – this paver is ideal for any kind of major scale projects.

A number of screed options is available for the SUPER 2100-3 Li to combine with.

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

VÖGELE AB 600 Extending Screed is the preferred choice on all those jobs where pave width varies and prime pavement quality counts. Thanks to their sturdy single-tube telescoping system, these screeds can be set quickly and accurately to any pave width desired. Effective sound insulation in the extending screeds reduces noise levels on the job site. In combination with the low-noise tractor unit, these screeds are hence ideally suited for use even in noise sensitive areas.

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 2100-3 Li can be combined with the fixed-width screeds SB 300 and SB 300 HD.



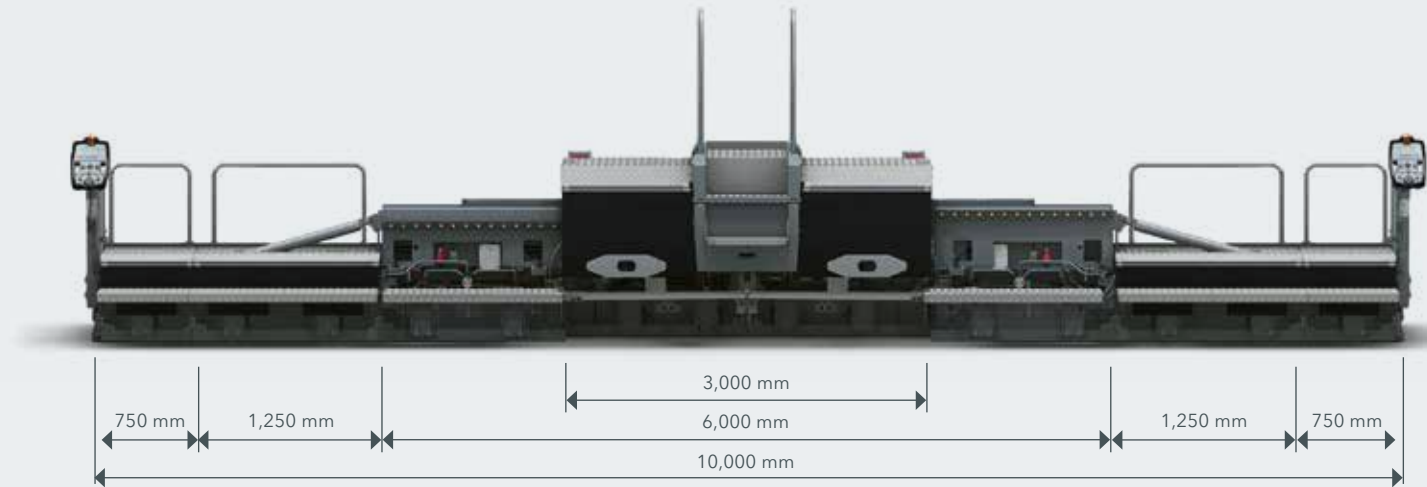
AB 600

Pave widths

- > Infinitely variable range from 3 m to 6 m
- > Larger widths if bolt-on extensions up to a maximum of 10 m are added

Compacting systems

- > AB 600 TV with tamper and vibrators



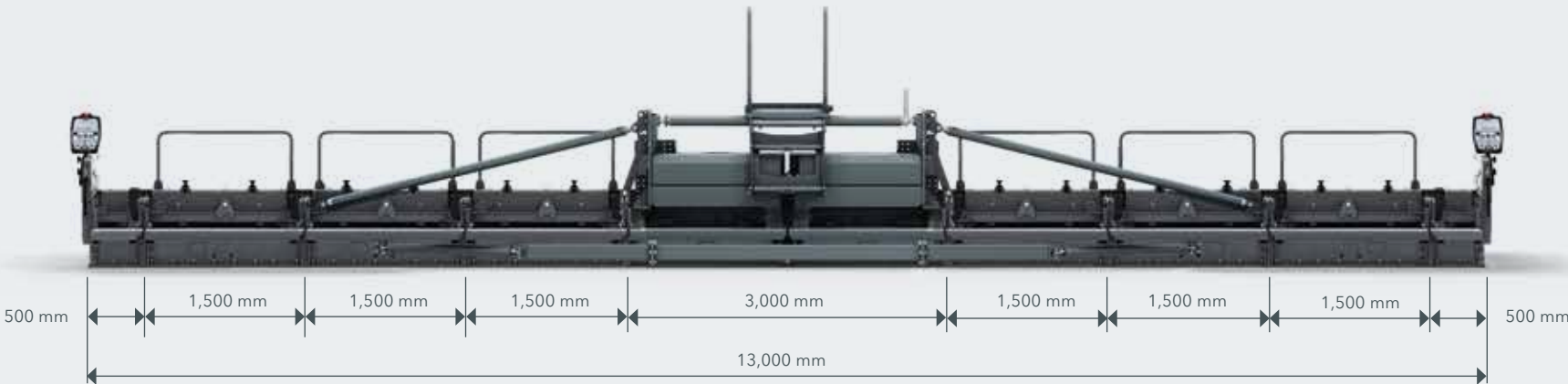
SB 300

Pave widths

- > Basic width 3 m. Larger widths if bolt-on extensions up to a maximum of 13 m are added
- > Thanks to hydraulic bolt-on extensions (125 cm), users can also benefit from the advantages of VÖGELE extending screed technology when operating with fixed-width screeds

Compacting systems

- > SB 300 TV with tamper and vibrators



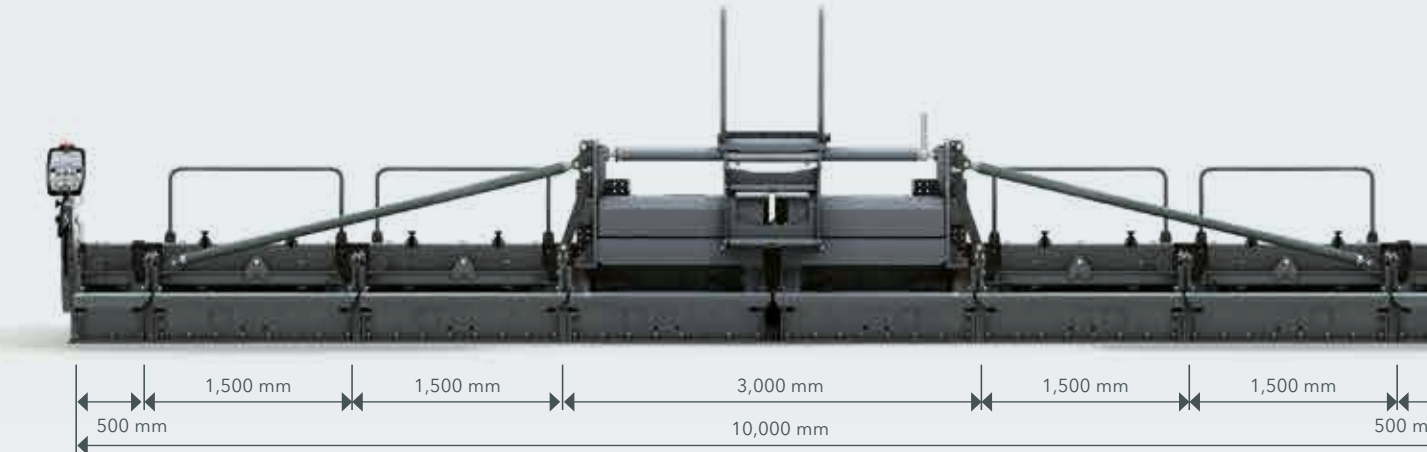
SB 300 HD

Pave widths

- > Basic width 3 m. Larger widths if bolt-on extensions up to a maximum of 10 m are added
- > Specially for roadbase applications and therefore without screed heating

Compacting systems

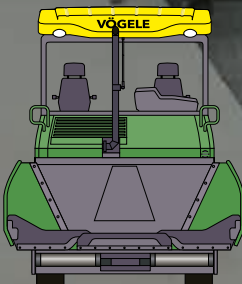
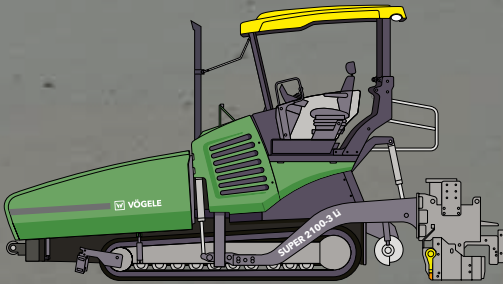
- > SB 300 HD T with tamper



ALL THE FACTS AT A GLANCE

SUPER 2100-3 Li Tracked Paver

TECHNICAL DATA



SUPER 2100-3 Li

- > Maximum pave width: 13 m
- > Maximum laydown rate 1,100 t/h
- > Layer thickness up to 40 cm (SB 300)
- > Transport width 3 m

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



Spare Parts

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

> parts.wirtgen-group.com



Training

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

> www.wirtgen-group.com/training



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

* 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.



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