

Wheeled Paver

# SUPER 1303i





# 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, even when operating at full load and in any climate zone.

## MATERIAL MANAGEMENT

### 02 Optimal mix feed

- > Large material hopper with a capacity of 10 tonnes ensures optimum feeding with mix.

## OPERATION

### 03 ErgoBasic operating system

- > Easy operation with the innovative and intuitive ErgoBasic operating system.

### 04 Pivot Steer steering brake

- > Significantly smaller turning circle due to Pivot Steer steering brake.

## QUALITY

### 05 Niveltronic Basic - the System for Automated Grade and Slope Control

- > Wide range of sensors for flexible use in all spheres of application.
- > User-friendly operation and monitoring of all Niveltronic Basic functions.

## VERSATILITY

### 06 Wide range of applications

- > Wheeled Compact Class paver with a wide range of applications and pave widths up to 4.5 m.

### 07 Screed

- > Can be combined with the AB 340 Extending Screed in the T, V and TV versions.







01



02



03



04



05



06

# POWERFUL, ECONOMICAL AND QUIET

The SUPER 1303i has been designed as a highly cost-efficient and compact wheeled paver. Wherever a job involves building minor roads or surfacing small areas, this VÖGELE paver is the ideal choice.

What is more, confined spaces at a job site are no problem, because, with its extremely compact dimensions, this paver is totally manoeuvrable even in the tightest spots.

As a VÖGELE Classic Line paver, it has a very solid range of basic features, the most striking being the ErgoBasic operating system. This system was developed on the basis of the tried-and-tested ErgoPlus 3 operating system and specially tailored to the needs of Classic Line machine users.

As with ErgoPlus 3, the design of the paver operator's ErgoBasic console is so clear that all functions can be grasped quickly and operated securely.

The SUPER 1303i combines with the AB 340 Extending Screed in the T, V and TV versions. It goes without saying that, like all VÖGELE screeds, this one also offers electric screed heating and achieves a high degree of precompaction.



01 Simple operation with the innovative ErgoBasic operating system.  
02 Wheeled paver with a large range of applications.  
03 The slim paver design and a compact overall length, makes it very easy to work and manoeuvre on tight job sites.

04 The paver operator's platform ensures maximum visibility.  
05 Optimum feeding with mix thanks to the large material hopper.  
06 Can be combined with the AB 340 Extending Screed.



# COMPACT DIMENSIONS FOR PAVING IN VERY TIGHT SPACES

Small size, high efficiency: be it extremely confined job sites outside of town or winding inner-city alleyways, the highly manoeuvrable and compact paver can negotiate tight spots with ease while delivering top performances. The slim paver design, with no protruding edges and a compact overall length, makes it very easy to work and manoeuvre on tight job sites.

The clearance width of just 1.85 m allows the SUPER 1303i to easily get in and out of confined spaces such as narrow alleys. The push-rollers automatically fold up together with the hopper sides.

**Compact total length**  
of just 4.95 m

**Clearance width 1.85 m**  
with hopper sides folded



For transport, the hardtop, made of a glass fibre-reinforced polymer material, and the exhaust pipe can be folded down in just a few swift moves, readying the paver for transport quickly and easily.





# RANGE OF APPLICATIONS OF THE SUPER 1303i

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 is a combined footpath and cycle path, a farm track or minor roads and small areas, the SUPER 1303i is more than up to the task, thanks to its wide range of pave widths from 0.75 m to 4.5 m and its innovative drive concept.



- 01 Surfacing paths in public parks
- 02 Asphalt paving on railway platforms
- 03 Pavement rehabilitation on access roads
- 04 Pavement rehabilitation on municipal roads

The applications illustrated here are typical of the VÖGELE Compact Class.



# FULL POWER – INTELLIGENT TECHNOLOGY

High output with low consumption

Three main components define the power unit of a SUPER 1303i: 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 diesel engine. The four-cylinder engine delivers 75 kW at 2,000 rpm, though fuel-saving ECO mode is sufficient for many applications. And even then, the SUPER 1303i still has a full 68.7 kW at its disposal. Moreover, the machine generates less noise when running at just 1,600 rpm.

A large cooler assembly ensures that the power unit always delivers its full output. With innovative air routing and a variable-speed fan, temperatures are continuously maintained

within the optimum range, significantly extending the service life of both the diesel engine and the hydraulic oil. A further advantage is that the machine can operate without difficulty in all climate regions worldwide.

All hydraulic consumers are directly supplied with hydraulic oil via the splitter gearbox. Hydraulic pumps and valves are centrally located, making them optimally accessible for servicing.

75 kW  
diesel engine output

ECO mode at 1,600 rpm  
reduces operating costs

Intelligent generator management  
adapts output to suit pave width



- = Hydraulic oil
- = Fuel
- = Coolant
- = Charge air

## VÖGELE > GOOD TO KNOW

### Exhaust emissions after-treatment

The power unit of the SUPER 1303i with its diesel particulate filter (DPF) and diesel oxidation catalyst (DOC) for exhaust gas after-treatment complies with the strict requirements of Chinese exhaust emissions standard NR4.

The SUPER 1303i complies with the “National Environment Protection Standards of the People’s Republic of China HJ 1014-2020”.



# MOBILITY ON WHEELS

The high-traction SUPER 1303i wheeled paver perfectly combines high performance paving with maximum mobility during transport, thanks to powerful separate hydraulic drives integrated in the powered wheels. They provide for maximum traction.

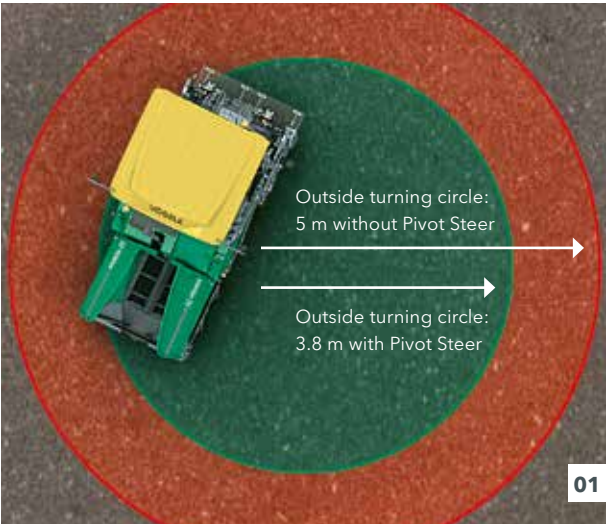
Rapid transport under its own power at up to 20 km/h – a feat the SUPER 1303i is optimally equipped for. The paver is equipped with a lighting system approved for use in traffic. As a result, this machine meets the basic requirement for driving on public roads.

Maximum power transmission thanks to separate, hydraulic drives in both rear wheels and optionally in two front wheels. 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.

**Optimum traction**  
even on difficult terrain

**Pivot Steer steering brake**  
reduces the outside turning circle to 3.8 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 a minimal 3.8 m for positioning manoeuvres and paving.
- 02** As a standard feature, VÖGELE wheeled pavers are equipped with lights 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.

Highly manoeuvrable thanks to Pivot Steer. With Pivot Steer activated, the rear inside wheel is automatically slowed down hydraulically. This minimizes the outside turning circle to no more than 3.8 m 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.





# PERFECT MATERIAL MANAGEMENT FOR PERFECT PAVING QUALITY

A continuous flow of mix is key to ensuring uninterrupted and high-quality paving. That is why we attach such importance to professional material management when designing our pavers. All our development efforts focus on simple operation and the best possible overview for the paving team.

Despite the paver’s slim profile, its material hopper holds 10 t. The paver comes with oscillating push-rollers to ensure the shock-free docking of feed vehicles.

Separately folding hopper sides ensure smooth feeding with mix even when paving across asymmetrical widths and a convenient mix supply even when paving along boundaries.

Oscillating push-rollers for convenient and shock-free docking also of large feed vehicles.

The large material hopper has a capacity of 10 t so that a sufficient quantity of mix is available for paving at all times, even in situations where feeding is difficult, such as when paving under bridges.



**Large material hopper**  
with a capacity of 10 tonnes

**Deep and wide hopper sides**  
for especially straight forward material feed

**Oscillating push-rollers**  
for convenient and shock-free docking



- 01 The amply dimensioned conveyor tunnel and powerful, separate hydraulic drives for conveyors and augers support laydown rates of up to 250 t/h, which are extraordinarily high for a paver in this class.
- 02 Separate drives and controls are installed for each conveyor and 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.
- 03 Separately folding hydraulic hopper sides for smooth feeding with mix, paving along boundaries and a targeted mix supply even when paving across asymmetrical widths.



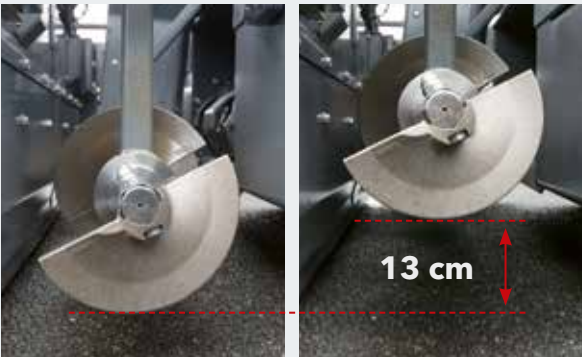
The conveyance and even spreading of mix in front of the screed are optimal thanks to the large conveyor tunnel, proportional control of conveyors and powerful augers.

What is more, the height-adjustable augers and folding limiting plates for the auger tunnel allow the paver to be repositioned without a need for conversion, a benefit that saves time and money.

## VÖGELE > GOOD TO KNOW

### Adjustable auger height

The height of the augers is infinitely variable by 13 cm for uniform spreading of mix across the entire pave width.







## ERGOBASIC OPERATING CONCEPT

Ergonomic, simple and intuitive

The ErgoBasic operating concept was developed on the basis of the tried and tested ErgoPlus operating system, but it focuses on the key functions.

The aim was to develop an operating system that is just as quick, precise and intuitive to operate as the ErgoPlus 3 system for the "Dash 3" machines. This makes VÖGELE the only manufacturer to offer a standardised operating concept for all paver classes.





# PAVER OPERATOR'S ERGOBASIC CONSOLE

Full control for the operator

Everything at a glance: The functions are arranged in a clear, logical and practical layout that was heavily inspired by the ErgoPlus operator's console. The type of controls and the symbols used are all in line with those of an ErgoPlus console.

Given the limited number of functions, there is no need for a display. The status of all settings is indicated as a percentage on LED strips immediately next to the relevant functions. LEDs also indicate the set speeds for the augers and the compacting systems as well as the fill level of the fuel tank.



**01 Drive and status display function group**

All the functions for driving the paver are arranged together here. The status displays also provide an overview of machine status.

**02 Screed function group**

This function group includes all the screed functions such as settings for the tamper and vibrators and adjustment of screed width and angle.

**03 Material handling function group**

The material handling function group includes operation of the hopper sides and of the conveyor and auger.



**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.



# DRIVE AND STATUS DISPLAYS

## Module 1

### 01 Function and status indicators

The function and status indicators mean that the operator always has full control over his machine. He can, for instance, read the fill level of the fuel tank directly and identify whether there are any functional faults.

### 02 Pivot Steer steering brake

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 at the maximum steering angle. This reduces the turning circle to a minimum.



- 01 Given the limited number of functions, there is no need for a display.
- 02 Pivot Steer minimizes the outside turning circle to no more than 3.8 m.



### 03 Choice of operating modes for the paver

At the touch of a button, the paver switches to Pave, Positioning, Job Site, Neutral modes and Road Travel. An LED indicates which mode is selected. On leaving "Pave" mode, the memory function stores all the most recent settings. After moving on the job site, the previously used paving parameters are instantly restored.

### 04 Choice of engine speed ranges

For the diesel 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.



# MATERIAL MANAGEMENT

## Module 2

### 01 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 push of a button. Reverse movement takes place for a short time only and stops automatically.

### 02 Automatic functions for material handling/distribution

These functions ensure that adequate mix for paving is automatically conveyed and distributed in front of the screed. The level of the head of mix in front of the screed is defined by a material sensor and the automatic system ensures that it remains constant. The function is only active during paving - if the paver stops, so does material handling.



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 Speed of the augers

In Automatic mode, the plus/minus buttons can be used to adjust the maximum auger speed separately for the right and left sides to suit the pave width, without the use of sonic sensors. The value, which is set in percent, is indicated by the LEDs.



# SCREED FUNCTIONS

## Module 3

### 01 Precompaction performance

The speeds of the compacting systems can be set directly on the paver operator's ErgoBasic console. The LED strips from 0 to 100% indicate the set speeds for the tamper and vibrators, allowing them to be adjusted immediately when required.

### 02 Screed settings

All settings can also be made from the paver operator's console, including raising or lowering the screed, extending or retracting either side of the screed, and adjusting the screed pitch to the site conditions. This means the paver operator also has access to the screed at all times.



01 Precompaction performance  
02 Screed settings  
03 Screed Assist (option)

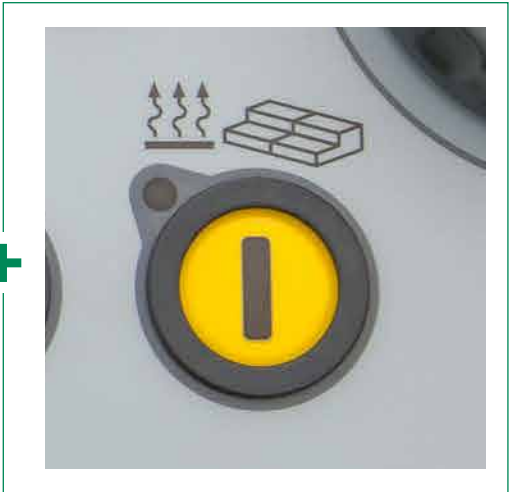


### 03 Screed Assist (option)

This button switches Screed Assist on (LED lights up) or off. Screed Assist is active only when the screed is floating.

### 04 Idling function

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



### Screed heating system

In order to optimise compaction and produce a smooth surface texture, all compacting elements are heated across the full screed width. A simple push of a button is all it takes to switch the 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.



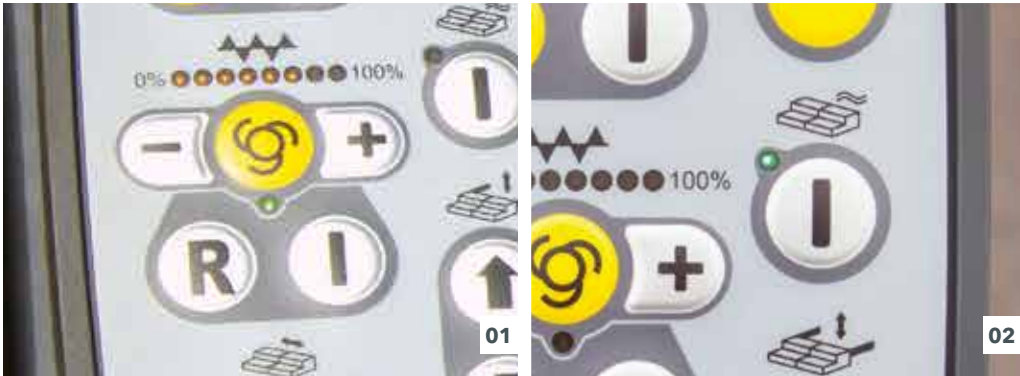
# ERGOBASIC REMOTE CONTROL UNIT FOR THE SCREED

The safe and easy handling of all screed functions is a key factor in high-quality pavement construction. That is why a remote control unit for the screed was developed specifically for the ErgoBasic operating system of the new SUPER 1303i.

The remote control’s keypad is laid out logically according to the functional processes. Designed for robustness, it is well able to withstand tough job-site conditions.

Operation is easy to understand and can be learned intuitively in a very short space of time, not least because the symbols used in the proven ErgoPlus operating system are found here, too.

The ErgoBasic remote control unit for the screed allows all paving-related functions to be set quickly and easily. That includes direct access to the material handling systems and the sonic sensor for the auger.



**01 Speed of the augers**  
Just like the paver operator, the screed operator, too, can select Manual Mode or Automatic Mode for conveyors and augers. The „Reversing Auger Rotation” function is very useful and comfortable in practice.

**02 Screed floating**  
Mix is normally paved with the screed in Screed Float mode, but the operator can switch off Screed Float if required - to discharge residual mix when paving is complete, for example.



**03 Screed width control**  
The screed width on one side can be adjusted at the touch of a button at any time.



Shown in original size

- 01 Setting of Augers and Conveyor (automatic/manual)
- 02 Screed floating on/off
- 03 Screed width control, one side
- 04 Adjustment of screed tow point ram



# NIVELTRONIC BASIC

**VÖGELE have also developed a System for Automated Grade and Slope Control to match the ErgoBasic operating system: the Niveltronic Basic. It is completely integrated into the machine control system and therefore perfectly adapted to the paver model concerned.**

Another outstanding aspect of Niveltronic Basic is its particularly simple and intuitive handling, a feature which makes it easy even for less experienced operators to learn their way around the system. This creates ideal conditions for the small paver to work true to line and level on any base.

Each side of the screed is operated by a separate compact and exceedingly robust Niveltronic Basic remote control unit. These units are easily removed from their magnetic brackets, giving the operator a large range of action so that he can always take up the optimum position for every paving job.



- 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 is available for Niveltronic Basic, in keeping with the machine's large and varied range of uses. These sensors extend from a mechanical to non-contacting sonic sensors.
- 03** The pre-set and actual values for the grade and slope sensor can be read off the display of the Niveltronic Basic's control panel.



- 01** Deviation from specified values
- 02** Setting: Sensor sensitivity
- 03** Selecting: Kind of reference (ground, tensioned wire, transverse slope)
- 04** Quick set-up
- 05** Sensor calibration

## 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.





# PAVER OPERATOR'S ERGOBASIC PLATFORM

Improved efficiency, reliability and convenience

The paver operator's ErgoBasic platform allows the paver operator to easily monitor the paver's feed with mix, for instance, from his seat.

**01 Working comfortably**

- > The comfortable paver operator's platform gives an unobstructed view of all crucial areas on the paver such as material hopper, steering guide or screed. The paver operator is thus ideally positioned to monitor the material feeding process right from his seat.
- > The operating console can be shifted across the entire working width so that operators can work comfortably and in an ergonomic position on either side of the machine.

**02 A place for everything and everything in its place**

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

**03 Hardtop provides excellent protection**

- > The modern hardtop, made of a glass fibre-reinforced polymer material, protects the operator. It can easily be collapsed to quickly prepare the paver for transport.

**04 Cost-efficient and service-friendly design**

- > The paver operator has convenient access to all service points on the machine. All hydraulic pumps connected to the transfer gearbox are extremely easy to service thanks to their clear arrangement and easy accessibility. Durable components made of highly wear-resistant materials for a long service life minimize machine downtimes.

**05 Safe and convenient step**

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

**06 Safe and simple operation of all screed functions**

- > All paving-related functions can be set quickly and easily on the ErgoBasic remote control unit for the screed.

**07 Protection against theft and vandalism**

- > Once work has been completed, the remote control unit for the screed can be collapsed and secured.



# EXTENDING SCREED

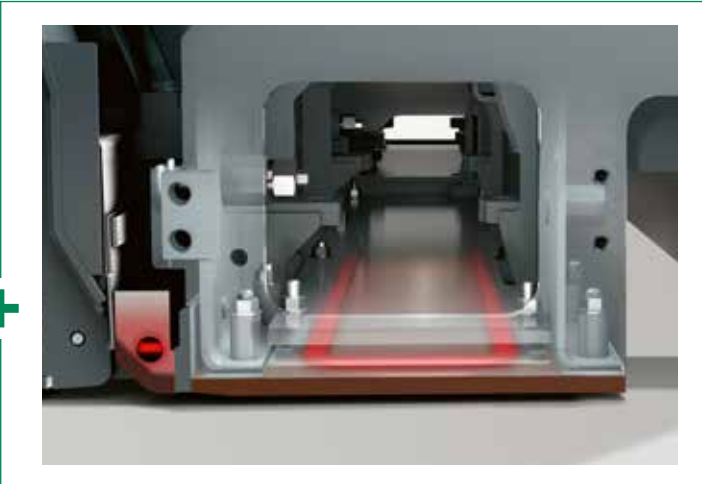
## AB 340

The AB 340 Extending Screed is optionally available for the SUPER 1303i with tamper (T version), vibrators (V version) or with tamper and vibrators (TV version). With this screed, rehabilitation jobs can be carried out very quickly and easily without ever compromising on quality. The unique VÖGELE single-tube telescoping system enables the screed width to be adjusted up to 3.4 m with millimetre precision and zero slack.

A typical VÖGELE feature also found in the AB 340 Extending Screed is its powerful electric heating system. This modern heating system quickly and uniformly heats the screed up to operating temperature, ensuring a smooth surface texture. Excellent insulation of the screed plates reduces loss of heat to a minimum and ensures that heating the screed only takes a short time, even with the engine running at minimum rpm.

### 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 is fitted with heating rods for quick and uniform heating from the inside. Sophisticated control technology is installed to allow automated management of screed heating.







**AB 340**

**Pave widths**

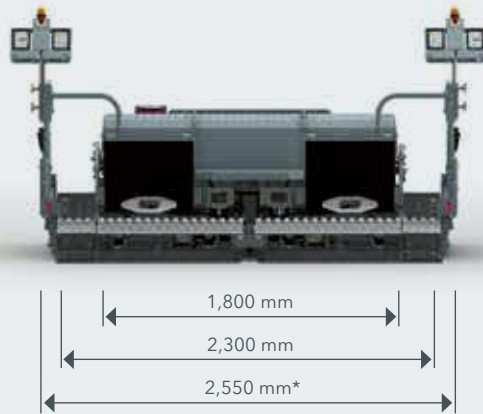
- > Infinitely variable range from 1.8 m to 3.4 m
- > Maximum pave width with bolt-on extensions:  
> 4.5 m (2 x 55 cm)
- > Minimum pave width of 0.75 m with the system  
for pave width reduction

**Compacting systems**

- > AB 340 T Extending Screed with tamper
- > AB 340 V Extending Screed with vibrators
- > AB 340 TV Extending Screed with tamper  
and vibrators

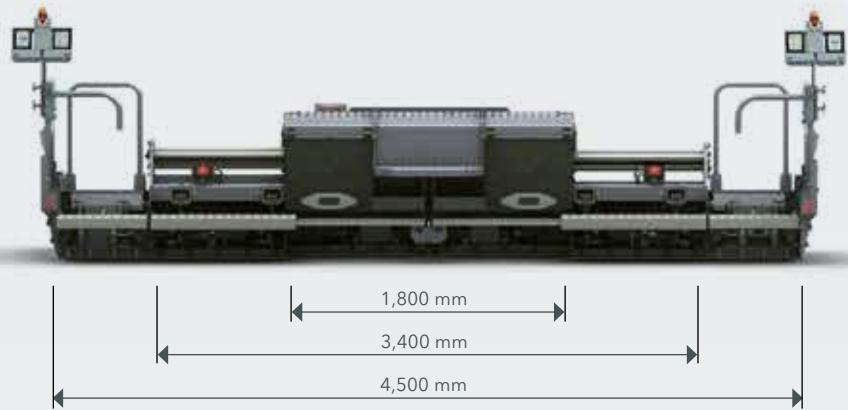


AB 340 Extending Screed with 25 cm bolt-on extensions



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

Extended 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](http://www.wirtgen-group.com/service)



### Spare Parts

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

> [parts.wirtgen-group.com](http://parts.wirtgen-group.com)



### Training

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

> [www.wirtgen-group.com/training](http://www.wirtgen-group.com/training)



### Telematics solutions

Construction machines with leading technology and perfected telematics solutions work hand-in-hand in the WIRTGEN GROUP. The Operations Center\* - the digital platform for process, machine and service optimisation - enables you to not only simplify maintenance planning for your machines, but also to increase your productivity and cost-effectiveness.

> [www.wirtgen-group.com/telematics](http://www.wirtgen-group.com/telematics)

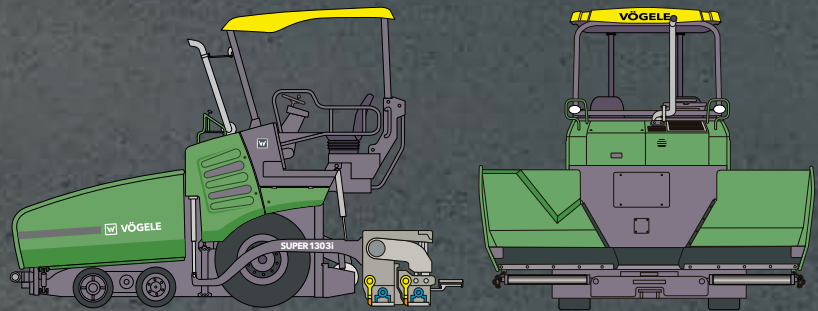
\* The John Deere Operations Center™ (formerly WITOS) is currently not available in all countries. Please consult your responsible subsidiary or dealer if you have any questions.

# ALL THE FACTS AT A GLANCE

SUPER 1303i Wheeled Paver



## TECHNICAL DATA



## SUPER 1303i

- > Maximum pave width: 4.5 m
- > Maximum laydown rate: 250 t/h
- > Layer thickness: max. 25 cm
- > Transport width: 1.85 m





## JOSEPH VÖGELE AG

Joseph-Vögele-Str. 1  
67075 Ludwigshafen  
Germany

T: +49 621 8105-0

F: +49 621 8105-461

M: [marketing@voegele.info](mailto:marketing@voegele.info)

 [www.voegele.info](http://www.voegele.info)



For more information scan the code.