

Compact Class

SUPER 1103-3i

WHEELED PAVER



Maximum pave width 4.2m
Maximum laydown rate 200 tonnes/h
Transport width 1.85m



Compact size, excellent manoeuvrability



Based on its overall machine concept, the wheeled SUPER 1103-3i features a particularly compact design and high economic efficiency. Wherever the paving job is building minor roads or surfacing small areas, this paver is the ideal candidate. Lack of space is not a problem. Thanks to its compact dimensions it does an excellent job, too, in confined spaces.

Nevertheless, it can still handle considerable pave widths. Equipped with the AB 340 Extending Screed in the V version, pave widths up to 4.2m are possible.

The SUPER 1103-3i is powered by a Deutz diesel engine rated at 74.4kW. The ECO mode for economical paver operation also available for this wheeled paver reduces fuel consumption and noise emission.

The machine, compact in design, is big when it comes to user-friendly operation. The SUPER 1103-3i offers ErgoPlus 3, the ergonomic concept for easy paver handling. Thanks to ErgoPlus 3, operators of VÖGELE pavers have never had it so good in terms of simplicity, ease of operation and also enhanced safety.

The highlights of the SUPER 1103-3i



Wheeled Compact Class paver with a large range of applications and pave widths up to 4.2m

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

Powerful Deutz engine of the very latest generation

Significantly smaller turning radius due to Pivot Steer steering brake

Optimum feeding with mix thanks to the large material hopper

ErgoPlus 3 operating system with numerous convenient and automatic functions

Compact design for paving in tight corners



Compact size, high efficiency: be it extremely cramped job sites out of town or winding city-centre alleyways, the VÖGELE Compact Class pavers feature excellent manoeuvrability. They are ideal in all these environments and trump with high performance.

- » **The slim paver design** without protruding edges and a compact length renders the machine ideal for easy paving and manoeuvring on small job sites.
- » **For passing through narrow spaces,** push-rollers fold up together with the hopper sides.
- » **The hardtop** of glass fibre-reinforced polymer material lowers down by manually operated hydraulic pump, thus preparing the paver for transport quickly and easily.



Range of applications of the VÖGELE Compact Class

With their combination of compact dimensions and top performance, road pavers in the VÖGELE Compact Class can handle a wide variety of applications.

Whether it's a combined footpath and cycle path, a farm track or minor roads and squares, the SUPER 1103-3i is more than up to the task, thanks to its wide range of pave widths from 0.75m to 4.2m and its excellent performance.



ASPHALT PAVING ON COMBINED FOOT AND CYCLE PATHS



SURFACING PATHS IN PUBLIC PARKS



PAVEMENT REHABILITATION ON ACCESS ROADS



PAVEMENT REHABILITATION ON MUNICIPAL ROADS



ASPHALT PAVING ON COMMERCIAL SITES



ASPHALT PAVING ON RAILWAY PLATFORMS

The applications illustrated here are typical of the VÖGELE Compact Class. The illustrations may also show the predecessor model.

The drive concept – Efficiency, performance and low consumption



VÖGELE's modern drive concept guarantees full power whenever it is needed. Superior technology also makes this Compact Class paver exceedingly economical in everyday use thanks

to the intelligent engine management with ECO mode and variable-speed fan. As a result, fuel consumption and the level of noise emitted by the SUPER 1103-3i are significantly reduced.

With its high tractive power, the wheeled SUPER 1103-3i perfectly combines high paving performance with maximum mobility when travelling.

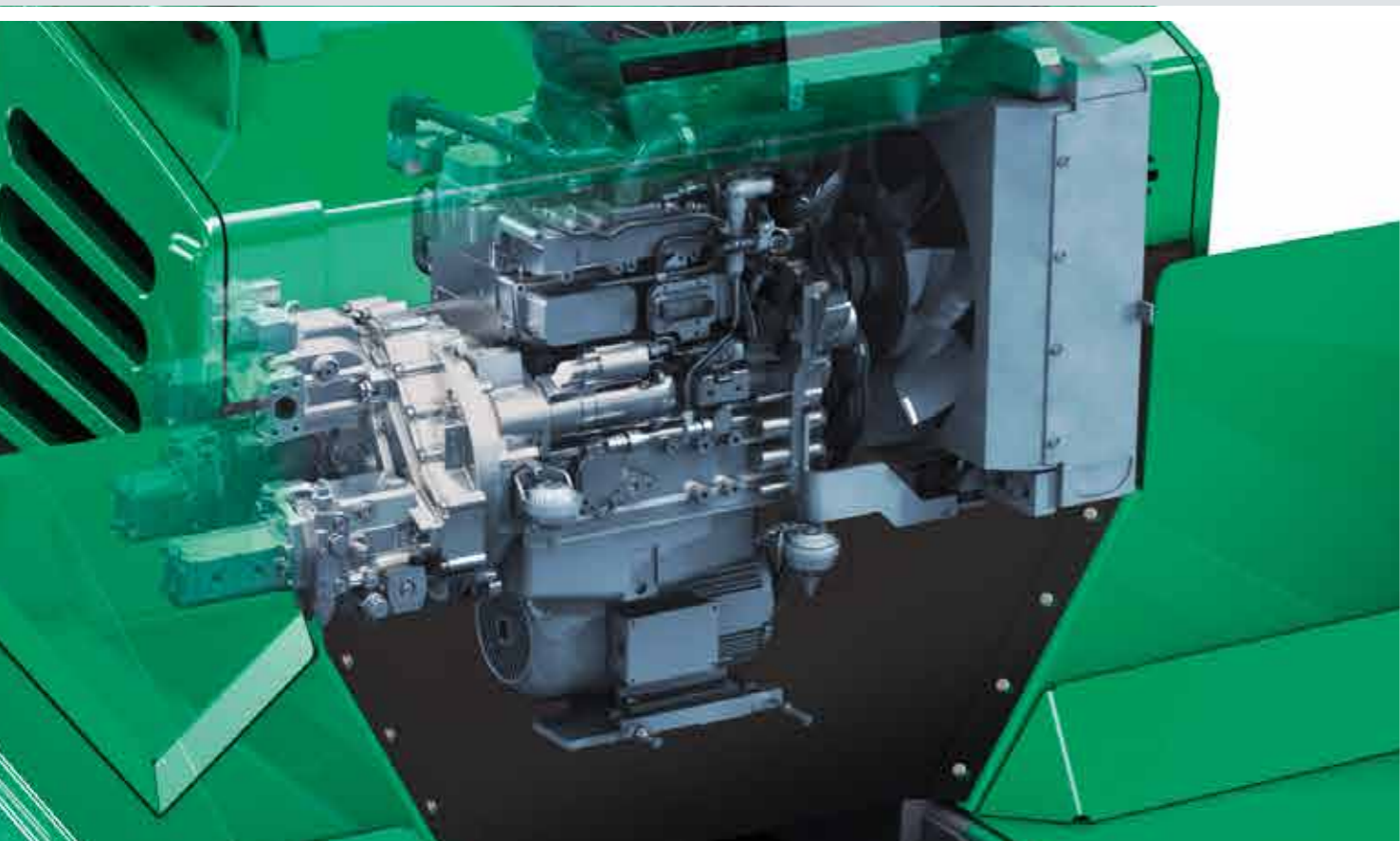
Full power – Intelligent technology

Three main components define the power unit of a SUPER 1103-3i: its modern, liquid-cooled diesel engine, a splitter gearbox flanged directly to the engine and a large cooler assembly.

The driving force in this VÖGELE powerpack is its powerful Deutz diesel engine of type TCD 3.6L4. This four-cylinder engine delivers 74.4kW at 2,000rpm. Yet the fuel-saving ECO mode is sufficient for many applications. And even then, the SUPER 1103-3i still has a full 68.2kW at its disposal. Moreover, the machine generates less noise when running at just 1,600rpm.

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

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.



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.

» **Machines with the suffix "i"** in their product designation are not only economical, but also extremely clean. The "i" stands for "intelligent emission control" and is found in the type names of all machines from the WIRTGEN GROUP equipped with the latest engine technology. Thanks to their sophisticated exhaust gas after-treatment, these engines comply with the strict requirements of European emissions standard Stage 3b as well as US EPA standard Tier 4i.

» **Powerful Deutz diesel engine** rated at 74.4kW.

» **ECO mode** (68.2kW at 1,600rpm) is sufficient for many paving applications.

The engine's noise emissions, which are already low, are further decreased when working in ECO mode. In addition, ECO mode reduces fuel consumption and wear.

» **A powerful three-phase A.C. generator** with generator management controls the output in compliance with the pave width. Heating the compacting systems to operating temperature takes a short time only.

» **For hydraulic functions**, powerful separate drives are installed, which operate in independent closed loops. This solution allows engine output to be transformed highly efficiently into hydraulic paver performance.

Travels swiftly under its own power

A **powerful paver** that's a comfortable drive on the road. The precise steering and handling characteristics make for the SUPER 1103-3i's excellent manoeuvrability, as demonstrated by its outside turning radius of just 5m

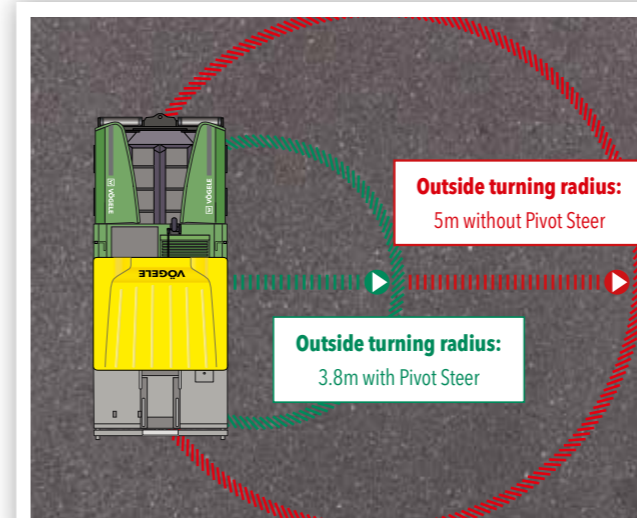
(3.8m with Pivot Steer). With its powerful traction drive, the machine can pave swiftly and travel on public roads at a maximum speed of 20km/h. So if its next job site is close at hand, there is no need for a low-bed trailer to transport the paver.



» **Rapid transport under its own power** at up to 20km/h – a feat the SUPER 1103-3i is optimally equipped for. All paving functions are automatically deactivated when "Road Travel" mode is selected. In addition, the paver comes 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.

» **Maximum power transmission** thanks to separate, hydraulic drives provided for the two rear wheels.

» **Optimum traction** is assured, even on difficult terrain, by electronic traction management and an electronic differential lock acting on the drives of the rear wheels.



Extreme manoeuvrability thanks to Pivot Steer: the rear inside wheel is automatically slowed down hydraulically when Pivot Steer is activated. This minimizes the outside turning radius to no more than 3.8m for positioning manoeuvres and paving.

The function can be activated in "Pave" and "Positioning" modes, greatly increasing the manoeuvrability of the machine on confined job sites.

High-quality paving 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.

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

Easy and clean feeding with mix

Despite the paver's slim profile, its material hopper holds 10t. The hydraulic hopper front supports both feeding of the paver with mix and emptying of the material hopper. The paver comes with oscillating push-rollers to ensure the shock-free docking of feed vehicles.

Hydraulically operated hopper sides, folding separately, guarantee consistent feeding with mix even when paving in asymmetrical widths along boundaries such as walls.

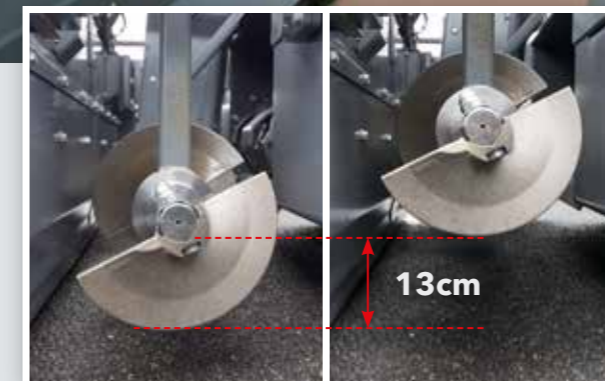


- » **Oscillating push-rollers** allow for convenient and shock-free docking even of large feed vehicles.
- » **The large material hopper** holding 10t is amply dimensioned so that a sufficient quantity of mix is stored at all times. There is no problem tiding over difficult situations such as paving under bridges, for instance.
- » **Hopper sides, folding separately**, guarantee a consistent feed with mix even when paving in asymmetrical width. They allow to smoothly pave along boundaries such as walls.

Proportional control provided for conveyors and augers

The conveyance and spreading of mix in front of the screed is optimal thanks to the large conveyor tunnel, proportional control of conveyors and powerful augers. Furthermore, augers adjustable

in height and folding limiting plates for the auger tunnel allow the paver to be moved on the job site without a need for conversion. This saves time and money.



Augers are infinitely variable in height by 13cm across the entire pave width for optimal spreading of mix. Hydraulic auger height adjustment is available as an option.

- » **Thanks to an amply dimensioned conveyor tunnel** and powerful, separate hydraulic drives provided for conveyors and augers, the SUPER 1103-3i achieves laydown rates up to 200t/h, an extraordinarily high performance for a paver in its class.
- » **Separate drive and control** is installed for each conveyor and each auger. When operating in Automatic mode, conveyors and augers are subject to continual monitoring. Proportional control provides for a constant head of mix in front of the screed.
- » **Folding limiting plates** for the auger tunnel are provided to quickly set up the machine for paving within its full range of pave widths. There is no need for conversion.

The ErgoPlus 3 operating concept

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. Therefore, the ErgoPlus 3 operating concept focuses on the operator. With VÖGELE pavers, the user consequently retains full control over the machine and 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 stand, the paver operator's console and screed consoles as well as Niveltronic Plus, the System for Automated Grade and Slope Control.



The paver operator's **ErgoPlus 3** console

“Full control for the machine operator”

The paver operator's ErgoPlus 3 console

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 a need to confirm. As darkness falls, the paver operator's console is back-lit automatically, as in a car. This makes night-time work easy and relaxed.



●●●●●	Module 1:	Conveyors and augers, traction
●●●●●	Module 2:	Screed
●●●●●	Module 3:	Material hopper and steering
●●●●●	Module 4:	Display for monitoring and adjustment of basic settings


Lighting for travelling on public roads

As a standard feature, all VÖGELE wheeled pavers 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.



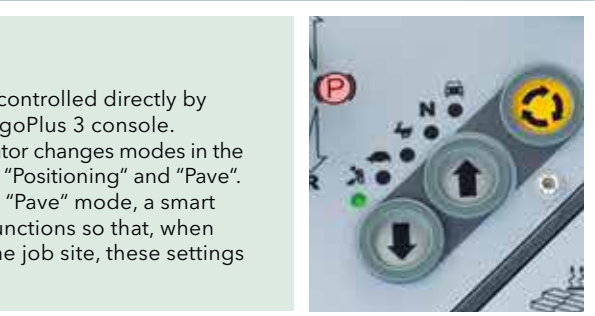
No-load function

The no-load function is provided for the warm-up or cleaning of conveyors and augers.



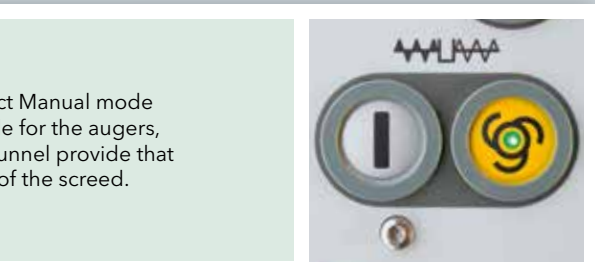
Choice of operating modes for the paver

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: "Road Travel", "Neutral", "Job Site", "Positioning" and "Pave". An LED indicates the mode selected. When leaving "Pave" mode, a smart memory feature stores the last settings for paver functions so that, when resuming work after a relocation of the paver on the job site, these settings are retrieved automatically.




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 material level in the auger tunnel provide that exactly the desired amount of mix is spread in front of the screed.



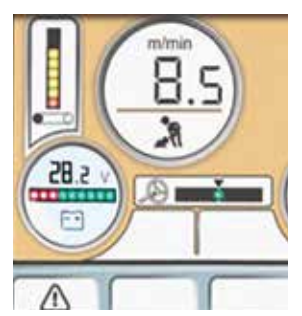
Safe operation during the night

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




Display of the paver operator's console

The redesigned colour display has a high-contrast user interface ensuring brilliant readability even in poor lighting conditions. Vital information is shown on menu level 1, such as the pave speed and the material level in the conveyor tunnel. Further paver functions such as vibrator speed or auger feed rates can be easily set or adjusted via the display monitor. The display also gives access to machine-related information such as fuel consumption or service hours.




Hydraulic hopper sides

The two hydraulic hopper sides can be folded separately or both together at the push of a button.




Choice of engine speed ranges

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



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.



The ErgoPlus 3 screed console



The screed is crucial for pavement quality. Therefore, easy and positive handling of all screed functions is of the utmost importance for high-quality road construction.

With ErgoPlus 3, the screed operator has the paving process at his fingertips. All functions are easily comprehensible and all controls are clearly arranged.

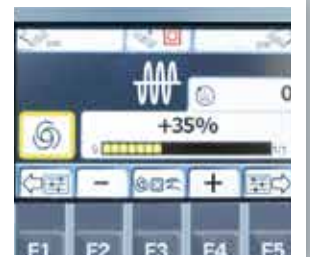
The screed console

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 be called up and adjusted from the screed console, too.



The display of the screed console

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



Crown adjustment at the press of a button

The crown can be conveniently adjusted at the press of a button on the screed operator's console. When pressing the "plus" or "minus" keys, the set crown value is shown on the display.



Ergonomic screed width control

The screed width can be effortlessly adjusted by means of the SmartWheel.



Optimum visibility even in darkness

The screed console is specially designed for night-time operation. To prevent operator errors, the buttons are backlit as soon as dusk falls or in darkness. What's more, downward-angled high-power LED lighting gives the operator a perfect view of all processes associated with the side plate.



VÖGELE Niveltronic Plus

Niveltronic Plus, the 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 optimally adapted to the machine technology of the SUPER pavers. All wiring and connections, for instance, are integrated into the tractor unit and screed, effectively eliminating all risk of damage to these components.

VÖGELE naturally offer a particularly large and practical selection of sensors permitting versatile use of the Niveltronic Plus system. Whether car parks, roundabouts or highways need to be built or rehabilitated, VÖGELE offer the right sensor for every job site situation.

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



Left-hand side of screed	Right-hand side of screed
Shows the value specified for the sensor on the left-hand side. For grade sensors, values are indicated in mm. When working with the slope sensor, values are indicated in percent.	Shows the value specified for the sensor on the right-hand side. For grade sensors, values are indicated in mm. When working with the slope sensor, values are indicated in percent.
Shows the type of sensor selected for the left-hand side. Displayed here in this example is the symbol of the sonic sensor used in Ground mode.	Shows the type of sensor selected for the right-hand side. Displayed here in this example is the symbol of the sonic sensor used in Ground mode.
Shows the actual value picked up by the sensor.	Shows the actual value picked up by the sensor.
Shows the sensitivity set for the sensor selected.	Shows the sensitivity set for the sensor selected.





The ErgoPlus 3 operator's stand

1. 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 feeding of the paver with mix.

2. The seats swinging out

to the sides and an operator's stand in a streamlined design provide for 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.

3. Working comfort

The paver operator's seat and console, as well as the screed consoles can now be adjusted even more easily to personal needs.

4. 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.

5. Hardtop gives excellent protection

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

6. Consistent service concept

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

7. Safe and comfortable ascent

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

8. Ergonomic screed console

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



AB 340 V Screed

The AB 340 Extending Screed in the V version is the ideal match for the SUPER 1103-3i's range of applications. This vibrating screed allows reinstatement work to be carried out quickly and with ease, without ever compromising on quality.

A typical VÖGELE feature also found in the AB 340 V Extending Screed is the powerful electric heating. The modern screed heating system provides for quick and uniform heating to operating temperature, an essential for smooth surface texture.

The unique VÖGELE single-tube telescoping system allows screed width control, accurate to the millimetre, up to 3.4m.

Telescopic tubes are located in high positions, so that any contact with hot mix is positively avoided, ensuring a long service life.

Excellent insulation of the screed plates reduces loss of heat to a minimum. Heating the screed takes a short time only, even with the engine running at minimum rpm.

A homogeneous surface texture is achieved due to uniform heating of screed plates.

The electric heating warms the screed up to its operating temperature much more quickly, even with the engine running at minimum rpm, thanks to intelligent generator management.

The screed for the SUPER 1103-3i

AB 340 V

Pave widths

- » Infinitely variable range from 1.8m to 3.4m.
- » Maximum pave width through bolt-on extensions:
 - > 3.9m (2 x 25cm)
 - > 4.2m (2 x 40cm)
- » Smaller widths by fitting cut-off shoes down to a minimum of 75cm.

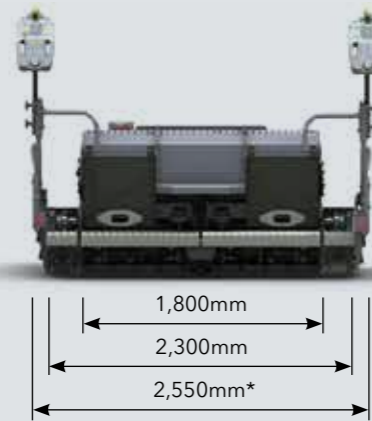
Compacting system

- » AB 340 V with vibrators



AB 340 V

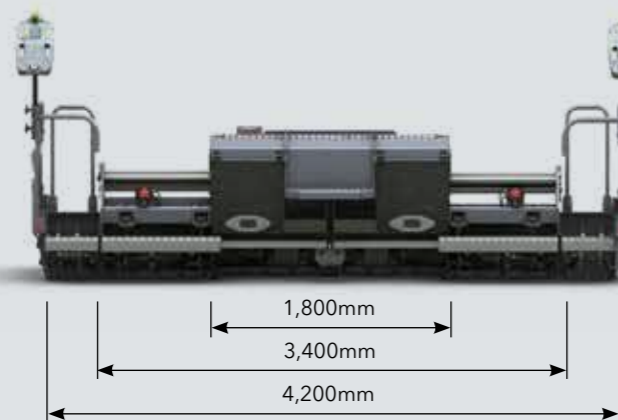
AB 340 V built up with 25cm bolt-on extensions



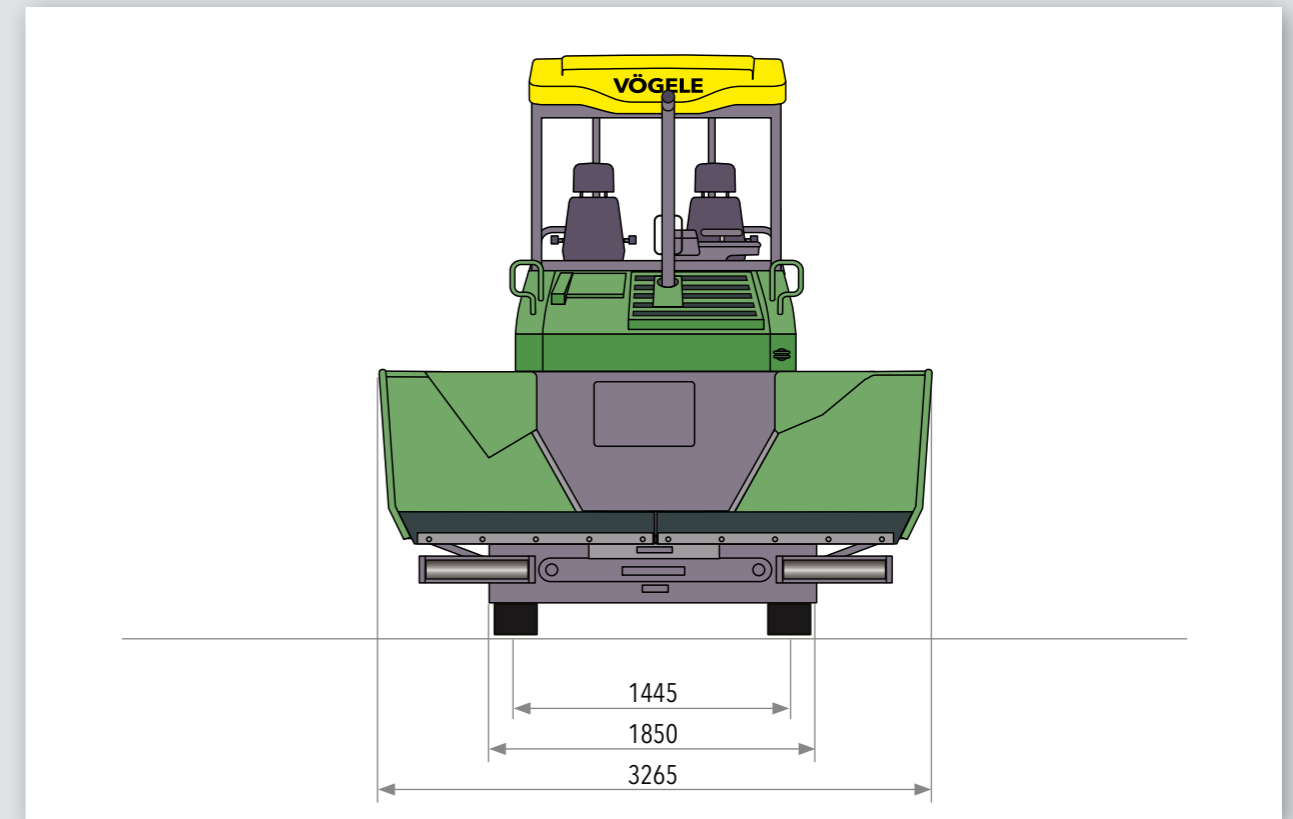
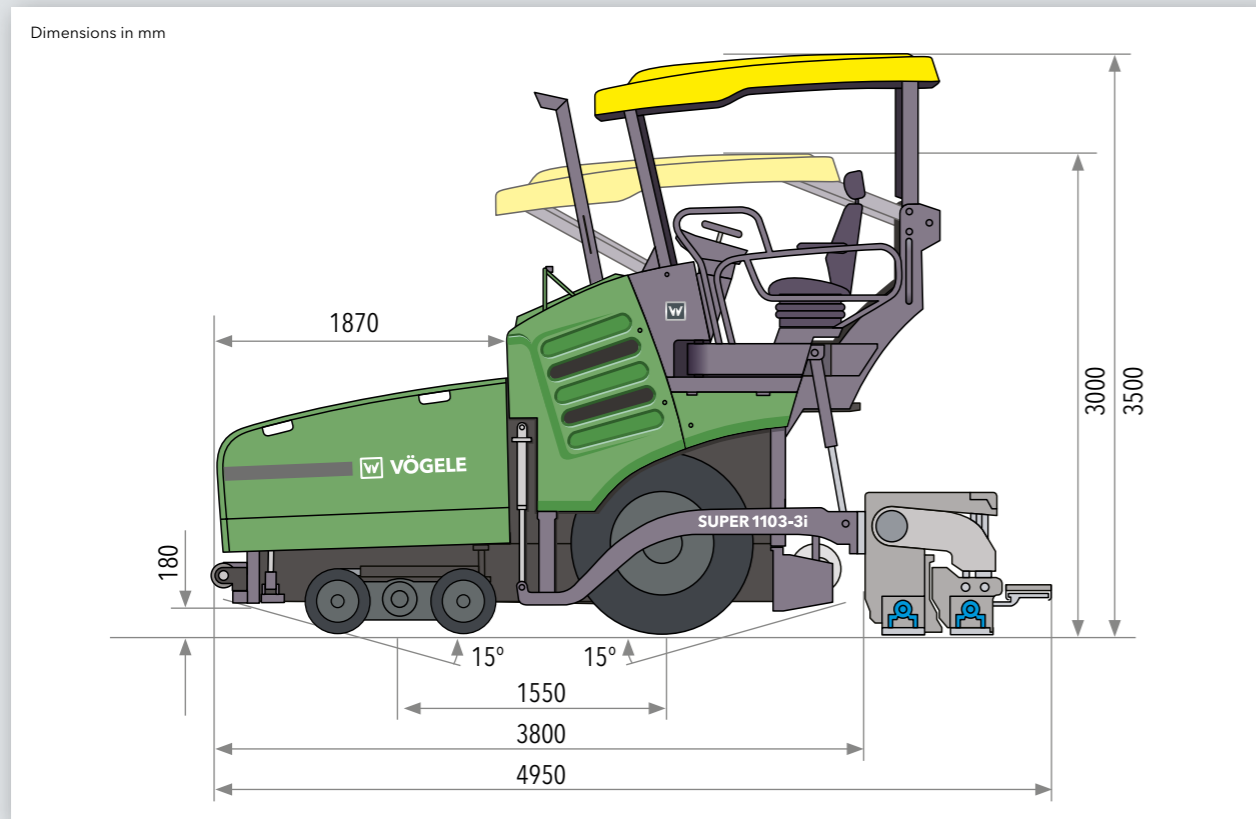
Easy transport
*Even with bolt-on extensions and side plates fitted, the transport dimensions do not exceed 2.55m.

AB 340 V

AB 340 V built up with 40cm bolt-on extensions



All the facts at a glance



Power unit	
Engine	4-cylinder diesel engine
Manufacturer	Deutz
Type	TCD 3.6L4
Output	
Nominal	74.4kW at 2,000rpm (according to DIN)
ECO mode	68.2kW at 1,600rpm
Exhaust emissions standard	EU Stage 3b, US EPA Tier 4i
Exhaust gas after-treatment	DOC
Emission data	
Sound power level	≤105 dB(A) (2000/14/EC and DIN EN 500-6)
Daily noise exposure level	>80 dB(A) (DIN EN 500-6)
Fuel tank	100 litres

Undercarriage	
Front wheels	4, mounted on bogies
Tyre equipment	elastic solid rubber tyres
Tyre size	460/250 – 310mm
Rear wheels	2, pneumatic tyres or filled with water
Tyre size	365/80 R 20 XZL TL 152K
Drive	separate hydraulic drive provided for each wheel
Standard	2 rear wheels (6x2)
Speeds	
Paving	up to 30m/min., infinitely variable
Travel	up to 20km/h, infinitely variable
Outside turning radius	minimum 3.8m (with Pivot Steer)
Material hopper	
Hopper capacity	10t
Width	3,245mm
Feed height	518mm (bottom of material hopper)
Push-rollers	oscillating
Position	can be displaced forwards by 80mm

Conveyors and augers	
Conveyors	2, with replaceable feeder bars, conveyor movement reversible for a short time
Drive	separate hydraulic drive provided for each conveyor
Speed	up to 25m/min., infinitely variable (manual or automatic)
Augers	2, with replaceable auger blades, auger rotation reversible
Diameter	300mm
Drive	separate hydraulic drive provided for each auger
Speed	up to 80rpm, infinitely variable (manual or automatic)
Auger height	infinitely variable by 13cm, mechanical

Screed		
AB 340	basic width	1.8m
	infinitely variable range	1.8m to 3.4m
	maximum width	4.2m
	minimum width	0.75m
	reduction in width: by cut-off shoes	2 x 52.5cm
Screed version	V	
Layer thickness	up to 20cm	
Screed heating	electric by heating rods	
Power supply	three-phase A.C. generator	
Dimensions (transport) and weights		
Length	tractor unit with screed	
AB 340 V	4.95m	
Weights	tractor unit with screed	
AB 340 V	pave widths up to 3.4m	10t
	pave widths up to 4.2m	10.7t

Key: **DOC** = Diesel Oxidation Catalyst **AB** = Extending Screed **V** = with vibrators

Subject to technical modification.



Your VÖGELE QR Code will take you directly to the "SUPER 1103-3i" on our website.



JOSEPH VÖGELE AG

Joseph-Vögele-Str. 1
67075 Ludwigshafen · Germany
marketing@voegele.info

Telephone: +49 (0)621 8105 0
Fax: +49 (0)621 8105 461
www.voegele.info



® ERGOPLUS, InLine Pave, NAVITRONIC, NAVITRONIC Basic, NAVITRONIC Plus, NIVELTRONIC, NIVELTRONIC Plus, RoadScan, SprayJet, VÖGELE, VÖGELE PowerFeeder, PaveDock, PaveDock Assistant, AutoSet, AutoSet Plus, AutoSet Basic, ErgoBasic and VÖGELE-EcoPlus are registered Community Trademarks of JOSEPH VÖGELE AG, Ludwigshafen/Rhein, Germany. PCC is a registered German Trademark of JOSEPH VÖGELE AG, Ludwigshafen/Rhein, Germany. ERGOPLUS, NAVITRONIC Plus, NAVITRONIC BASIC, NIVELTRONIC Plus, SprayJet, VISION, VÖGELE, VÖGELE PowerFeeder, PaveDock, PaveDock Assistant, AutoSet, AutoSet Plus, AutoSet Basic and VÖGELE-EcoPlus are trademarks registered in the US Patent and Trademark Office to JOSEPH VÖGELE AG, Ludwigshafen/Rhein, Germany. Legally binding claims cannot be derived from written information or pictures contained in this brochure. Pictures may include optional extras. We reserve the right to make technical or design alterations.