

Universal Class

SUPER 1400i

TRACKED PAVER



Maximum pave width 7.5 m
Maximum laydown rate 600 tonnes/h
Transport width 2.55 m



Ready for tomorrow's infrastructure: SUPER 1400i tracked paver



The new SUPER 1400i points the way toward the future of road construction in India. The paver has a modern JOHN DEERE engine with innovative exhaust emissions after-treatment. The machine's chassis and material handling systems are unrivalled in terms of robustness.

The design of the paver pursues a single target: boosting quality and safety at work in road construction. To this end, the Indian/German development team worked to the same high standards that apply in Europe. In this way, they ensured that customers would have a premium machine with first-class technology at their disposal.

A powerful and efficient 4-cylinder JOHN DEERE diesel engine rated at 110 kW is installed in the SUPER 1400i. Supported by a highly effective

cooling system, the power unit delivers its full output reliably even in extreme tropical environments.

The ergonomic, practice-oriented ErgoBasic operating system provides for an excellent overview of the machine and ease of operation.

The paver also comes with a high-performance hydraulic system. The hydraulics provide an accurate drive for the material handling systems, thus ensuring an optimal head of mix in front of the screed at all times. Combined with the cutting-edge AB 480 Extending Screed, the SUPER 1400i is capable of building high-quality pavements in varying widths between 2.55 and 4.8 m, and even achieves a maximum pave width of 7.5 m through the addition of bolt-on extensions.

The highlights of the SUPER 1400i



Powerful, economic and quiet drive concept with a modern JOHN DEERE engine

Perfect paving quality due to perfect material management

Simple operation with the innovative and easy-to-grasp ErgoBasic operating system

Easy-to-use Niveltronic Basic System for Automated Grade and Slope Control

Easy service concept, perfectly geared to the requirements of the workshop and service staff

Combines with the AB 480 Extending Screed in the TV version

Electric screed heating provided for all compacting and smoothing screed elements

The drive concept – efficiency, performance and low consumption



VÖGELE's modern drive concept is perfectly adapted to the large range of different uses of the multifunctional SUPER 1400i.

Delivering a powerful drive when maximum performance is called for, this Universal Class paver is exceedingly flexible in everyday operation.

Low input, maximum output – all drive components, from the diesel engine to the hydraulic system, operate at maximum efficiency.

Modern drive technology

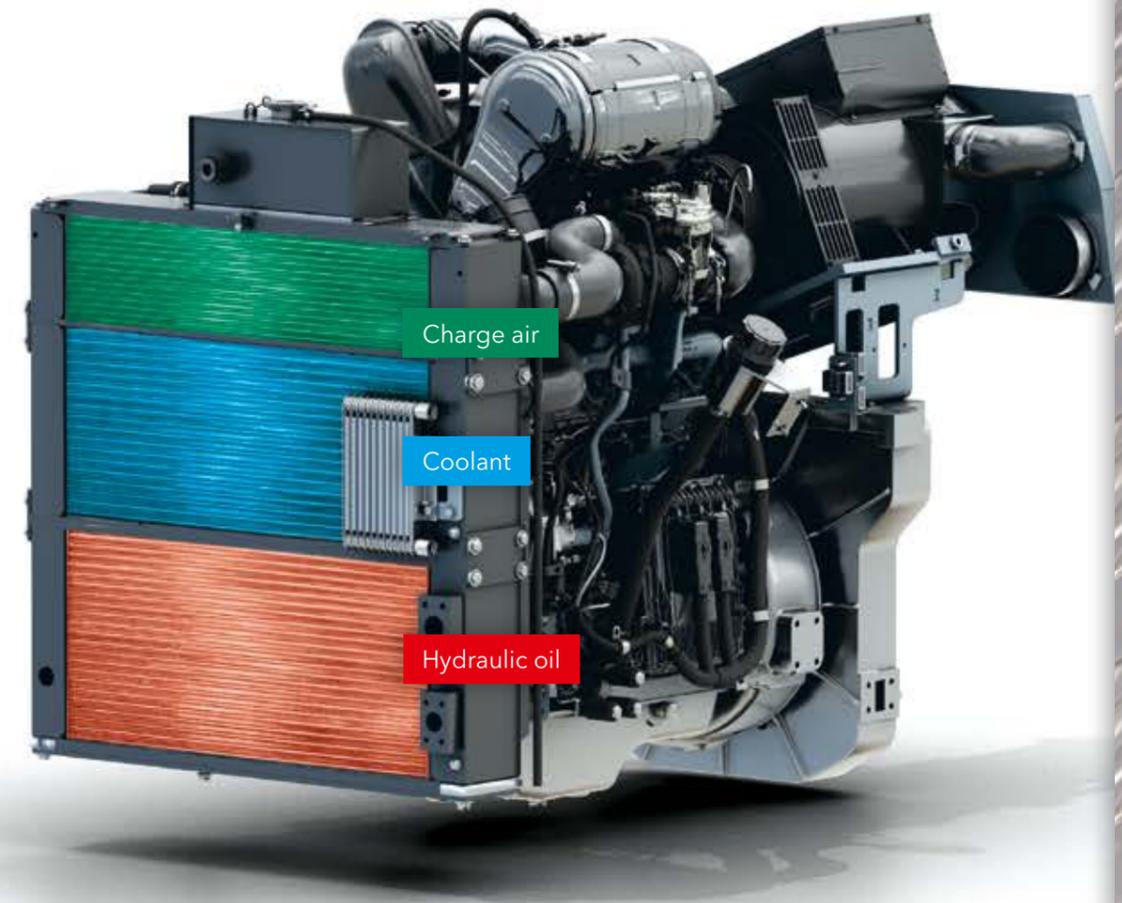
Three main components define the power unit of a SUPER 1400i: its modern, liquid-cooled diesel engine, a large cooler assembly and a splitter gearbox flanged directly to the engine.

The driving force behind this VÖGELE power pack is a powerful JOHN DEERE diesel engine. The liquid-cooled four-cylinder engine is rated 110 kW at 2,000 rpm, whilst electronic engine control makes it especially economical with a low level of noise and emissions. Speed-controlled ECO mode rated 106.5 kW at 1,800 rpm is more than adequate for many applications.

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. This makes a significant contribution to the long service life of both diesel engine and hydraulic oil.

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

The modern JOHN DEERE engine means that you now get full machine service from a single course - the WIRTGEN GROUP.



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



- » **A powerful and efficient 4-cylinder diesel engine** rated at 110 kW, manufactured by JOHN DEERE, is installed in the SUPER 1400i.
- » **Low-emission, economical consumption** as a result of electronic engine control.
- » **The sophisticated exhaust gas after-treatment** of the engine complies with the strict requirements of India emissions standard CEV Stage - IV
- » **No additional maintenance:** DOC and SCR are maintenance free.

- » **Low-noise machine** as a result of the speed-controlled fan and ECO mode.
- » **Service from a single source** as we are a JOHN DEERE Worldwide Construction & Forestry Division company.
- » **The 220-litre fuel tank** is amply dimensioned, so that there is no need to refuel, even when the machine is operated for long periods.
- » **A powerful, air-cooled three-phase AC generator** ensures rapid, uniform heating of the screed.

Precision on tracks

Even difficult terrain is no problem for the SUPER 1400i thanks to its powerful crawler tracks and accurate steering. In terms of traction, too, the VÖGELE drive concept leaves nothing to be desired.



» **Thanks to powerful separate drives** fitted into the sprockets for crawler tracks, engine output is translated into pave speed with no loss of power.

» **Long crawler tracks** with large ground contact deliver maximum tractive effort, allowing the paver to advance well at a constant speed even when operating on difficult terrain.

» **Positive tracking** when moving straight and accurate turning of radii due to the separate drive and electronic control provided for each crawler track.



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.

The paver comes with a high-performance hydraulic system. The hydraulics provide an accurate drive for the material handling systems, thus ensuring an optimal head of mix in front of the screed at all times.

The large and sturdy material hopper holds 13 t. Thanks to the low and wide hopper sides, feeding the paver with mix is a fast and easy process.

Especially wide oscillating push-rollers ensure convenient and shock-free docking of feed vehicles, even on bends.

Perfect conveying and spreading of mix, the basis for perfect pavement quality

Thanks to the perfect spreading of mix, the SUPER 1400i provides for an optimal 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.



- » **Proportional control and continuous monitoring** of augers guarantee a constant head of mix in front of the screed in line with current requirements.
- » **Large-diameter of auger blades** (400 mm) for excellent spreading of mix, even when paving in large widths.

The height of the auger complete with bearing boxes and limiting plates for the auger tunnel can be adjusted by up to 15 cm across the full pave width. This optimizes the head of mix in front of the screed, even when paving thin layers or when layer thickness varies.

Equipped for tough roadbase work

The road pavers made by **VÖGELE** have been designed for tough road construction operations. All components responsible for moving the material are built from high-quality wear-resistant steel and have been manufactured with precision. This makes the SUPER 1400i a sturdy and reliable partner which can meet all challenges in road construction.

When using the machine primarily for placing Wet Mix Macadam (WMM), a special WMM kit is available.



The WMM kit includes a wear-resistant rubber conveyor onto which the feeder bars are bolted. Retrofitting the paver with the WMM kit is possible at any time.

- » **All wearing parts** are made of high-quality wear-resistant material and manufactured with precision.
- » **The WMM kit** for placing Wet Mix Macadam provides for an optimum material flow and effectively counteracts the wear caused by this coarse, abrasive material. Combined with the WMM kit, maximum pave width is 6.5 m.

The paver operator's ErgoBasic console



Everything at a glance: the functions are arranged in a clear, logical and practical layout that was heavily inspired by the ErgoPlus operating 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.



Safe operation during the night

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

The paver operator's ErgoBasic console



1. 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.

3. Speed of the augers

When the paver is operating in automatic mode and no sonic sensors are connected, the maximum speed of the augers can be adapted to pave width separately for the left and right using the plus and minus keys. The set value is displayed as a percentage on the LED strip.

2. 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 switches 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 last settings, which means that the paving parameters last used are retrieved immediately after repositioning the machine on the job site, for instance.

4. 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.

5. Steering at a preselected steering angle

The machine is steered by means of a rotary controller which enables the paver operator to manoeuvre the machine precisely even in the tightest spots. For long curves with a constant radius, the desired steering angle can be

preselected using arrow keys. The paver automatically stays on the set track until the function is deactivated, allowing the paver operator to monitor the paving process undisturbed.

6. Idling function

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

The **ErgoBasic** remote control unit for the screed

Safe and easy handling of all screed functions is a key factor in high-quality pavement construction, which is why a remote control unit for the screed was developed specifically for the ErgoBasic operating system of the new SUPER 1400i.

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.

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



- 1 // **Setting:** conveyor (automatic/manual)
- 2 // **Horn**
- 3 // **Setting:** auger (automatic/manual)
- 4 // **Screed floating** on/off
- 5 // **Screed width control,** one side
- 6 // **Adjustment of screed tow point ram**



Remote control unit for Niveltronic Basic

In line with the ErgoBasic operating concept, VÖGELE has also developed Niveltronic Basic, a System for Automated Grade and Slope Control. 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 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.

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 sensor through to non-contacting sonic sensors.

The System for Automated Grade and Slope Control can be simultaneously connected to two grade sensors and a 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 unit comes with all the functions required for high-precision grade and slope control. Clear symbols allow the machine to be operated intuitively.

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





The ErgoBasic operator's platform

1. The comfortable operator's platform gives an unobstructed view of all crucial areas on the paver such as material hopper, steering guide or screed. It allows the operator to easily monitor the paver's feed with mix, for instance, from his seat.

2. Working comfort

Easy displacement of the paver operator's console across the full width of the platform for convenient working in an ergonomic position on either side of the machine.

3. A place for everything and everything in its place

The operator's platform, 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.

4. Hardtop gives excellent protection

The modern hardtop made of glass fibre reinforced polymer material shelters the operator. The hardtop folds down with effortless ease, thus getting the paver quickly ready for transport.

5. Economical and service-friendly design

The operator has convenient access to all service points on the machine. All hydraulic pumps attached to the splitter gearbox, their clear arrangement and easy access provide for service-friendliness at the highest level. Sturdy components of highly wear-resistant materials for long service lives minimize downtime.

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 easy handling of all screed functions

The ErgoBasic remote control unit for the screed allows all paving-related functions to be set quickly and easily.

8. Remote control unit for a large range of action

Each side of the screed is operated by a compact and exceedingly robust remote control unit.



AB 480 TV Extending Screed

VÖGELE extending screeds are the preferred choice on all those jobs where pave width varies and prime pavement quality counts. Thanks to their sturdy single-tube telescoping system, these screeds can be set quickly and accurately to any pave width desired.

Electric screed heating is provided for all compacting and smoothing screed elements. The electric heating warms the screed up to its operating temperature in next to no time.



The screed for the SUPER 1400i

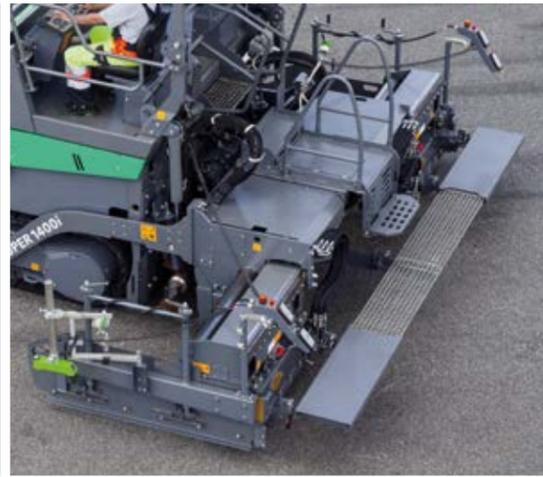
AB 480 TV

Pave widths

- » Infinitely variable range from 2.55 m to 4.8 m
- » Maximum pave width with bolt-on extensions:
 - > 6 m (2 x 60 cm)
 - > 7.3 m (2 x 125 cm)
 - > 7.5 m (2 x 75 cm + 2 x 60 cm)

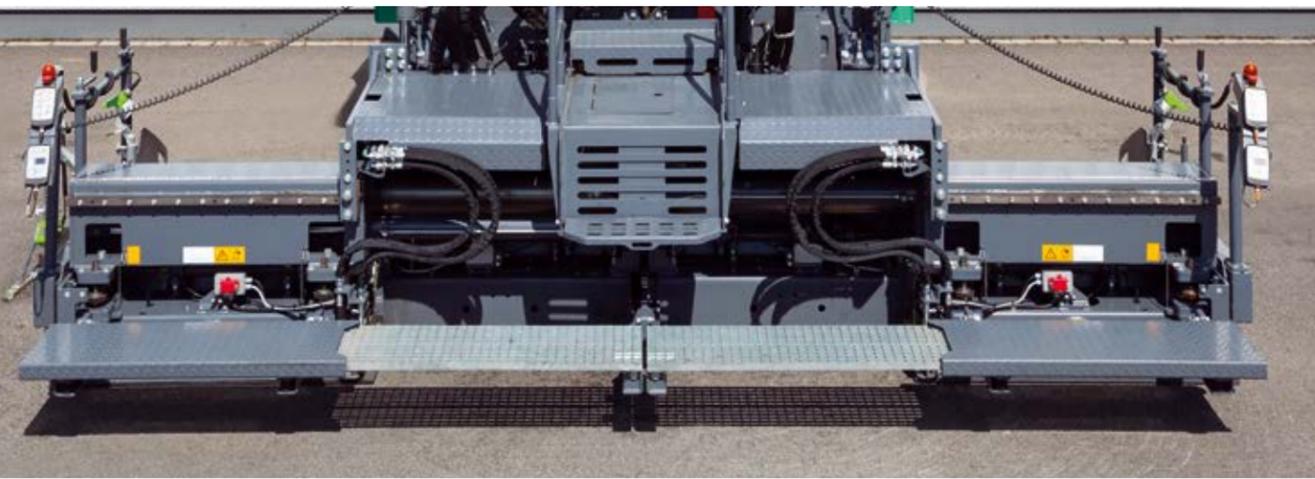
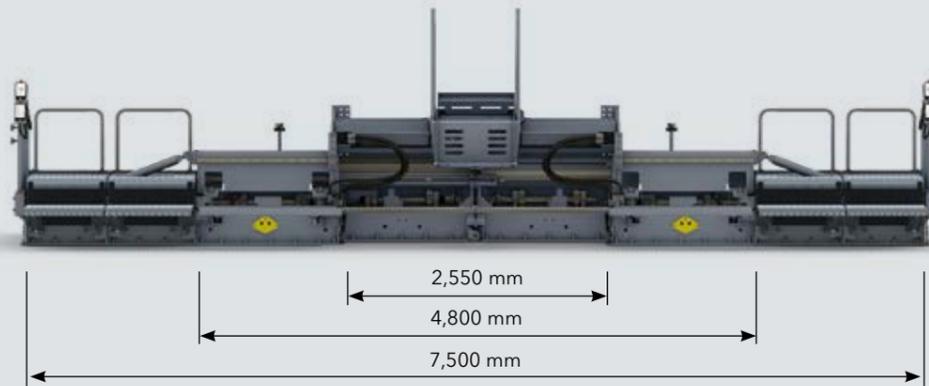
Compacting systems

- » AB 480 TV with tamper and vibrators

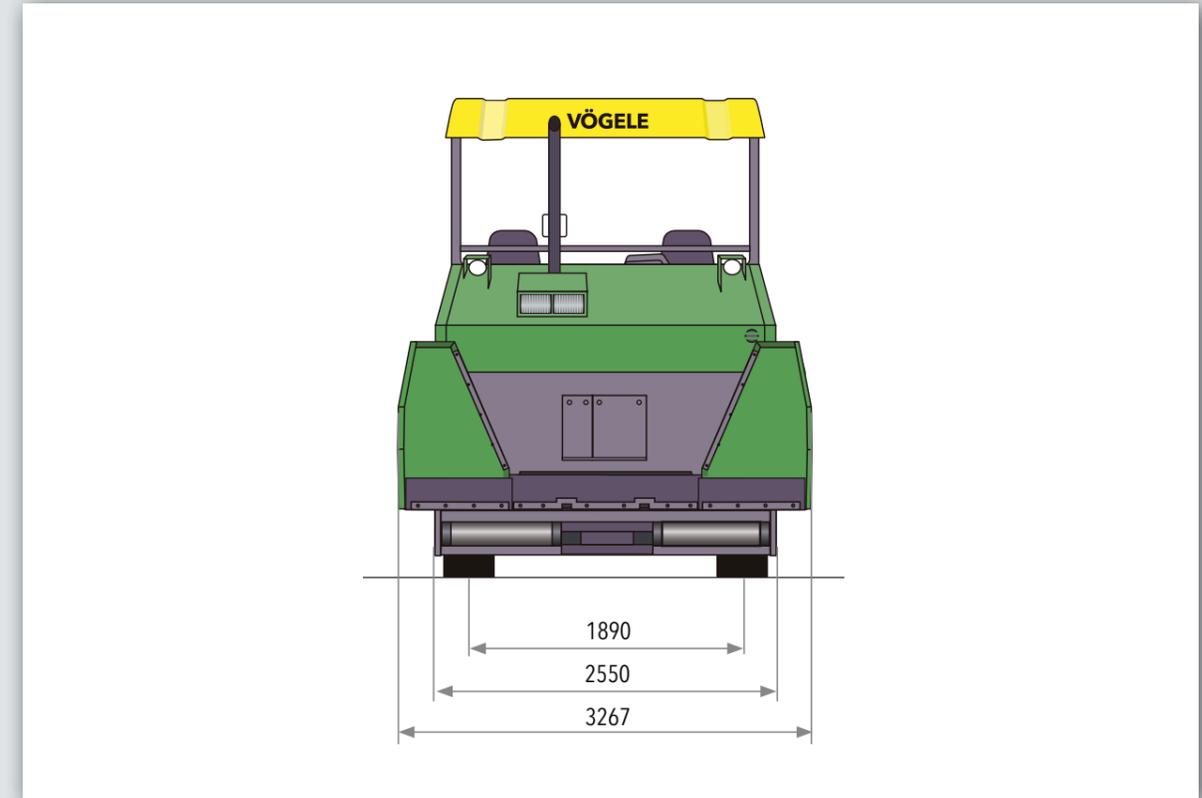
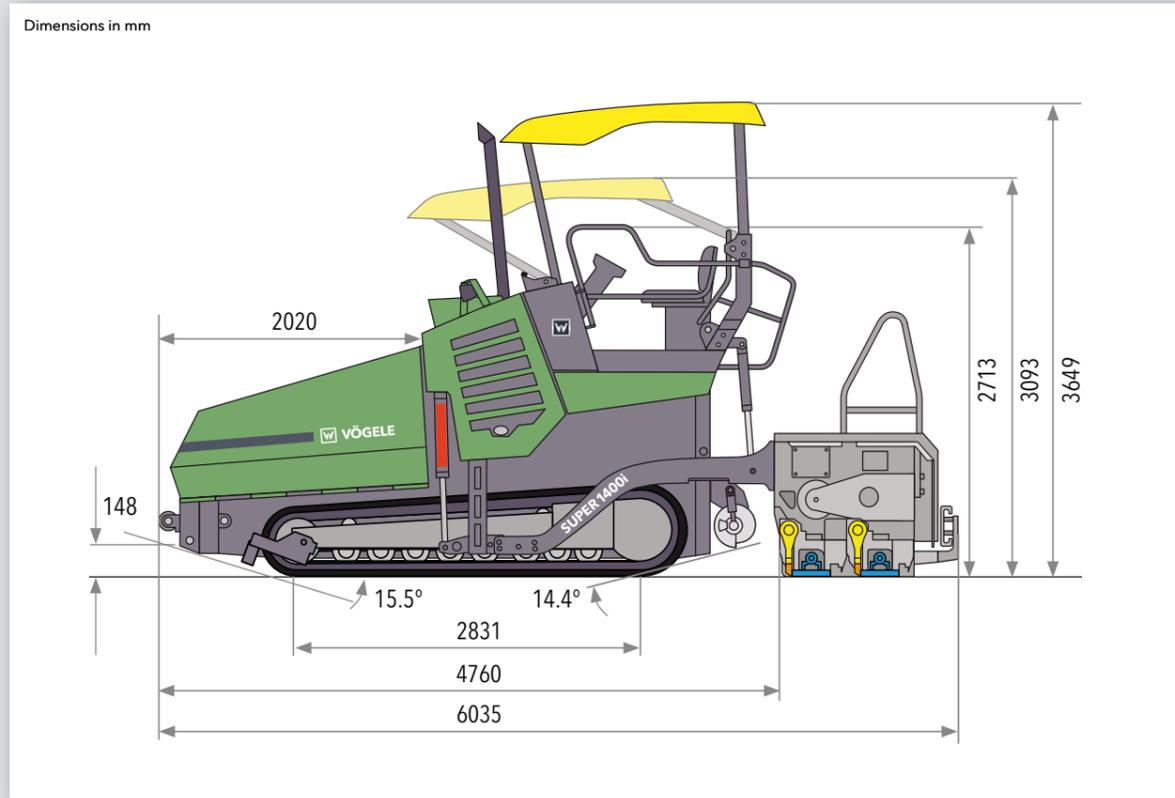


AB 480 TV

Built up to maximum pave width



All the facts at a glance



Power unit	
Engine	4-cylinder diesel engine, liquid-cooled
Manufacturer	John Deere
Type	4045 EWL
Output	
Nominal	110 kW at 2,000 rpm (according to DIN)
Eco-Mode	106.5 kW at 1,800 rpm
Exhaust emissions standard	CEV Stage - IV
Fuel tank	220 litres

Undercarriage	
Crawler tracks	provided with rubber pads
Ground contact	2,831 x 305 mm
Track tension adjuster	spring assembly
Track roller lubrication	lifetime
Traction drive	separate hydraulic drive and electronic control provided for each crawler track
Speeds	
Paving	up to 24 m/min., infinitely variable
Travel	up to 4.5 km/h, infinitely variable

Material hopper	
Hopper capacity	13 t
Width	3,267 mm
Feed height	560 mm
Push-rollers	
Standard	oscillating, can be displaced forwards by 150 mm

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	25 m/min.
Augers	2, with replaceable auger blades, auger rotation reversible
Diameter	400 mm
Drive	separate hydraulic drive provided for each auger
Speed	up to 65 rpm, infinitely variable (manual or automatic)
Height	infinitely variable by 15 cm, mechanical
Lubrication	centralized lubrication points

Screed		
AB 480	basic width	2.55 m
	infinitely variable range	2.55 m to 4.8 m
	maximum width	7.5 m
	compacting system	TV
Layer thickness	up to 20 cm	
Screed heating	electric by heating rods	
Power supply	three-phase AC generator	

Dimensions (transport) and weights		
Length	tractor unit with screed	
AB 480 TV	6.04 m	
Weights	tractor unit with screed	
AB 480 TV	pave widths up to 4.8 m	16,500 kg

Key: AB = extending screed TV = with tamper and vibrators

Technical alterations reserved.



Your VÖGELE QR Code will take you straight to the "SUPER 1400i" on our website.



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