

Wheeled Paver

SUPER 1603-3(i)



PERFECT IN ALL CLASSES

The right paver for every job

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



VÖGELE PRODUCT RANGE

MINI CLASS

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

COMPACT CLASS

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

UNIVERSAL CLASS

- > Maximum pave width 10 m
- > Maximum laydown rate 700 t/h

HIGHWAY CLASS

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

SPECIAL CLASS

- > SprayJet
- > InLine Pave

POWERFEEDER

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

HIGHLIGHT OVERVIEW

Perfectly equipped

DRIVE

- 01 Drive concept**
> Maximum power transmission thanks to separate, hydraulic drives provided for both rear wheels and optional all-wheel drive (6x6).
- 02 VÖGELE EcoPlus**
> The VÖGELE EcoPlus low-emissions package significantly reduces fuel consumption and noise levels.
- 03 Pivot Steer steering brake**
> The Pivot Steer steering brake reduces the outside turning circle to 3.5 m.

QUALITY

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

MATERIAL MANAGEMENT

- 05 Receipt of mix**
> Large material hopper with a capacity of 13 tonnes ensures optimum feeding with mix.
> A hydraulically operated hopper front directs the mix inside the material hopper straight onto the conveyors, conveying the entire mix properly in front of the screed.
- 06 PaveDock Assistant**
> Facilitates communication during transfer of mix.

OPERATION

- 07 ErgoPlus 3 operating system**
> ErgoPlus 3 operating system with numerous convenient and automatic functions.
- 08 AutoSet Plus functions**
> AutoSet Plus functions for quick and safe repositioning on the job site and for storing individual paving programs.

VERSATILITY

- 09 Wide range of applications**
> Wheeled Universal Class paver with a large range of applications and pave widths up to 7 m*.
- 10 AB 500 Extending Screed**
> The wheeled paver can be combined with the AB 500 TV Extending Screed (with tamper and vibrators).



* The 7 m pave width requires extra equipment and is available on request.



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THE COMPACT WHEELED PAVER

All-rounder with numerous features

Innovative paving technology can come in compact packages, as the VÖGELE SUPER 1603-3(i) proves. A member of the "Dash 3" paver family, it is one of the most advanced wheeled pavers in its class. Naturally, this compact powerhouse benefits from all the "Dash 3" features.

The VÖGELE EcoPlus package, for instance, significantly reduces both fuel consumption and noise levels. In addition, VÖGELE's ErgoPlus operating system has been supplemented by numerous ergonomic and functional features. The paver operator's console comes

with a particularly large colour display which provides brilliant readability even in poor lighting conditions. In addition, the convenience functions AutoSet Plus and PaveDock Assistant make work with the SUPER 1603-3(i) even easier.

With its compact dimensions and an extremely small outside turning circle thanks to the Pivot Steer steering brake, the SUPER 1603-3(i) is particularly manoeuvrable and hence suitable for a wide range of applications.



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

02 Large range of applications up to 7 m.

03 VÖGELE EcoPlus significantly reduces fuel consumption and noise levels.

04 The paver operator's platform ensures maximum visibility.

05 Automated processes with AutoSet Plus.

06 Optimum feeding with mix thanks to the large material hopper and PaveDock Assistant communication system.

STATE-OF-THE-ART DRIVE TECHNOLOGY

Full power – intelligent technology

Three main components define the power unit of a SUPER 1603-3(i): its state-of-the-art, liquid-cooled diesel engine, a splitter gearbox flanged directly onto the engine, and a large cooler assembly.

The driving force behind this VÖGELE powerhouse is its high-performance diesel engine. The liquid-cooled 4-cylinder in-line engine is tuned to a perfect degree of efficiency for the overall system and thus ensures minimum expenditure on fuel and overall operation. The SUPER 1603-3i is equipped with the latest-generation engines and state-of-the-art exhaust emissions after-treatment. This engine meets the requirements of European exhaust emissions standard Stage V as well as US standard EPA Tier 4f. The SUPER 1603-3 has no exhaust emissions after-treatment and is thus approved for use in less well-regulated countries. Its engine meets European exhaust emissions standard Stage 3a and US standard EPA Tier 3.

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. Hydraulic pumps and valves are centrally located, making them optimally accessible for servicing. Even the powerful generator for screed heating is flanged directly onto the splitter gearbox and makes it completely maintenance-free.

115/116 kW
diesel engine output

ECO mode at 1,700 rpm
reduces operating costs

215/201 litres
Capacity fuel tank

Generator
is oil-cooled and powerful



- = Coolant
- = Charge air
- = Hydraulic oil

VÖGELE > GOOD TO KNOW

Exhaust emissions after-treatment on “i” machines and the VÖGELE EcoPlus package

On the engine of the SUPER 1603-3i, exhaust emissions after-treatment is provided by the diesel oxidation catalyst (DOC), a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) catalytic converter, so engines of the “i” machines satisfy the strict requirements of European exhaust emissions standard Stage V.

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

VÖGELE ECOPLUS

Less is more for the environment

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

One of these innovations is the VÖGELE EcoPlus low-emissions package. Fuel savings of up to 25% can be achieved with VÖGELE EcoPlus, depending on the application and capacity utilization of the paver. That doesn’t just result in considerable savings for the contractor – it’s good news for the environment too. That’s because every litre of fuel saved reduces carbon dioxide (CO₂) emissions.



25% fuel saving



25% less CO₂ emitted



Less noise



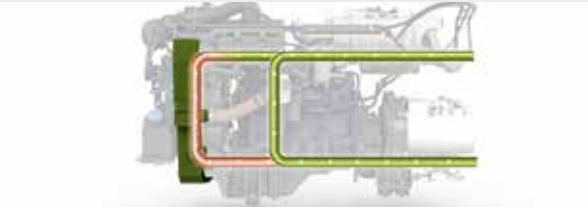
VÖGELE > GOOD TO KNOW



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.



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.

MOBILITY ON WHEELS

With its high tractive power, the wheeled paver SUPER 1603-3(i) perfectly combines high paving performance with maximum mobility when travelling.

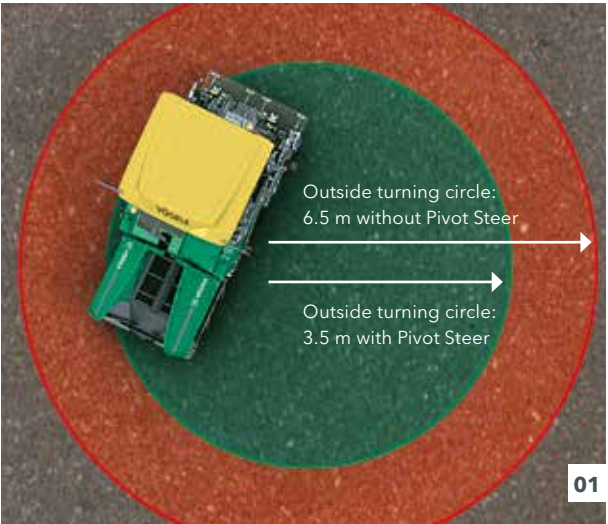
The SUPER 1603-3(i) has powerful separate hydraulic drives in the drive wheels. These allow maximum tractive power when paving and when driving on public roads at up to 20 km/h. If maximum manoeuvrability is required, the paver operator can use the Pivot Steer steering brake.

All paving functions are automatically deactivated when "Road Travel" mode is selected. In addition, the paver is equipped with the approved lighting for public traffic. As a result, this paver – like all other wheeled pavers from VÖGELE – meets the basic requirement for driving on public roads.

Optimum traction
Even on difficult terrain

Pivot Steer steering brake
Reduces the outside turning circle to 3.5 m

Lighting system
Enables pavers to run on public roads



- 01** With the Pivot Steer steering brake activated, the rear inside wheel is automatically slowed down hydraulically, reducing the outside turning circle to no more than 3.5 m for positioning manoeuvres and paving.
- 02** As a standard feature, all VÖGELE wheeled pavers are equipped with a lighting system approved throughout Europe for travelling on public roads.
- 03** The push-buttons for the direction indicators, warning lights, dipped-beam and full-beam headlights are clearly arranged side-by-side on the paver operator's console.

The separate hydraulic drives in both rear wheels ensure maximum power transmission. Additional drives in two or four front wheels (all-wheel drive) are available as an option. Optimum traction is assured, even on difficult terrain, by Electronic Traction Management and an electronic limited slip differential acting on the drives of the rear wheels.

Continuous ground contact is assured by a front axle which oscillates both lengthwise and crosswise. In other words, the front axle is only permanently connected to the chassis at one point. Combined with the rigidly suspended rear wheels, this creates a static 3-point support.



PERFECT MATERIAL MANAGEMENT FOR PERFECT PAVING QUALITY

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

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

As with all VÖGELE pavers, supplying the SUPER 1603-3(i) with mix is a clean, safe and swift process. A hydraulically operated hopper front directs the mix inside the material hopper straight onto the conveyors, conveying the entire mix properly in front of the screed. PaveDock Assistant from VÖGELE is an innovative solution to standardize and simplify communication between the paver operator and the driver of the feed vehicle.

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



- 01** Oscillating push-rollers facilitate convenient, smooth material feed from mix trucks, even on bends.
- 02** Proportional control and continuous quantity monitoring of mix feed guarantee a constant head of mix in front of the screed to suit requirements.
- 03** Large-diameter auger blades (400 mm) guarantee optimum spreading of mix, even when large pave widths are involved.



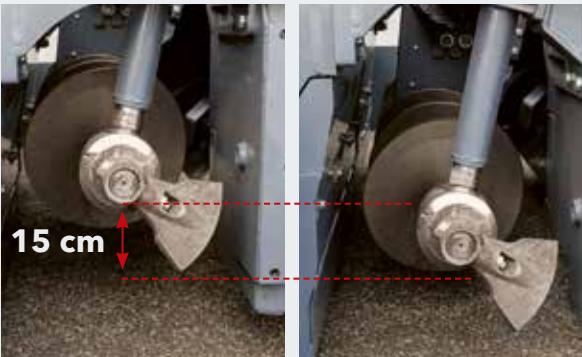
By spreading mix perfectly, the SUPER 1603-3(i) provides the ideal head of material in front of the screed in every paving situation.

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

VÖGELE > GOOD TO KNOW

Adjustable auger height

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



Large material hopper
with a capacity of 13 tonnes

Deep and wide hopper sides
for especially straight forward material feed

Push-rollers
oscillating

PAVEDOCK ASSISTANT

Feeding as a reliable process

A constant feed of material is a fundamental prerequisite for high-quality, even paving. PaveDock Assistant is the communication system between the paver operator and the driver of the feed vehicle, allowing mix to be transferred to the paver especially quickly and reliably.

Signal lights on the paver and the associated controls on the paver operator's ErgoPlus 3 console are key components of PaveDock Assistant. The paver has two sets of signal lights, mounted on the left and right of the hardtop. They help the paver operator provide

the driver of the mix truck with unambiguous instructions about what to do (e.g. reverse, stop or dump mix). Having two lights, each in an elevated position, ensures that all signals are clearly visible to the truck driver from any angle of approach.



VÖGELE > GOOD TO KNOW

PaveDock Assistant signals

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

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

AUTOMATED PROCESSES WITH AUTOSSET PLUS

With AutoSet Plus, we make key job site processes even more efficient and convenient. AutoSet Plus has two handy automatic functions to achieve this.

The automatic repositioning and transport functions facilitate the continuation of work - when moving the paver from one section to another or after the paver has been transported: just touch the Execute button to prepare the paver quickly and safely for repositioning or transport; just touch the button again to return the paver to the previously stored operating position.

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

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

- Repositioning function**
- > Fast and safe repositioning of the paver on the job site.
 - > No settings are lost between paving and repositioning.
 - > Also prevents any damage to the augers.

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



VÖGELE > GOOD TO KNOW

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

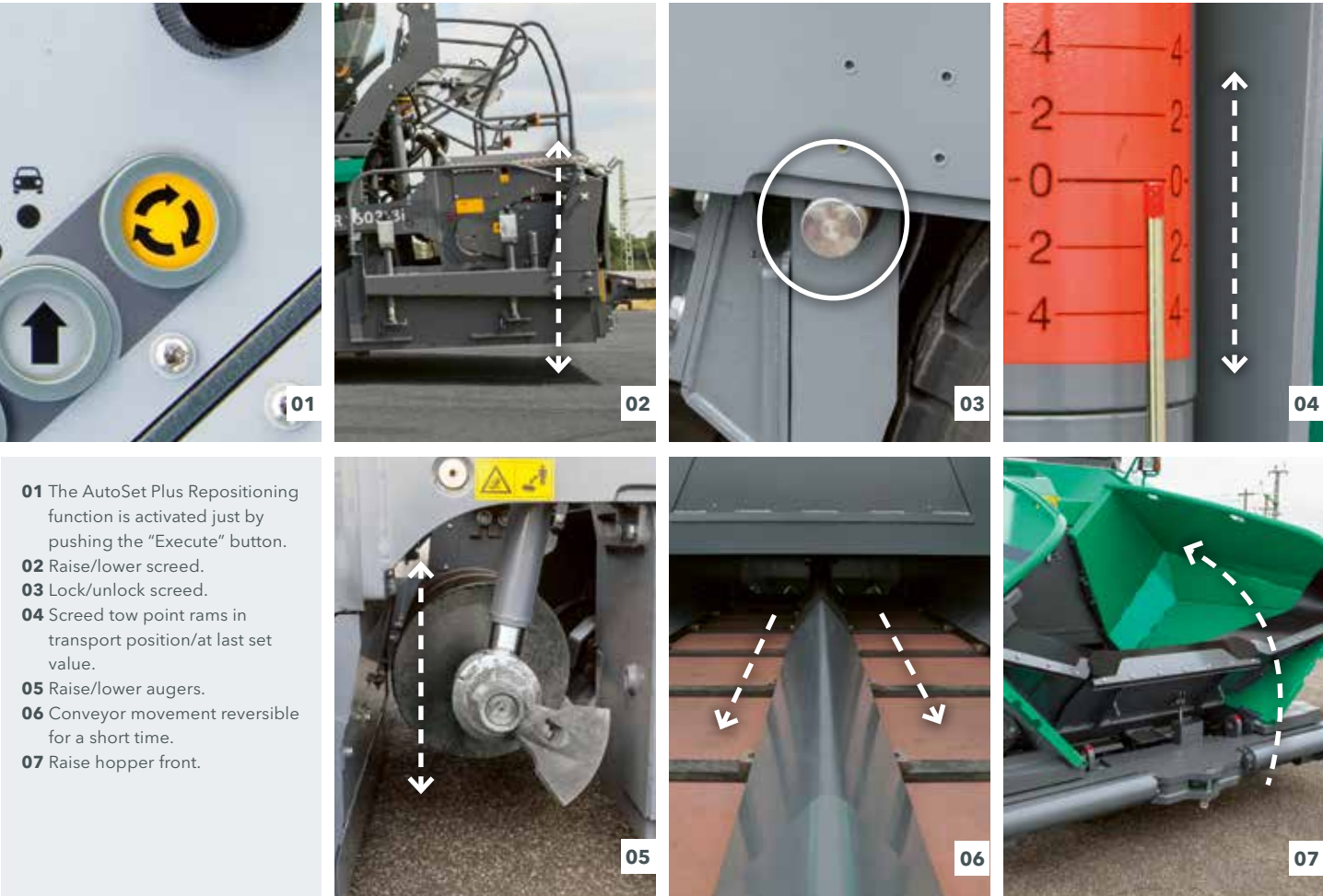
AUTOSET PLUS REPOSITIONING FUNCTION

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

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

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

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



- 01 The AutoSet Plus Repositioning function is activated just by pushing the “Execute” button.
- 02 Raise/lower screed.
- 03 Lock/unlock screed.
- 04 Screed tow point rams in transport position/at last set value.
- 05 Raise/lower augers.
- 06 Conveyor movement reversible for a short time.
- 07 Raise hopper front.

AUTOSET PLUS PAVING PROGRAMS



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

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

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

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

ERGOPLUS 3 OPERATING CONCEPT

Improved efficiency, reliability and convenience

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

That's why the ErgoPlus 3 operating concept is focussed on the operator, ensuring that VÖGELE paver operators retain full control over the machine and the paving job. ErgoPlus 3 encompasses the operator's stand, the paver operator's console and screed consoles and Niveltronic Plus, the System

for Automated Grade and Slope Control. On the following pages, example illustrations will provide you with more detailed information on the extensive functions of the ErgoPlus 3 operating concept.



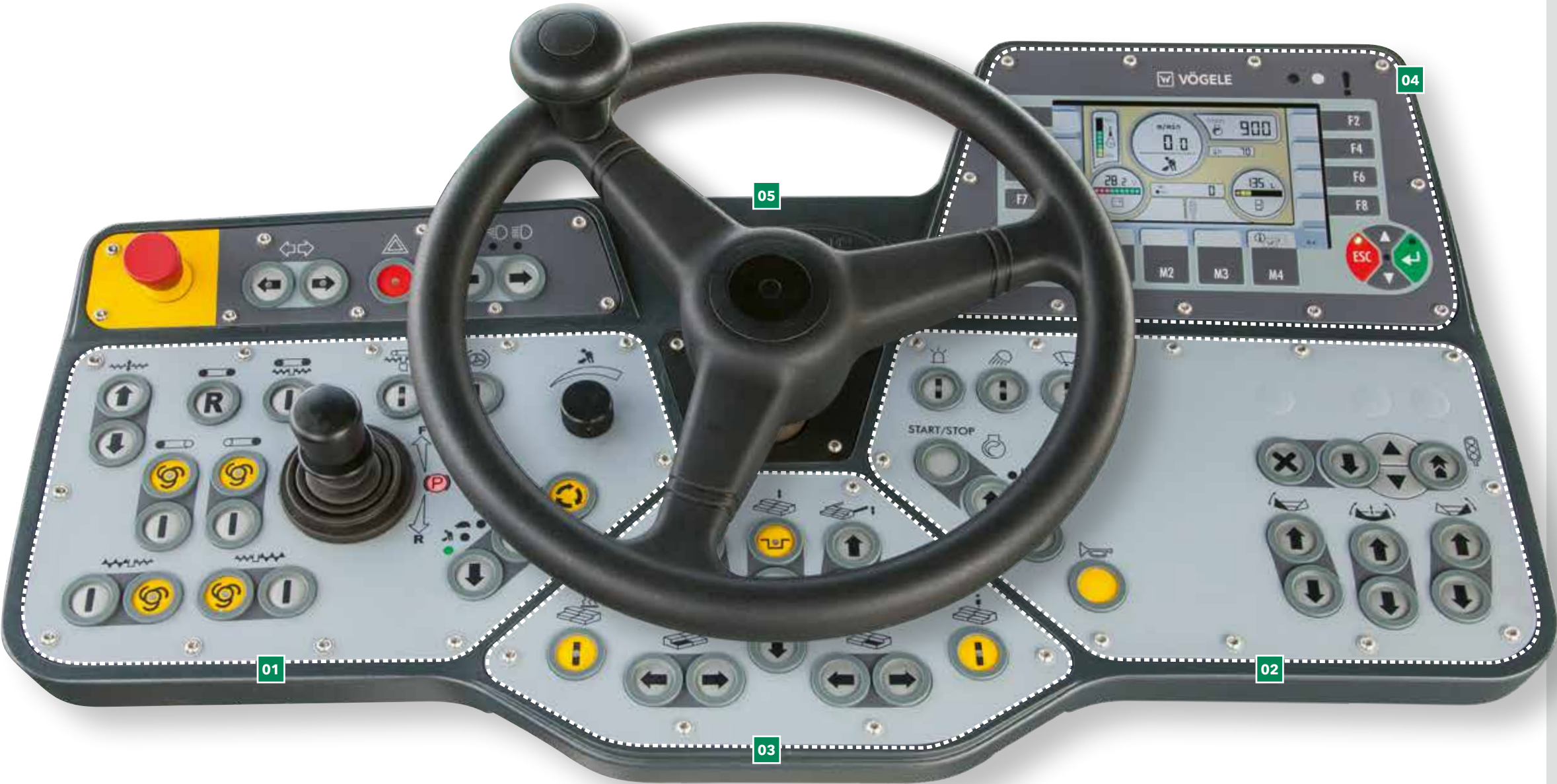
ERGOPLUS 3 PAVER OPERATOR'S CONSOLE

Clearly arranged in line with experience from the field

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

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

As a standard feature, all wheeled pavers from VÖGELE are equipped with a lighting system approved throughout Europe for travelling on public roads. The push-buttons for indicating direction, warning lights, dipped lights and full beam are clearly arranged side by side on the paver operator's console.



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 management**

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

03 **Screed functions**

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

04 **Paver operator's console display**

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

05 **Safe operation at night**

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



CONVEYORS AND AUGERS, TRACTION

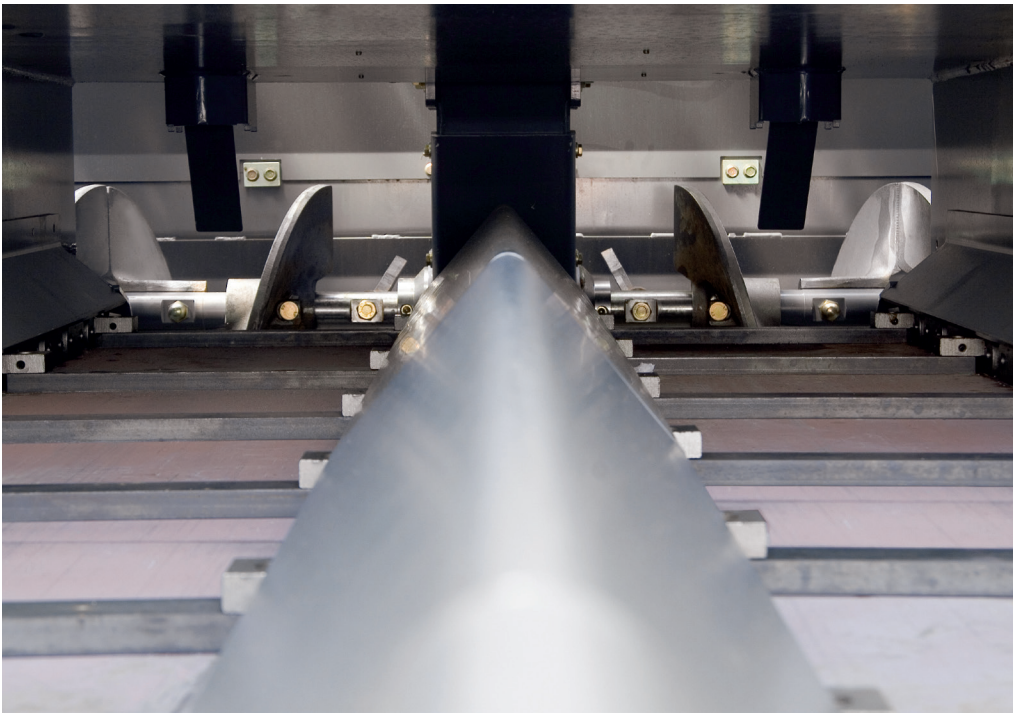
Module 1

01 AutoSet Plus Repositioning function (option)

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

02 Choice of operating modes for the paver

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



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



03 Reversing conveyor movement

In order to avoid mix dropping from the conveyors during a move of the paver on the job site, conveyor movement can be reversed at the touch of a button. Reverse movement takes place for a short time only and stops automatically.

04 Steering brake Pivot Steer

The Pivot Steer steering brake can be switched on with a simple push of a button in the "Positioning" and "Pave" modes. When it is activated, the speed of the rear inside wheel is automatically slowed down hydraulically when a steering movement is carried out. This reduces the turning circle to a minimum.

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

MATERIAL MANAGEMENT

Module 2

01 Choice of engine speed ranges

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

02 PaveDock Assistant (option)

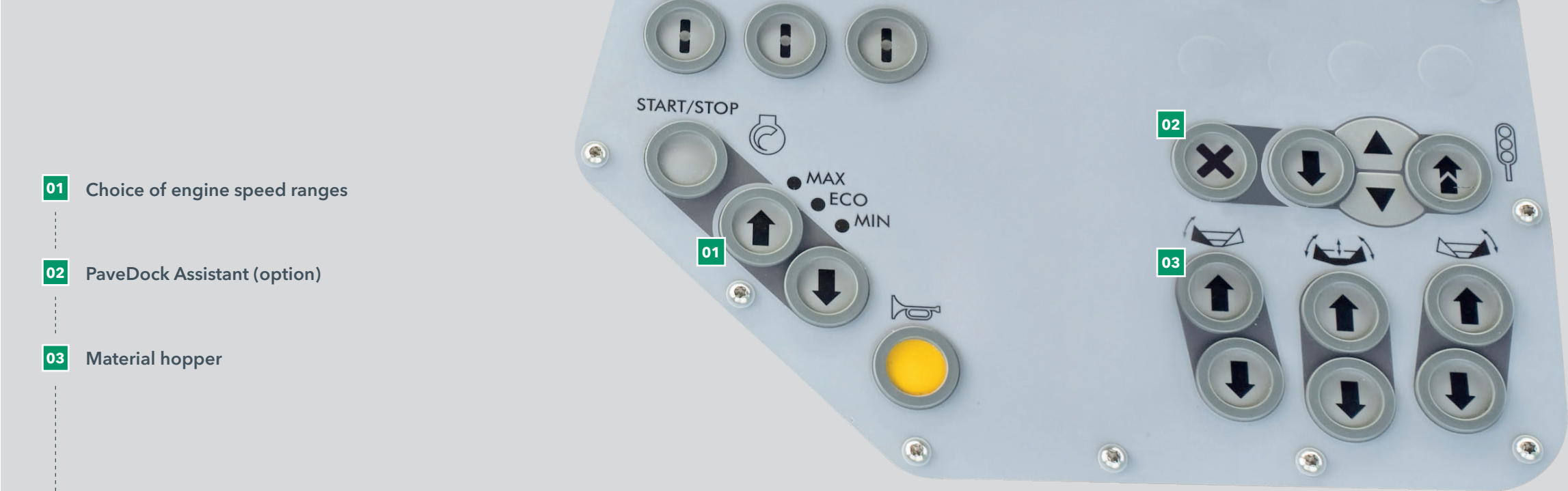
With the PaveDock Assistant signal lights, the paver operator can give the driver of the feed vehicle unambiguous signals indicating what needs to be done (e.g. reverse, stop, dump mix). The lights are conveniently activated directly from the paver operator's ErgoPlus 3 console.



01 Push-button for selecting speed
02 PaveDock Assistant (option)

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 PaveDock Assistant (option)
03 Material hopper

SCREED

Module 3

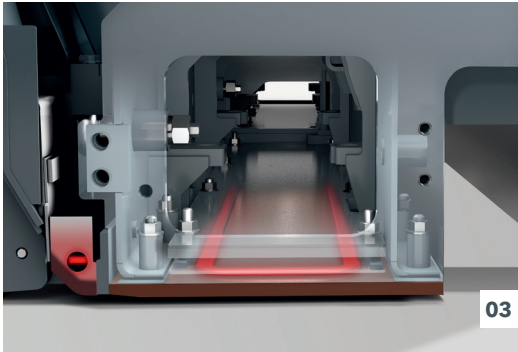
All the key screed settings can be made from the paver operator’s console. The screed can be raised or lowered here, each of the two sides of the screed extended or retracted or the angle of the screed adapted to suit conditions. This means the paver operator, too, has access to the screed at all times.

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.

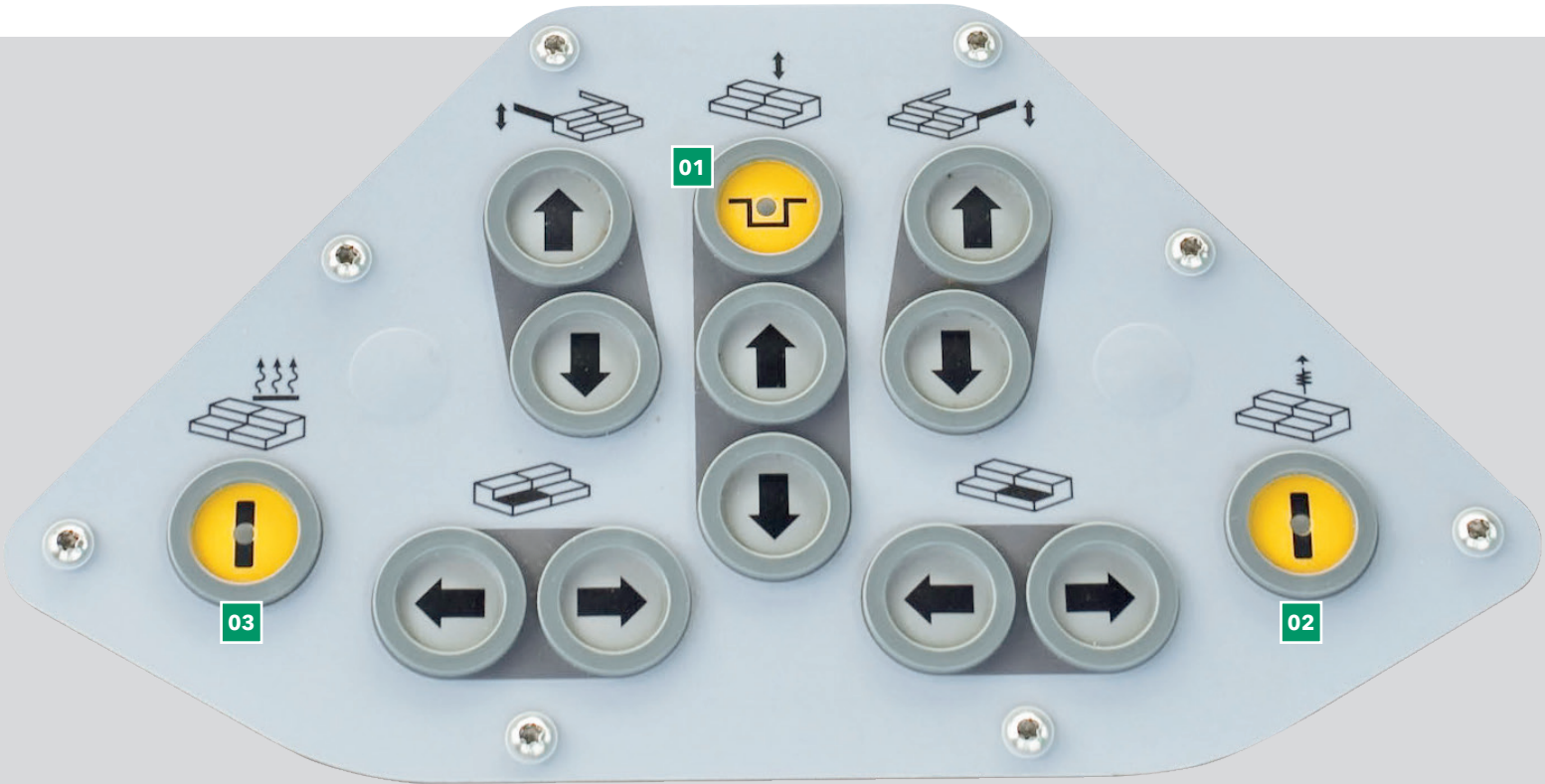
02 Screed Assist (option)

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.

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



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.

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 ensures brilliantly clear legibility, even in poor light conditions. The high-performance, downward-facing LED lighting furthermore delivers perfect visibility.
- 02 Crown can be adjusted using the plus or minus key on the screed operator's consoles.
- 03 Screed width can be adjusted by the handy SmartWheel.



- 01 The screed console display
- 02 Crown adjustment at the touch of a button
- 03 Ergonomic screed width control in two speeds

- 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 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.
- 03 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.

NIVELTRONIC PLUS

System for Automated Grade and Slope Control

Niveltronic Plus, the System for Automated Grade and Slope Control, is an in-house development by JOSEPH VÖGELE AG based on many years’ experience in grade and slope control technology. Easy operation, precision and reliability are its hallmarks, ensuring that any grade and slope control job is mastered perfectly.

The fully integrated system is perfectly tuned to the engineering of VÖGELE pavers with the ErgoPlus 3 operating concept. All wiring and connections, for instance, are integrated in the tractor unit and screed, effectively eliminating any risk of damage to these components.

It goes without saying that VÖGELE offers a particularly large and practical selection of sensors to facilitate versatile use of

the Niveltronic Plus system. Whether the project is to build or rehabilitate a car park, a roundabout or a highway, VÖGELE has the right sensor for every job site situation.

Sensors are quick and easy to change, as Niveltronic Plus automatically detects every sensor which is connected, thus simplifying the configuration process for the user.

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



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- 01 The LED sighting crosses also fitted to the sensor provide continuous, clearly visible feedback to the screed operator to indicate whether the actual values match the settings made.
- 02 A variety of sensor types is available for Niveltronic Plus to suit the variety of applications for the paver. These range from 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, 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.

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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ERGOPLUS 3 OPERATING CONCEPT

Improved efficiency, reliability and convenience

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

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

01 The comfortable operator's stand

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

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

- > The seats swinging out to the sides and an operator's stand of streamlined design likewise provide maximum visibility of the auger tunnel, permitting the paver operator to keep an eye on the head of mix in front of the screed at all times.
- > The paver operator's seat and console on the platform, as well as the screed operator's platforms can now be adjusted even more easily to personal needs.

03 Hardtop gives excellent protection

- > The modern hardtop made of glass fibre-reinforced polymer material shelters the operator come rain or shine.
- The hardtop, including the exhaust pipe, is effortlessly lowered into transport position by a manually-operated hydraulic pump.

04 A place for everything and everything in its place

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

05 Safe and comfortable ascent

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

06 Ergonomic screed console

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

EXTENDING SCREED AB 500

The AB 500 Extending Screed is particularly adaptable, making it ideal for paving in varying widths and on winding roads. The AB 500 Extending Screed comes with an immensely sturdy single-tube telescoping system. Working with maximum

precision, it delivers quick screed width adjustment accurate to the millimetre. Even with the screed set to its maximum width, the telescoping tubes are extended by no more than half, thus delivering superb screed system stability and zero flexing.

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

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

The SUPER 1603-3(i) can be combined with the VÖGELE AB 500 Extending Screed. The AB 500 has a basic width of 2.55 m and extends hydraulically to 5 m. Through the addition of bolt-on extensions, the screed builds up to a maximum width of 7 m. Quick-fitting aids allow easy and fast mounting of bolt-on extensions.

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





AB 500

Pave widths

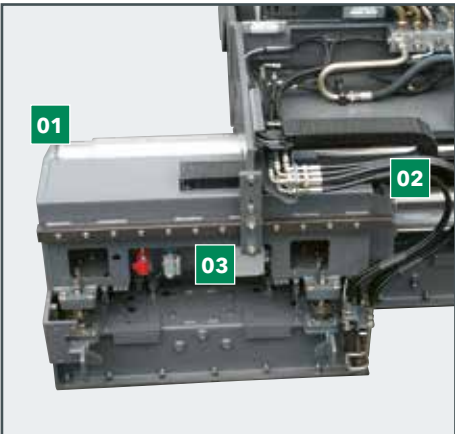
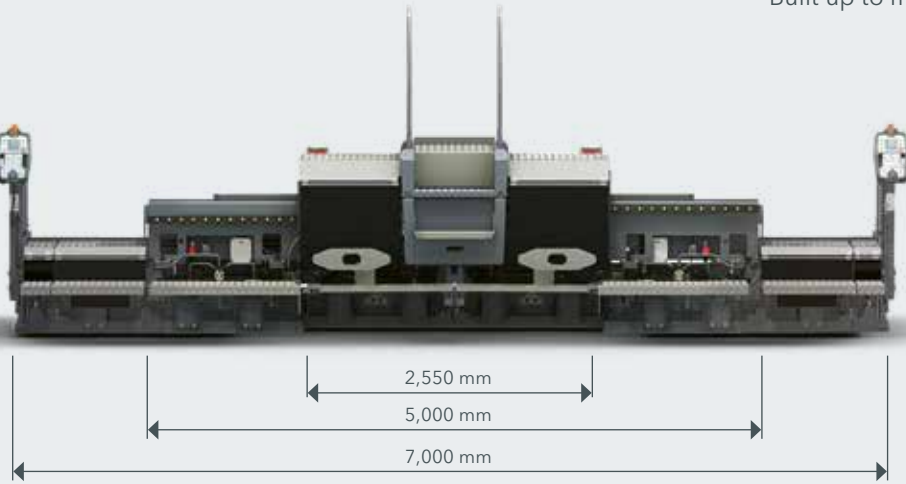
- > Infinitely variable range from 2.55 m to 5 m
- > Larger widths if bolt-on extensions up to a maximum of 7 m* are added

Compacting systems

- > AB 500 TV with tamper and vibrators



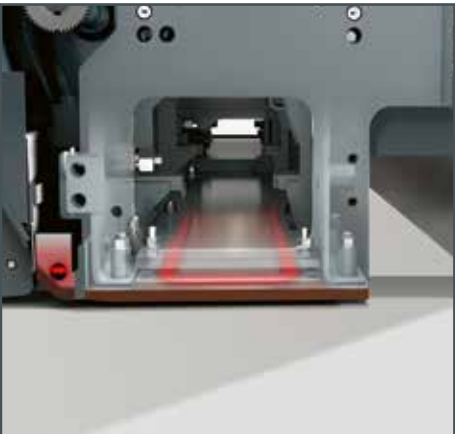
Built up to maximum pave width



VÖGELE single-tube telescoping system

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

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



Innovative screed heating

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

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

* The 7 m pave width requires extra equipment and is available on request.

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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.

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Telematics solutions

At the WIRTGEN GROUP, construction machinery involving leading-edge technology goes hand in hand with sophisticated telematics solutions. Intelligent monitoring systems such as WITOS or JD Link* not only make it easier for you to plan the maintenance of your machines, they also increase productivity and efficiency.

> www.wirtgen-group.com/telematics

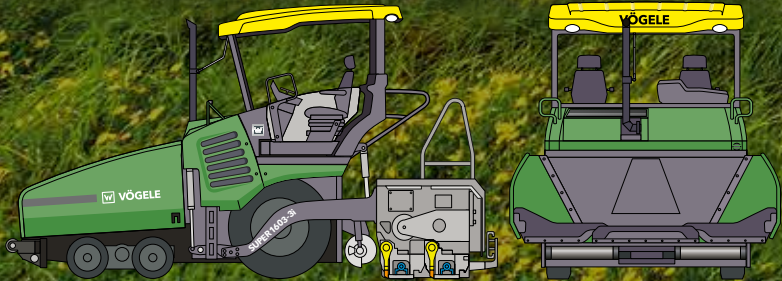
* Neither WITOS nor JD Link are currently available in all countries.
Please contact the subsidiary or dealer responsible for you for more information about this.

ALL THE FACTS AT A GLANCE

SUPER 1603-3(i) Wheeled Paver



TECHNICAL DATA



SUPER 1603-3(i)

- > Maximum pave width: 7 m*
- > Maximum laydown rate: 600 t/h
- > Layer thickness: max. 30 cm
- > Transport width: 2.55 m

* The 7 m pave width requires extra equipment and is available on request.



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