

Tracked Paver

SUPER 1900-3

P-Tier



P

PERFECT IN ALL CLASSES

The right paver for every job

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



VÖGELE PRODUCT RANGE

MINI CLASS

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

COMPACT CLASS

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

UNIVERSAL CLASS

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

HIGHWAY CLASS

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

SPECIAL CLASS

- > SprayJet
- > InLine Pave

POWERFEEDER

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

HIGHLIGHTS

Perfectly equipped

DRIVE

01 Drive concept

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

02 VÖGELE EcoPlus

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

MATERIAL MANAGEMENT

03 Optimal mix feed

> Optimal mix feed thanks to the large 15 tonnes capacity material hopper.
> Perfect paving quality thanks to perfect material management.

04 Large push-rollers

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

VERSATILITY

05 Wide range of applications

> Tracked Universal Class paver with a wide range of applications and pave widths up to 10 m.

06 The right screed for every application

> AB 600 Extending Screed for asphalt job sites guaranteeing high quality and high evenness.

OPERATION

07 ErgoPlus 3 operating system

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

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

> The Niveltronic Plus automated grade and slope control system is characterised by easy operation, precision and reliability, to execute all levelling tasks perfectly.
> User-friendly operation and monitoring of all Niveltronic Plus functions.





01



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SUPER 1900-3 - the high-grade asphalt specialist

Powerful, efficient and economical

The SUPER 1900-3 points the way toward the future of road construction in India. The machine features a unique design as well as ergonomic operating comfort and high performance with minimum consumption.

When developing this Universal Class P-Tier road paver, a special focus was on ergonomic, economic and ecological aspects. The VÖGELE EcoPlus package for a low carbon footprint, for instance, significantly reduces both fuel consumption and noise levels.

The VÖGELE ErgoPlus 3 operating system has been supplemented by numerous ergonomic and functional features. The paver operator's console, for example, comes with a large colour display which provides brilliant readability even in poor lighting conditions. With a maximum pave width of 10 m the VÖGELE paver handles motorway projects, potent roads or the surfacing of large areas with the same high perfection.



03



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01 Large material hopper specially adapted to the feed vehicles for large road building projects.
02 Powerful separate drives fitted into the sprockets.
03 ErgoPlus 3 operating system with numerous convenient and automatic functions.

04 All functions are easily comprehensible and all controls are clearly arranged.
05 The paver operator's platform ensures maximum visibility.
06 The paver has a consistent maintenance concept with identical service intervals.



MODERN DRIVE TECHNOLOGY

Efficiency, performance and low consumption

VÖGELE’s modern drive concept is perfectly adapted to the large range of different uses of the multifunctional SUPER 1900-3. Delivering a powerful drive when maximum performance is called for, this Universal Class paver is exceedingly flexible in everyday operation.

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

The SUPER 1900-3 is powered by a high-performance 6-cylinder diesel engine rated at 145 kW. The modern engine complies with the CEV 5 Standard.

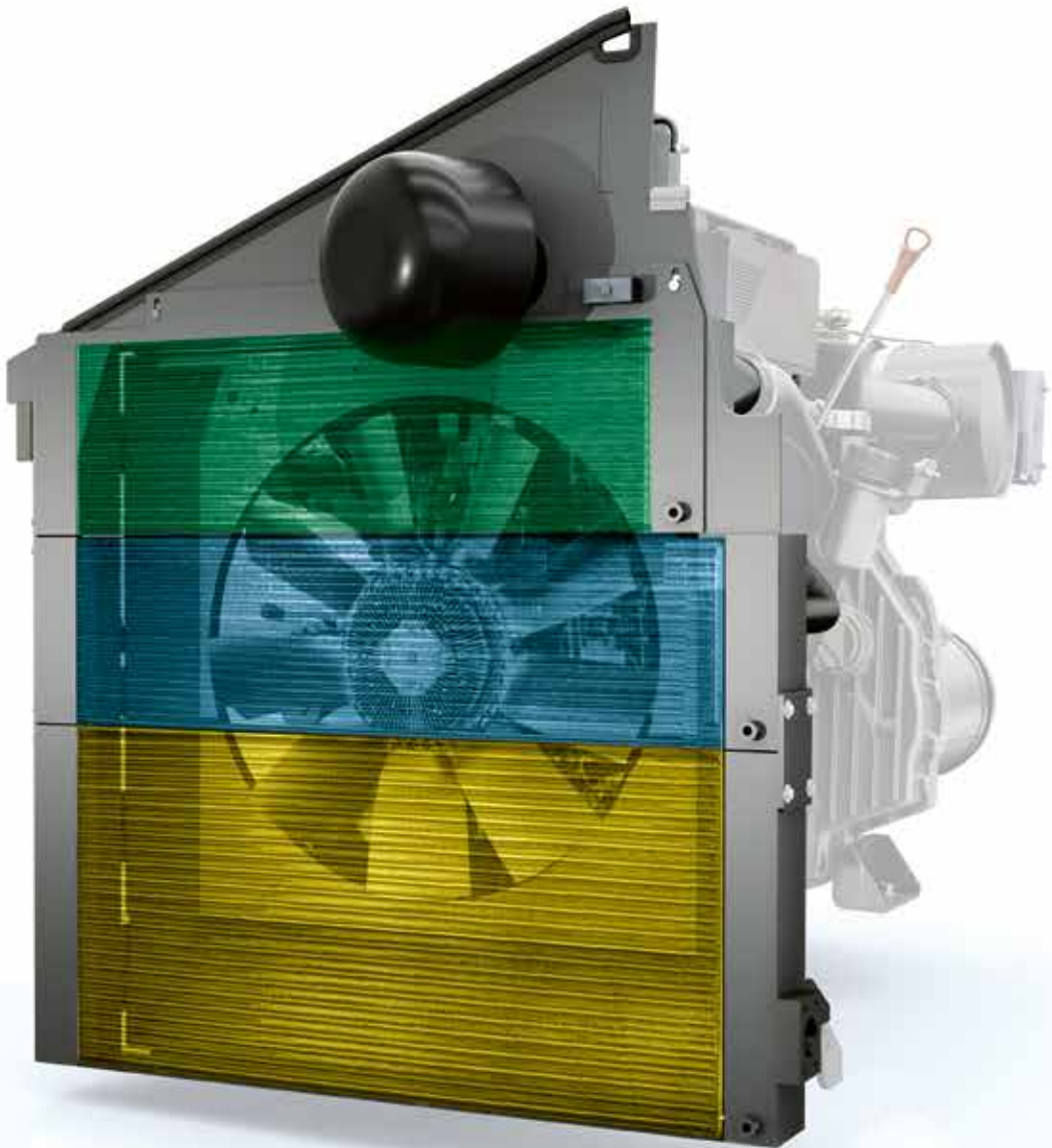
The engine features an ECO mode that reduces the nominal speed from 2,000 rpm to 1,700 rpm. This ECO mode reduces operating costs and noise emissions significantly. A low carbon footprint is guarantees to contribute to a better environment.

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

Powerful engine
developing 145 kW

ECO mode at 1,700 rpm
cuts operating costs

Large cooler assembly
for perfect cooling at low noise levels



■ = Hydraulic oil
■ = Coolant
■ = Charge air

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

A constantly high cooling capacity provides for ideal temperatures inside the hydraulic system and top performance of all drive units, even when working under full load, in all climate zones the world over.

VÖGELE > GOOD TO KNOW

Exhaust emissions after-treatment

Exhaust emissions after-treatment is provided by the diesel oxidation catalyst (DOC), a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) catalytic converter. As a result, the engine complies the stringent CEV 5 emissions standard.

VÖGELE ECOPLUS

Less is more

It goes without saying that our road pavers conform to the applicable emissions directives, 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



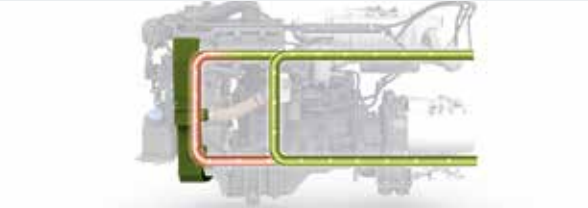
The technical innovations



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.

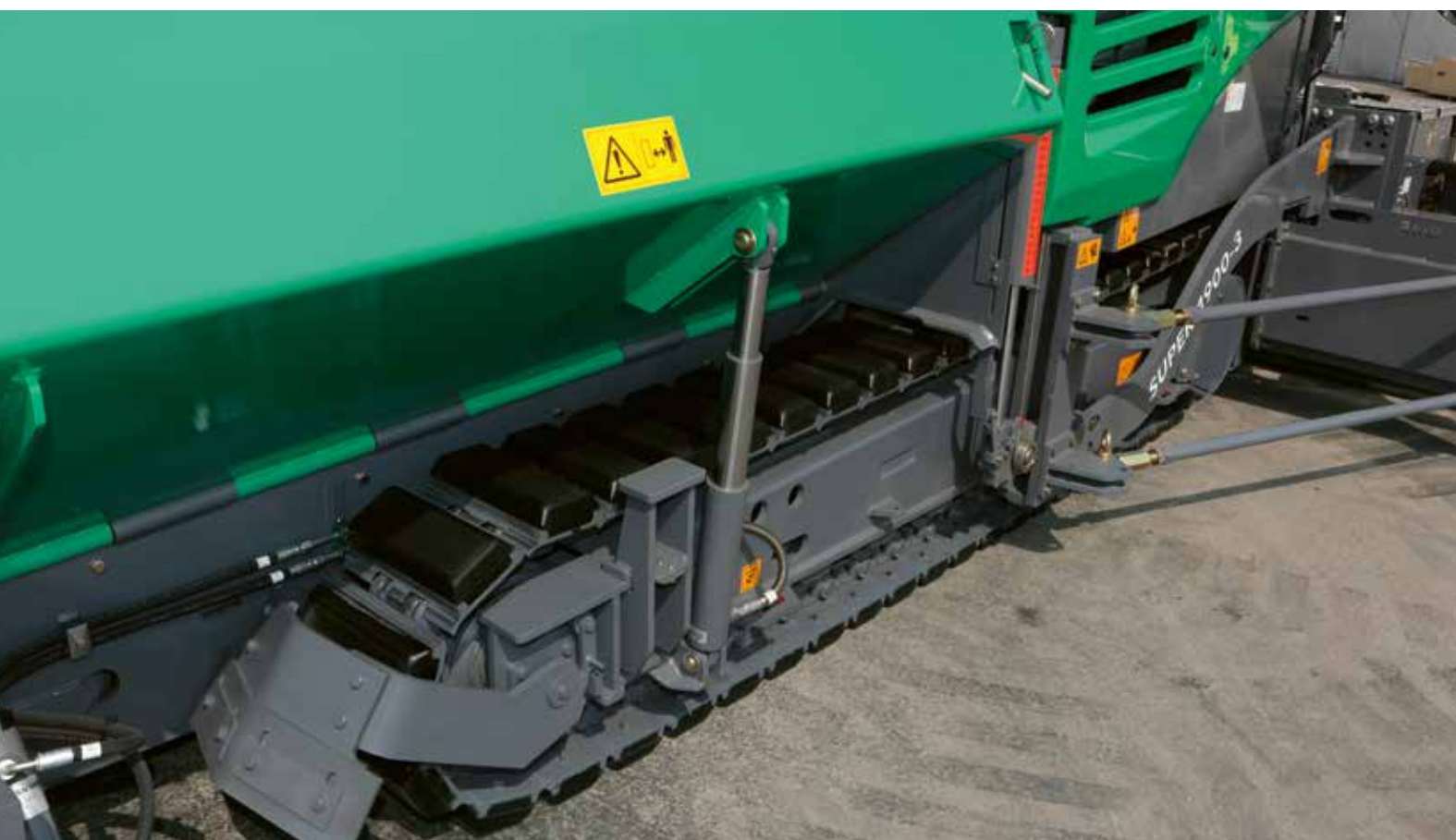
- > Thanks to powerful separate drives fitted into the sprockets for crawler tracks, engine output is translated into pave speed with no loss of power.
- > Long crawler tracks with large footprints provide for maximum tractive effort, allowing the paver to progress well at a constant speed even when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

Powerful separate drives

fitted into the sprockets

Positive tracking when moving straight-ahead

thanks to electronic control for each crawler track



PERFECT PAVING QUALITY THANKS TO PERFECT MATERIAL MANAGEMENT

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

The material hopper and chassis of the SUPER 1900-3 have been specially adapted to the feed vehicles which are customary for large road building projects. Any mix lorry can dock onto the SUPER 1900-3 without difficulty, thanks to its great length and low feed height. What is more, the wide, oscillating push-rollers can be moved 150 mm and 75 mm forward for a convenient and jerk-free material supply to the paver from any kind of feed vehicle. The large material hopper holds up to 15 tonnes. This not only permits rapid unloading of the feed lorries, but also ensures that there is an ample buffer of material when changing lorries.

- > Any customary mix lorry can dock onto the SUPER 1900-3 thanks to its length of 2,507 mm and low feed height of just 508 mm.
- > Easy feed with mix thanks low material hopper, wide hopper sides and sturdy rubber baffles fitted to the hopper front.
- > The large material hopper holding 15 tonnes is amply dimensioned so that a sufficient quantity of mix is stored at all times. No problem to tide over difficult situations such as paving under bridges, for instance.

Large material hopper holding 15 tonnes
specially adapted to large feed vehicles

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



- 01** Powerful, separate hydraulic drives installed for conveyors and augers, thus permitting high laydown rates up to 1,000 t per hour.
- 02** 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.
- 03** The ability to adjust the augers in height also provides for an optimal head of material in front of the screed when placing thin layers or when the layer thickness varies.



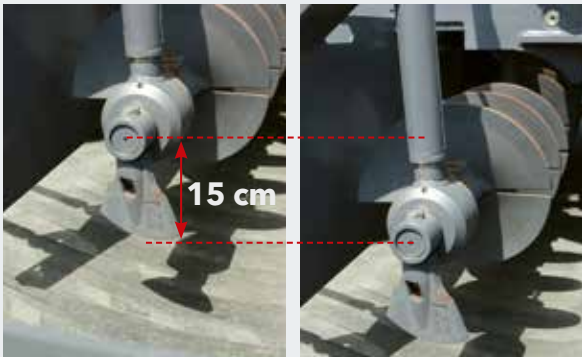
Optimally designed mix conveying system with conveyors ascending towards the rear avoids segregation and diminishes wear of conveyors and conveyor bearings. The proportional

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

VÖGELE > GOOD TO KNOW

Adjustable auger height

The augers of the SUPER 1900-3 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.



ERGOPLUS 3 OPERATING CONCEPT

Full control for the machine operator

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. So VÖGELE paver operators retain full control over the machine and the paving job.

On the following pages you will find 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 console and Niveltronic Plus, the system for automated grade and slope control.



PAVER OPERATOR'S ERGOPLUS 3 CONSOLE

Full control for the machine operator

The paver operator's ErgoPlus 3 console has been designed according to practice-related principles. All controls are clearly arranged. Paver functions are clustered in logical groups so that operators find their controls just where they would expect them 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. This is due to the "Touch and Work" principle. This means that a function is executed directly, with no need to confirm it.



- 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 provides for 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 Conveyor reversing

To prevent mix dropping off the conveyors when moving the paver on the job site, the conveyor can be reversed at the push of a button. Reversing - transfer of mix from the rear of the conveyor tunnel back inside - takes place for a short time only, and stops automatically.

02 Automatic functions

Operators can easily select Manual mode or Automatic mode for conveyors and augers. When selecting Automatic mode for the augers, sensors installed to monitor the material level in the auger tunnel ensure that exactly the desired amount of mix is spread in front of the screed.



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



03 Idling function

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

04 Choice of paver operating modes

All the main paving and machine functions can be controlled directly by individual push-buttons on the ErgoPlus 3 paver operator's console. By pressing the up or down arrow buttons, the operator changes modes in the following order: "Neutral", "Job Site Mode", "Positioning Mode" and "Pave Mode". An LED indicates the mode selected. On exiting "Pave Mode", a smart memory feature stores the last settings for paver functions so they are automatically restored on resuming work after moving the paver on site.

01 Conveyor reversing

02 Automatic functions

03 Idling function

04 Choice of paver operating modes

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 Material hopper

The large material hopper with separately folding sides is designed so that the machine can always be supplied with paving material in the best, most cost-effective way. The two hopper sides can be folded separately or both together at the push of a button.



01 Choice of engine speed ranges
02 The two hopper sides can be folded separately or both together at the push of a button.

03 Steering

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



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

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

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 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.

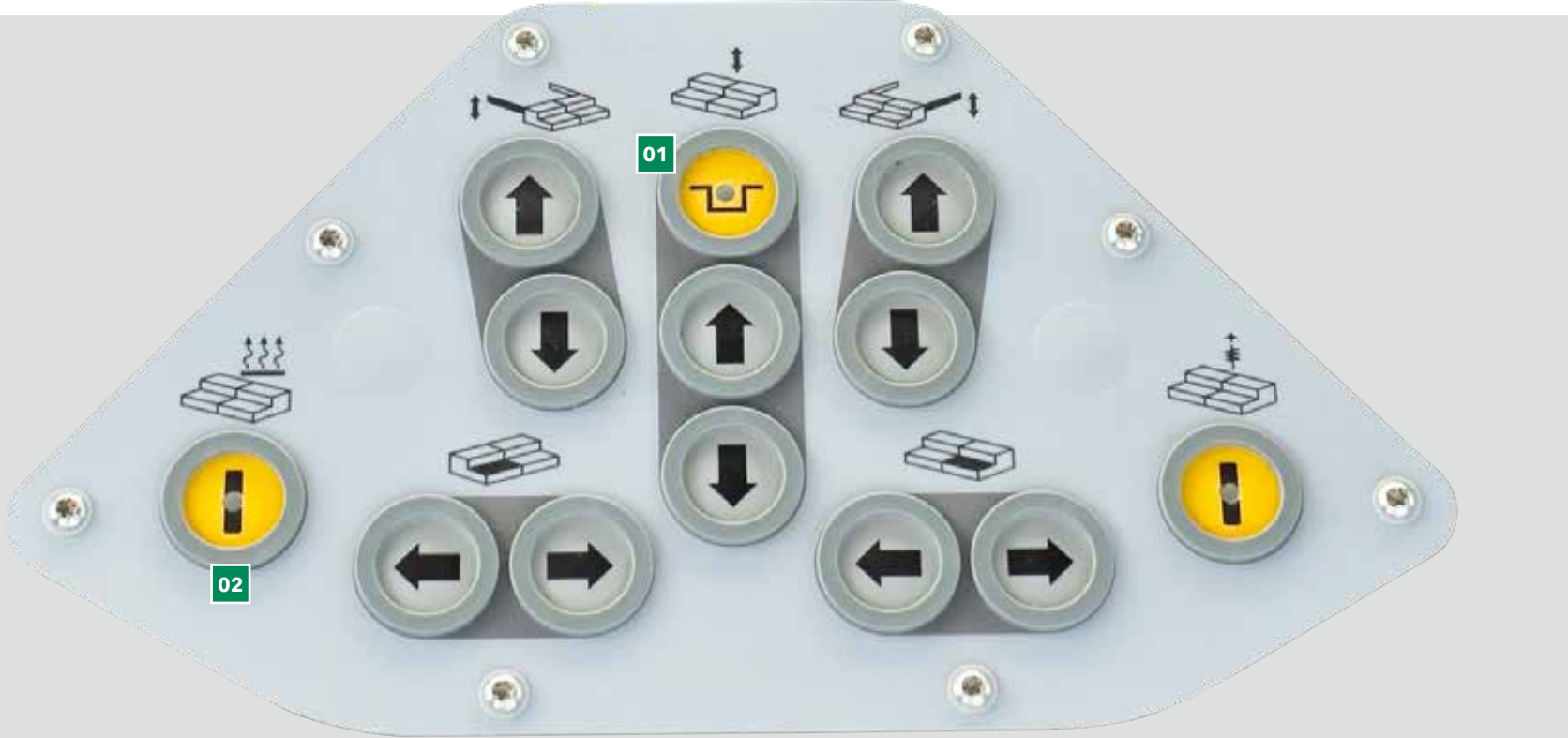


01 Locking bolts on both sides secure the screed in its transport position.

02 Screed plates are fitted as standard with heating elements which distribute the heat all over the plates.

01 Screed Lock

02 Screed Heating

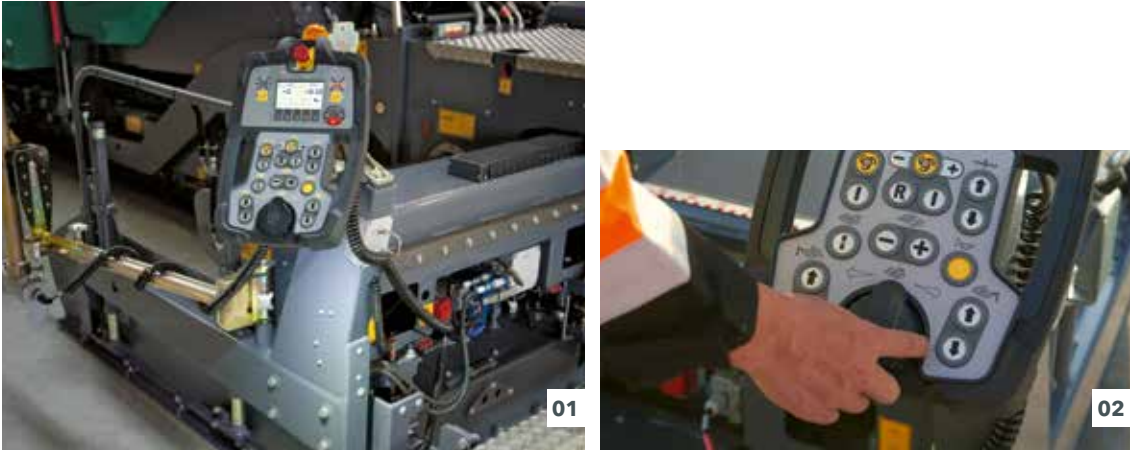


ERGOPLUS 3 SCREED CONSOLE

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.

The screed console is designed in keeping with the conditions prevailing on the job site. Push-buttons are provided for the frequently used functions operated from the screed console. These are watertight and enclosed in palpably raised rings, so that they are 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 The 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
- 04** Screed float on/off

01 The screed console display

The display of the screed console 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 push of a button

The crown can be conveniently adjusted at the push 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.

04 Screed float on/off

The screed can be made to float at the touch of a button.

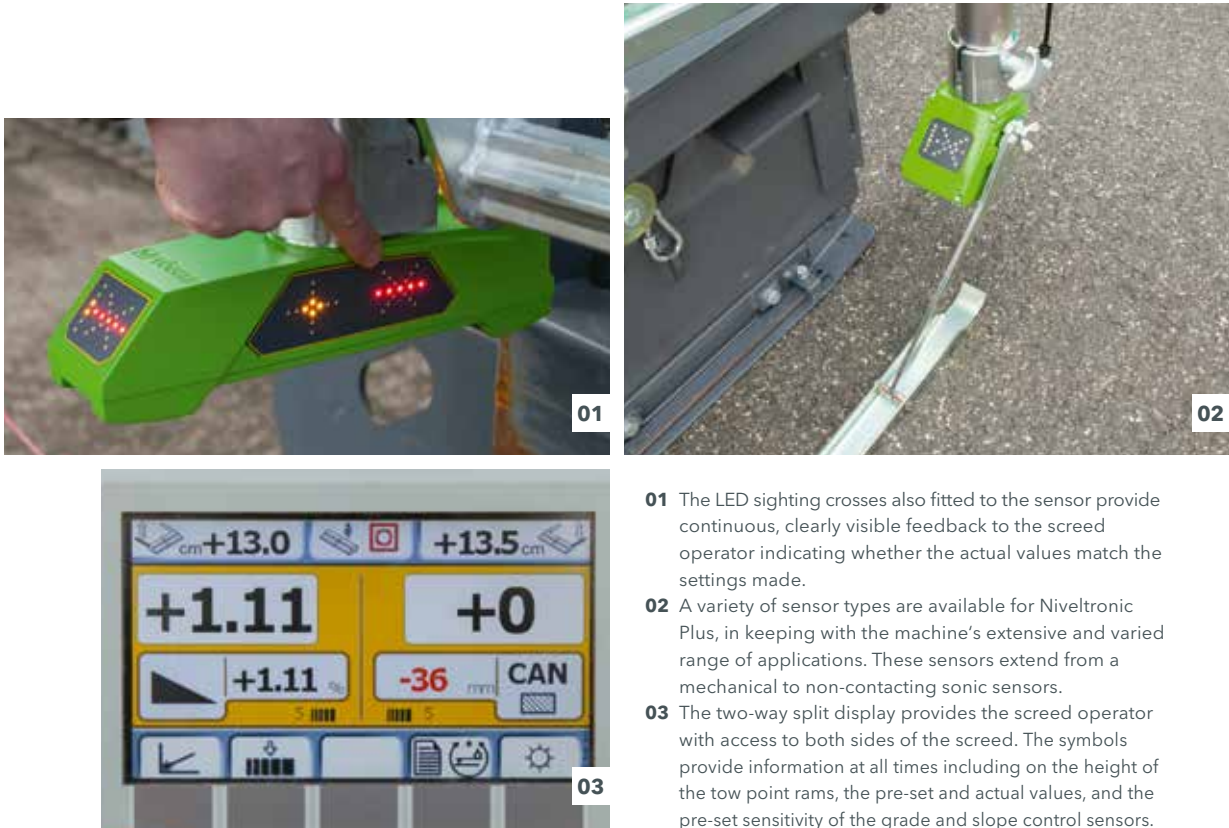
NIVELTRONIC PLUS

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 the 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.



- 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 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

Available sensors

Slope sensor

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

Variable mechanical grade sensor

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

Multi-cell sonic sensor

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

Big MultiPlex Ski

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



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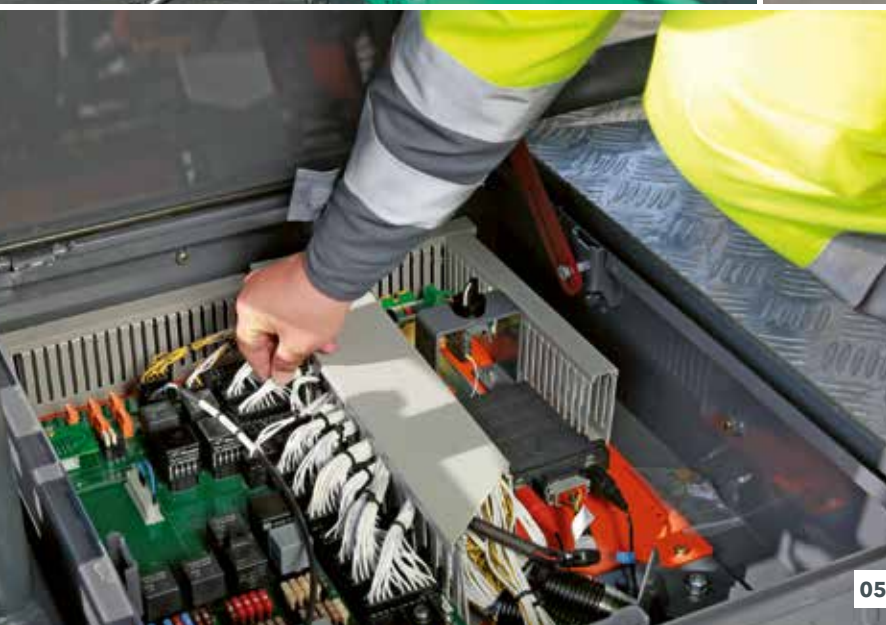
02



03



04



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06

ERGOPLUS 3 OPERATOR'S STAND

Improved efficiency, reliability and convenience

The user-friendly ErgoPlus 3 operator's stand gives an unobstructed view of all key areas on the paver, such as material hopper, steering guide or screed.

The seats, which swing out to the sides, and the streamlined design of the paver operator's platform 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 platform is streamlined and well organized, offering the paver operator a professional workplace. The operator's console can be protected by a shatter-proof cover.

01 Working comfort

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

02 A place for everything and everything in its place

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

03 A hardtop for complete protection

- > The modern hardtop made of glass fibre-reinforced polymer material shelters the operator come rain or shine. The hardtop, including exhaust pipe, raises up or lowers down quickly and with effortless ease by a manually operated hydraulic pump.

04 Safe and convenient step

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

05 Consistent service concept

- > All "Dash 3" pavers have a consistent maintenance concept with identical service intervals.

06 Ergonomic screed console

- > Robust design with protected, rubber-coated edges. The height and position of the console are easily adjusted. The high-contrast colour display can be read clearly from all angles.

AB 600 EXTENDING SCREED

Uniform screed heating

of screed plates, tamper bar and pressure bars 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

The SUPER 1900-3 can be combined with the VÖGELE AB 600 Extending Screed. The screed has a basic width of 3 m. Through the addition of bolt-on extensions, the AB 600 screed builds up to a maximum width of 10 m. Quick-fitting aids allow easy and fast mounting of bolt-on extensions.

The VÖGELE AB 600 Extending Screed is the preferred choice on all jobs where pave width varies and prime pavement quality counts. The pave width can be quickly and easily hydraulically adjusted between 3 m and 6 m using the highly stable single-tube telescoping system.

The screed used with the SUPER 1900-3 can be extended to a maximum pave width of 10 m by means of fixed bolt-on extensions. Electric screed heating is provided for all compacting and smoothing screed elements. The electric heating warms the screed up to its operating temperature in next to no time.



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

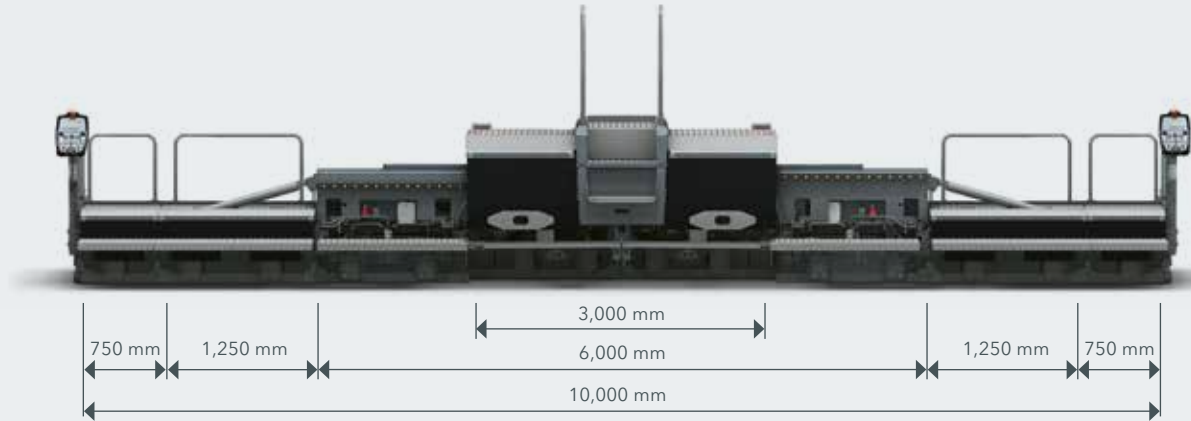
Compacting systems

- > AB 600 TV with tamper bar and vibrators
- > AB 600 TP1 with tamper bar and 1 pressure bar



AB 600 TV

Built up to maximum pave width



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

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

*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.

ALL THE FACTS AT A GLANCE

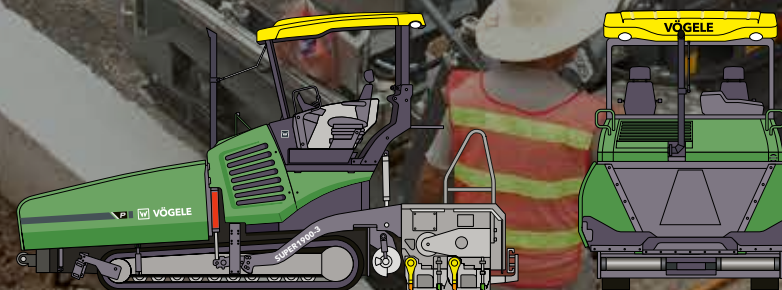
SUPER 1900-3 Tracked Paver



TECHNICAL DATA

SUPER 1900-3

- > Maximum pave width: 10 m
- > Maximum laydown rate: 1,000 t/h
- > Layer thickness: max. 300 mm
- > Transport width: 3 m



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