

Compact Class

# **SUPER 1003i**

## **WHEELED PAVER**



Maximum pave width 3.9 m  
Maximum laydown rate 230 tonnes/h  
Transport width 1.85 m



## Compact and manoeuvrable - The small wheeled paver



**The SUPER 1003i** 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 1003i combines with the AB 340 Extending Screed in the 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.

# Highlights of the SUPER 1003i



**Wheeled Compact Class paver** with a wide range of applications and pave widths up to 3.9 m

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

**Simple operation** thanks to the innovative and easy-to-grasp ErgoBasic operating concept

**Significantly smaller turning circle** due to Pivot Steer steering brake

**Can be combined** with the AB 340 TV Extending Screed in the V and TV versions

## 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 VÖGELE Compact Class pavers 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 1003i to easily get in and out of confined spaces such as narrow alleys. The push-rollers automatically fold up together with the hopper sides.

» **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 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 is a combined footpath and cycle path, a farm track or minor roads and small areas, the SUPER 1003i is more than up to the task, thanks to its wide range of pave widths from 0.75 m to 3.9 m and its innovative drive concept.



PAVEMENT REHABILITATION ON MUNICIPAL ROADS



REHABILITATING ACCESS ROADS

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

# 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. These features significantly reduce the SUPER 1003i's fuel consumption and noise emissions.

The high-traction wheeled undercarriage on the SUPER 1003i paver perfectly combines high performance paving with maximum mobility during transport.

## Full power – intelligent technology

**Three main components** form the power unit of the SUPER 1003i: the large cooler assembly, an advanced, liquid-cooled diesel engine and a splitter gearbox flanged directly to the engine.

The driving force behind this VÖGELE powerhouse is a powerful diesel engine. The 4-cylinder engine delivers 55,4 kW at 2,000 rpm, though fuel-saving ECO mode is sufficient for many applications. Moreover, the machine operates particularly quietly 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. Another advantage is that the machine can be operated without difficulty in all climatic regions around the world.

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 power unit of the SUPER 1003i with diesel oxidation catalyst (DOC) and diesel particulate filter (DPF) for exhaust gas after-treatment complies with the strict requirements of European exhaust emissions standard Stage V and US EPA Tier 4f.



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

- » **Powerful diesel engine** develops 55,4 kW at just 2,000 rpm.
- » **ECO mode at 1,600 rpm** is not only perfectly adequate for many applications, it also cuts operating costs and supports super-quiet operation.
- » **The sophisticated exhaust gas after-treatment of the engine** complies with the strict requirements of European emissions standard Stage V as well as US EPA standard Tier 4f.
- » **A powerful three-phase AC generator** with generator management controls output in line with the selected pave width and minimizes the time required to heat the compacting systems up to operating temperature.

# Mobility on wheels

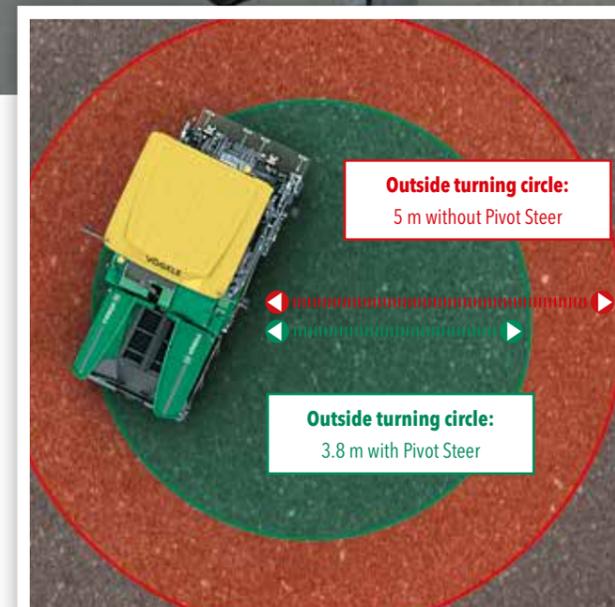
The high-traction SUPER 1003i wheeled paver perfectly combines high performance paving with maximum mobility during transport, thanks to powerful separate hydraulic drives integrated in the powered wheels. They provide for maximum traction.



» **Rapid transport under its own power** at up to 20 km/h – a feat the SUPER 1003i is optimally equipped for. The paver can optionally be 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.



**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.

## Easy and clean feeding with mix

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.

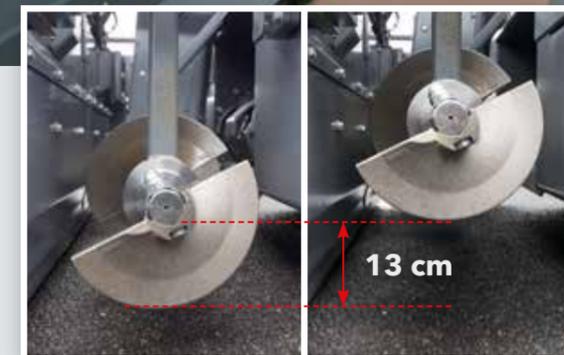


- » **Oscillating push-rollers** for convenient and shock-free docking also of large feed vehicles.
- » **The large material hopper** has a capacity of 10 t so that a sufficient quantity of mix is available for paving at all times, even in situations where feeding is difficult, such as when paving under bridges.
- » **Separately folding hydraulic hopper sides** for smooth feeding with mix, paving along boundaries and a targeted mix supply even when paving across asymmetrical widths.

## Perfect conveying and spreading of mix, just like the big pavers

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.



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

- » **The amply dimensioned conveyor tunnel** and powerful, separate hydraulic drives for conveyors and augers support laydown rates of up to 230 t/h, which are extraordinarily high for a paver in this class.
- » **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.

## The ErgoBasic operating concept



**The ErgoBasic operating concept** was developed on the basis of the proven ErgoPlus operating system which is installed in our Premium Line pavers, but was tailored specifically to the needs and requirements of VÖGELE Classic Line users.

The goal was to develop an operating system that can be operated just as quickly, accurately and intuitively as the ErgoPlus 3 system on the "Dash 3" machines.

This makes VÖGELE the only manufacturer to offer a standardized operating concept for all paver classes.



# The paver operator's **ErgoBasic** console

**“Full control for the machine operator!”**

# The paver operator's ErgoBasic console

**Everything at a glance:** the functions are arranged in a clear, logical and practical layout that has clearly been inspired by the ErgoPlus operating console. The type of controls and the symbols used are all in line with those on 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.

Additional LEDs indicate the set speeds of the augers and the compacting systems as well as the fill level of the diesel tank.



**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.



**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.



**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 ErgoBasic console. The paver changes between operating modes at the push of a button in the following order: "Pave", "Positioning", "Job Site" and "Neutral". 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.



**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.



**Lighting for travelling on public roads**

The SUPER 1003i can be equipped with a lighting system approved throughout Europe for use on public roads. The push-buttons for the direction indicators, warning lights, dipped beams and full beams are clearly arranged side-by-side on the console.



**Compacting effort**

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



**Idling function**

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



**Safe operation during the night**

The paver operator's ErgoBasic console features glare-free backlighting so that the paver operator can also work safely on night-time jobs.



## The **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's why an ErgoBasic remote control unit for the screed was developed specifically for the new Classic Line pavers.

Its 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. This includes direct access to the material handling systems and the sonic sensors for the augers.

**All the main paving functions** can be controlled using the two handy remote control units for the screed. Simple, language-neutral symbols allow the machine to be operated intuitively.



- 1 // **Conveyor setting**  
automatic/manual
- 2 // **Horn**
- 3 // **Auger setting**  
automatic/manual/reverse
- 4 // **Screed floating** on/off
- 5 // **Adjustment of screed width**  
one side
- 6 // **Adjustment of screed tow point ram**



## The operator's Niveltronic Basic console

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

A variety of sensor types is available for Niveltronic Basic, in keeping with the machine's large and varied range of uses. The selection extends from mechanical sensors to non-contacting sonic sensors. The System for Automated Grade and Slope Control can simultaneously be connected to two grade sensors and one slope sensor. The type of sensor used is detected automatically.

The kind of reference - ground, tensioned wire or transverse slope - can be easily set on the remote control unit.

**The remote control units** cover all the functions required for high-precision grade and slope control. Clear symbols support intuitive machine operation.



- 1 // **Deviation** from specified values
- 2 // **Niveltronic Basic** on/off
- 3 // **Setting** for sensor sensitivity
- 4 // **Selection of scanning mode** for the sensor (ground/tensioned wire/transverse slope)
- 5 // **Quick set-up**
- 6 // **Setting** of the specified value
- 7 // **Sensor calibration**





## Paver operator's ErgoBasic platform

### 1. 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.

### 2. Working comfortably

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.

### 3. 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.

### 4. 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.

### 5. 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.

### 6. Safe and convenient step

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

### 7. 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.

### 8. Protection against theft and vandalism

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



## AB 340 Extending Screed

The **AB 340 Extending Screed** is optionally available for the SUPER 1003i with vibrators only (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.

# The SUPER 1003i screed system

## AB 340

### Pave widths

- » Infinitely variable range from 1.8 m to 3.4 m
- » Maximum pave width with bolt-on extensions:
  - » 3.9 m (2 x 25 cm)
- » Minimum pave width of 0.75 m with the system for pave width reduction

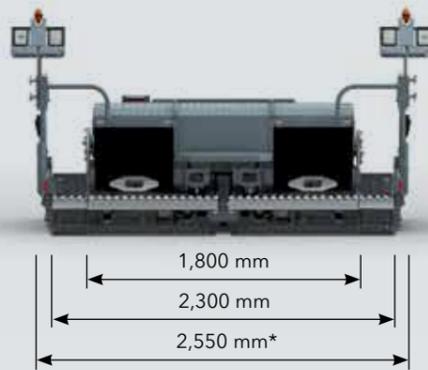
### Compacting systems

- » AB 340 V Extending Screed with vibrators
- » AB 340 TV Extending Screed with tamper and vibrators



## AB 340

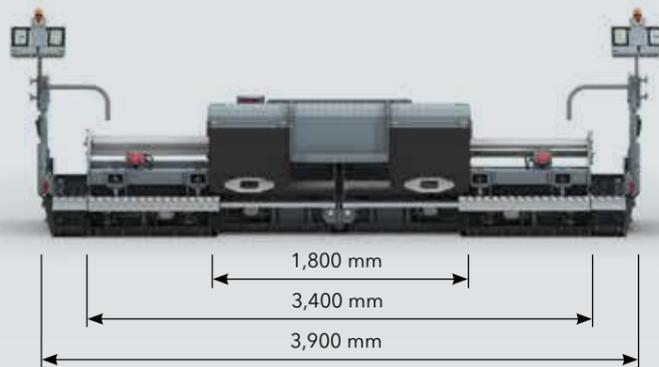
AB 340 with 25 cm bolt-on extensions



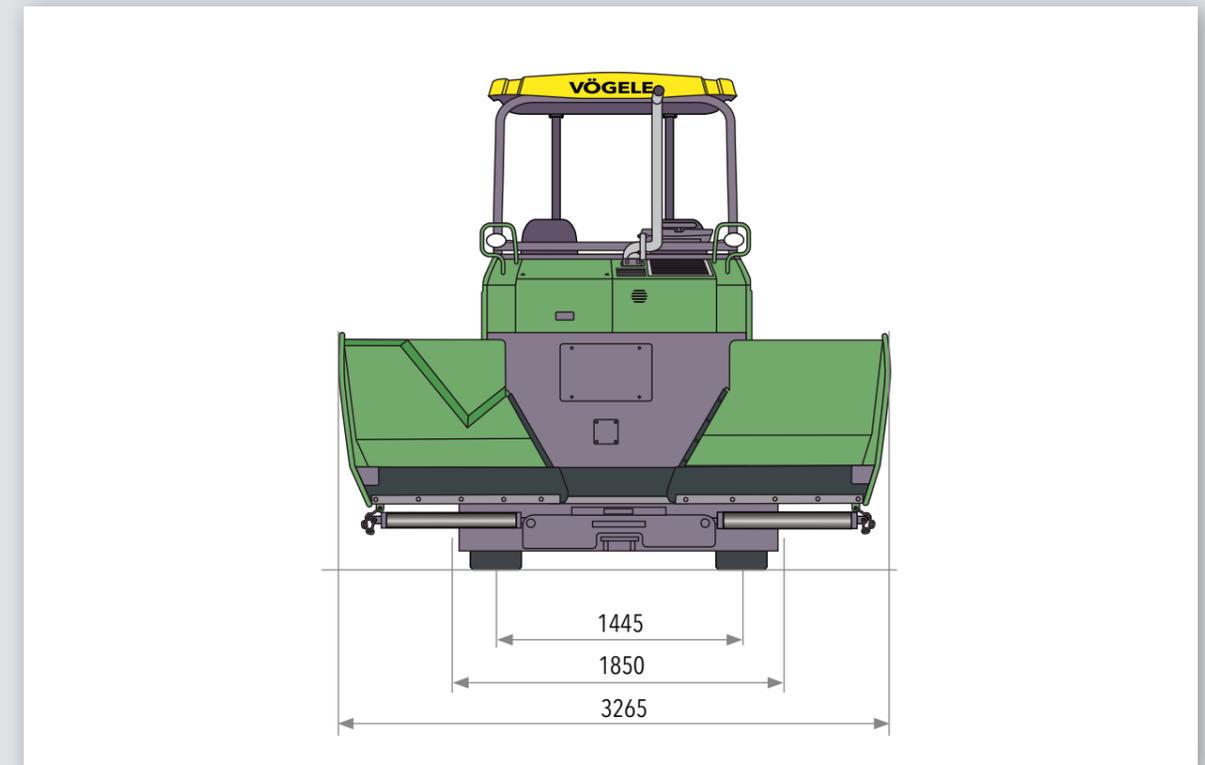
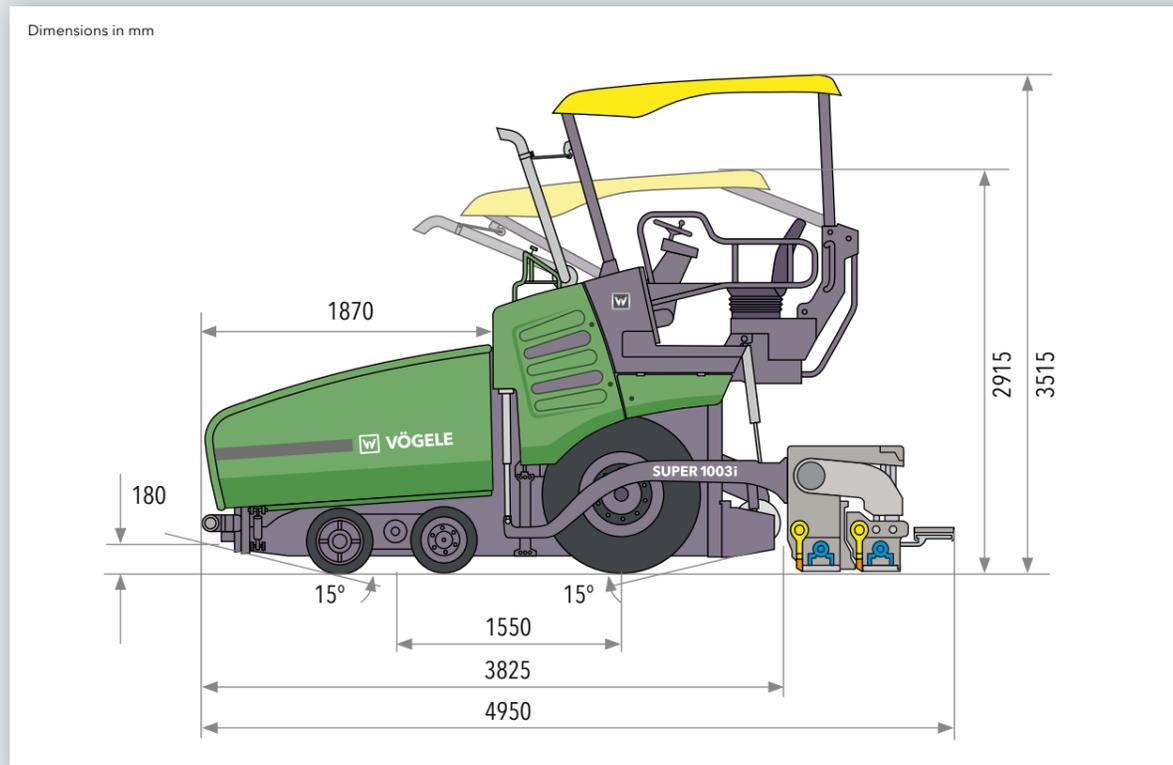
Easy transport  
\*Even with bolt-on extensions and side plates fitted, the transport dimensions do not exceed 2.55 m.

## AB 340

Extended to maximum pave width



# All the facts at a glance



Power unit	
<b>Engine</b>	4-cylinder diesel engine
Manufacturer	Deutz
Type	TCD 3.6 L4
<b>Output</b>	
Nominal	55,4 kW at 2,000 rpm (according to DIN)
ECO mode	55,4 kW at 1,600 rpm
<b>Exhaust emissions standards</b>	EU Stage V, US EPA Tier 4f
Exhaust gas after-treatment	DOC, DPF
<b>Emission data</b>	
Sound power level	≤104 dB(A) (2000/14/EC and DIN EN 500-6)
Daily noise exposure level	>80 dB(A) (DIN EN 500-6)
<b>Fuel tank</b>	105 litres

Undercarriage	
<b>Front wheels</b>	4, mounted on bogies
Tyre equipment	elastic solid rubber tyres
Tyre size	460/250 - 310 mm
<b>Rear wheels</b>	2, pneumatic tyres or filled with water
Tyre size	365/80 R20
<b>Drive</b>	electronically controlled separate hydraulic drive provided for each wheel
Standard	2 rear wheels (6x2)
Option	2 rear and 2 front wheels (6x4)
<b>Speeds</b>	
Paving	up to 18 m/min., infinitely variable
Transport	up to 20 km/h, infinitely variable
<b>Outside turning circle</b>	min. 3.8 m (with Pivot Steer)
Material hopper	
<b>Hopper capacity</b>	10 t
<b>Width</b>	3,265 mm
<b>Feed height</b>	570 mm (bottom of receiving hopper)
<b>Push-rollers</b>	oscillating
Position	can be displaced forwards by 80 mm

Conveyors and augers	
<b>Conveyors</b>	2, with replaceable feeder bars, direction of conveyor temporarily reversible
Drive	separate hydraulic drive provided for each conveyor
Speed	up to 22 m/min., infinitely variable (manual or automatic)
<b>Augers</b>	2, with replaceable auger blades, auger rotation reversible
Diameter	300 mm
Drive	separate hydraulic drive provided for each auger
Speed	up to 85 rpm, infinitely variable (manual or automatic)
<b>Auger height</b>	
Standard	infinitely variable by 13 cm, mechanical
Option	infinitely variable by 13 cm, hydraulic

Screed		
<b>AB 340</b>	basic width	1.8 to 3.4 m
	maximum width	3.9 m
	min. pave width with system	
	for pave width reduction	0.75 m
	reduction in width by cut-off shoes 2x52.5 cm	
	compacting systems	V, TV
<b>Layer thickness</b>	up to 15 cm	
<b>Screed heating</b>	electric by heating rods	
Power supply	three-phase AC generator	
Dimensions (transport) and weights		
<b>Length</b>	paver with screed	
AB 340	4.95 m	
<b>Weights</b>	paver with screed	
AB 340 V	9,800 kg	
AB 340 TV	10,000 kg	

Key: **DOC** = diesel oxidation catalyst    **AB** = extending screed    **V** = with vibrators  
**DPF** = diesel particulate filter    **TV** = with tamper and vibrators

Subject to technical changes.



Your VÖGELE QR Code will take you straight to the "SUPER 1003i" on our website.



**JOSEPH VÖGELE AG**

Joseph-Vögele-Str. 1  
67075 Ludwigshafen · Germany  
[www.voegele.info](http://www.voegele.info)

T: +49 621 / 81 05 0  
F: +49 621 / 81 05 461  
[marketing@voegele.info](mailto:marketing@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. We reserve the right to make technical or design alternations. Pictures may include optional extras.