

Tracked Paver

# SUPER 2100-2



## SUPER 2100-2

Maximum Pave Width 13m

Maximum Laydown Rate 1,100 tonnes/h

Transport Width 2.55m

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# Powerful, Economical, Low-Noise



The **SUPER 2100-2** is a real workhorse. This paver, one of the top models and great performer from the VÖGELE range of products, features a highly modern design and handles even largest contracts with excellence and ease, let alone its high cost-effectiveness.

Given a maximum pave width of 13m, the SUPER 2100-2 is a large player ideal for motorway construction in full-road width, surfacing large areas or taking up the challenge of airport projects. Thanks to various measures taken to minimize

noise, SUPER 2100-2 stands out through superquiet operation, a feature allowing application even in noise sensitive areas.

It comes with a powerful engine developing 182kW. Conveyors and augers installed in the paver are so dimensioned as to transfer and spread even largest quantities of mix with effortless ease. No problem to place materials pretty hard to handle, such as water-bound base in thick layers, reliably and fast.

A true highlight of SUPER 2100-2 is ErgoPlus®, the innovative VÖGELE concept for paver handling. With ErgoPlus®, paver operation is child's play. The operator enjoys a modern, ergonomical environment to work in that leaves nothing to be desired.

The overall concept of the SUPER 2100-2 unites ergonomics with ecological and economic aspects and was awarded the iF Product Design Award.

## SUPER 2100-2

### At a Glance



- Maximum pave width 13m
- Laydown rate up to 1,100 tonnes/h
- Maximum layer thickness 30cm
- Transport width 2.55m
- Pave speed up to 25m/min.
- Travel speed up to 4.5km/h
- Powerful DEUTZ engine rated at 182kW
- Easy-to-use ErgoPlus® operating concept
- Hardtop made of glass fibre reinforced polymer material





## Tracked Paver SUPER 2100-2





# The Drive Concept

## Powerful, Economical, Low-Noise



High power and economical operation are the main features of the DEUTZ engine installed in the SUPER 2100-2. It already achieves its full power output of 182kW at just 2,000 rpm. The engine's noise levels are very low, and so are its exhaust emissions. The SUPER 2100-2 complies with exhaust emissions standards COM 3a and EPA 3. Even when paving across large widths the paver can, in most of the cases, be operated in ECO Mode delivering 139kW at 1,800 rpm, which cuts operating costs and further reduces noise emissions.

In addition to the engine's particularly quiet ECO Mode, numerous additional measures have been taken to reduce the noise levels of the SUPER 2100-2 to a minimum. The generator,

for instance, has been located so as to ensure a quiet intake of air. The hinged lateral panels, made of glass fibre reinforced plastic material, also add to noise insulation.

A large cooler assembly and excellent air routing ensure perfect cooling of the engine coolant, hydraulic oil and charge air in every climatic zone the world over. As a result, full engine performance is guaranteed at all times, while also prolonging the engine's service life.

Featuring extreme efficiency, high eco-friendliness and longevity, the drive concept of the SUPER 2100-2 meets highest demands.



- ▶ High engine output of 182kW developed at just 2,000 rpm, low noise levels and low exhaust emission (engine complying with exhaust standards COM 3a and EPA 3).
- ▶ ECO Mode (1,700 rpm) cuts operating cost and allows superquiet operation. Thanks to extra measures taken to minimize noise (sound insulated panels, for instance), the paver works very quietly, permitting operation also in environments sensitive to noise.
- ▶ A large cooler assembly with innovative air routing ensures perfect cooling of engine cooling liquid, hydraulic oil and charge air in every climatic zone the world over, no need to open panels. As a result, full engine performance is guaranteed and best conditions exist for longevity.
- ▶ High pave speed up to 25m/min. allows cost-effective operation and rapid completion of job sites.
- ▶ Positive tracking when moving straight and accurate turning of radii due to separate drive and electronic control provided for each crawler track.
- ▶ The powerful transfer gearbox provides all hydraulic systems, such as conveyors and augers, with precisely the power required for the job in hand. All hydraulic pumps are clearly arranged on the transfer gearbox.



## Large Material Hopper and Easy Feed with Mix



The material feed and material handling concept of the SUPER 2100-2 is designed for maximum performance. This large paver achieves laydown rates up to 1,100 tonnes/h. Large job sites can thus be completed in considerably less time and more economically.

- The material hopper holding 14 tonnes is amply dimensioned so that a sufficient quantity of mix is stored at all times, even when paver performance is high.
- Easy feed with mix thanks to low material hopper and hopper sides folding far down. Sturdy rubber baffles fitted to the hopper front.
- Large oscillating push-rollers for easy and shock-free docking of feed vehicles.
- A hydraulically operated hopper front (option) prevents spills of mix when feed lorries change and permits the material hopper to be completely emptied, so no hand work with shovels required. The entirety of mix is properly conveyed in front of the screed and cooling, which might promote conglomeration and affect pavement quality, is positively avoided.

## Accurate Conveyance of Mix, High Laydown Rates



Large auger blades (diameter 480mm) provide for an optimal head of mix in front of the screed and prevent segregation, even when paving across large widths.

- Proportional control provided for conveyors regulates flow rates to precisely match the requirement of mix in front of the screed for excellent paving results.
- Powerful, separate hydraulic drives installed for conveyors and augers, thus permitting high laydown rates up to 1,100 tonnes per hour.
- Optimally designed mix conveying system with conveyors ascending towards the rear avoids segregation and diminishes wear of conveyors and conveyor bearings.



## Auger Height Adjustment Across the Full Pave Width



The augers of the SUPER 2100-2 are infinitely variable in height up to 15cm while paving.

- Fast and easy adaptation to the desired layer thickness thanks to hydraulic adjustment of augers in height across the full pave width (hydraulic a an option).
- This provides for an optimal head of mix in front of the screed, even when placing thin layers or when layer thickness varies.
- The possibility of adjusting augers in height, complete with bearing boxes and limiting plates for the auger tunnel, allows to move the paver on the job site without a need for conversion, a benefit that saves time and money.

## Easy Servicing



The standardized service concept conceived for the "dash 2" pavers means that servicing is quick and uncomplicated. Large hinged panels provide convenient access to all service points on the machine.

- Highly service-friendly paver design.
- All hydraulic pumps attached to the transfer gearbox. Their clear arrangement and easy access provides for service-friendliness at the highest level.
- Clear arrangement of power module, valves and flexible piping.
- All measuring points conveniently accessible.
- Centralized lubrication system installed as standard to automatically supply grease to the heavily strained bearings of conveyors and augers.



# VÖGELE ErgoPlus®

## The User-Friendly Operating System



Even the best machine with the most advanced technology can only really show its strengths if it can be operated easily and as intuitively as possible, and offers to the operator a maximum of ergonomic comfort and workplace safety. Therefore, the ErgoPlus® operating concept focuses on the operator.

The example diagrams on the following pages will provide you with additional information on the extensive functions of the ErgoPlus® operating concept. ErgoPlus® encompasses the operator's stand, the paver operator's and screed consoles and NIVELTRONIC Plus®, the System for Automated Grade and Slope Control.

The operating consoles are designed for optimum clarity, presenting all paver functions in logical groups. There's a place for everything and everything in its place on the operator's stand, and the paver operator has an excellent overview of all the key points of the paver.

All told, the ErgoPlus® operating concept enables the operator to respond to job site working processes and situations more quickly and accurately, giving him total control over the machine and the project.

### The Strong Points of ErgoPlus®

- ▶ Operator platform of streamlined design and well organized for a high level of safety at work.
- ▶ The paver operator's seats and the operating console adjust conveniently and easily in keeping with his personal needs. This provides a maximum of ergonomic comfort.
- ▶ All vital paver functions are clustered in logical groups on the paver operator's console. Their operation is easy to learn.
- ▶ Easy operation of VÖGELE NIVELTRONIC Plus®, the System for Automated Grade and Slope Control, to achieve perfect paving results.
- ▶ The ErgoPlus® paver operator's console is of modular design. This smart concept is not only ideal in practice, but also saves costs. In case of need, it offers the great advantage of easy replacement of single modules without having to replace the entire unit.



ErgoPlus® Paver Operator's Console



ErgoPlus® Screed Console



ErgoPlus® Operator Stand



A man with dark hair, wearing a blue and white striped polo shirt and an orange high-visibility safety vest, is seated in the operator's cab of a paver machine. He is looking down at the controls, with his hands on two joysticks. The machine is paving a road surface, and the background shows a dry, grassy hillside under bright sunlight. The text 'THE ErgoPlus® PAVER OPERATOR'S CONSOLE' is overlaid on the right side of the image, enclosed in large green brackets. Below the title, the text 'Full control for the machine operator' is displayed. The control console features a digital display screen, numerous buttons, and two joysticks. The brand name 'Vötsch' is visible on the right side of the console.

# THE ErgoPlus® PAVER OPERATOR'S CONSOLE

Full control for the machine operator



# THE ErgoPlus® PAVER OPERATOR'S CONSOLE

Clear and Logical Arrangement of Controls

The ErgoPlus® paver operator's console has been designed according to practice-related principles. All controls are clearly arranged. Paver functions are clustered in logical groups so that operators find their controls where they suppose these should be.

On the ErgoPlus® console, all push-buttons are easily identifiable by touch even when wearing work gloves.



Once a button is pressed, off you go. This is due 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 you have it in your car. This makes night-time work easy and relaxed.


## Examples of Paver Functions





**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, transferring mix from the rear of the conveyor tunnel back inside, takes place for a short time only and stops automatically.

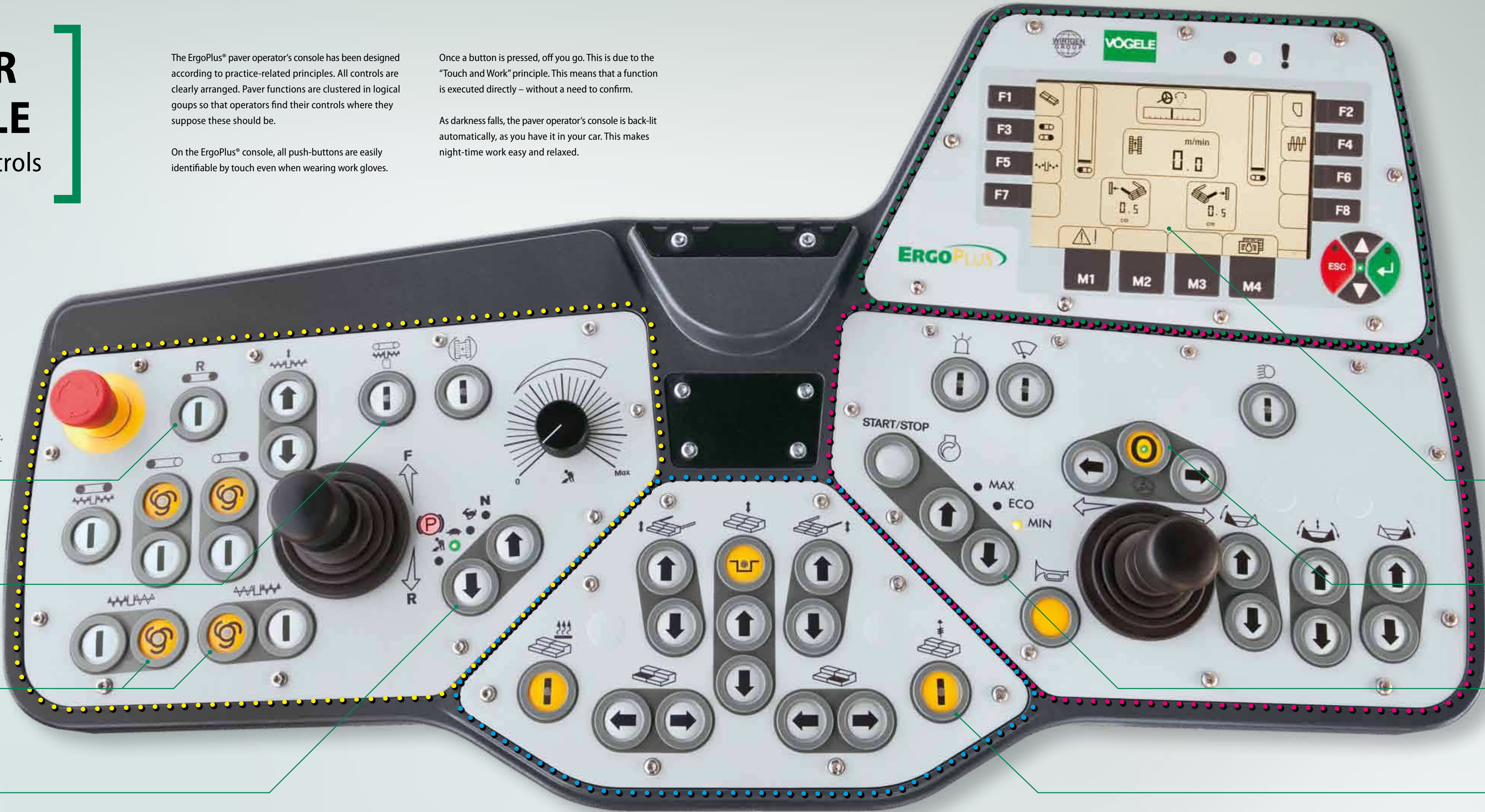
**No-Load Function**  
The No-Load Function is provided for warm up or cleaning of conveyors, augers and tamper.



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




**Choice of Operating Modes for the Paver**  
On the ErgoPlus® console, 4 different operating modes for the paver are available to select from. By pressing the arrow buttons, up or down, the operator changes modes in the order as follows: "Neutral", "Job Site Mode", "Positioning Mode" and "Pave Mode". A LED indicates the mode selected. When leaving "Pave Mode", a smart Memory feature stores last settings for paver functions so that, when resuming work after a move of the paver on site, these settings are restored automatically.



- ● ● ● ● ● **Module 1:**  
Conveyors and Augers, Traction
- ● ● ● ● ● **Module 2:**  
Screed
- ● ● ● ● ● **Module 3:**  
Material Hopper and Steering
- ● ● ● ● ● **Module 4:**  
Display for set-up of vital paver functions on menu level 1.  
Secondary functions on menu level 2.


**Display of the Paver Operator's Console**  
The large, easy-to-read display shows vital information on menu level 1 – such as the positions of the screed tow point rams or the pave speed. Set-up of further paver functions such as speeds for tamper and vibrators or feed rate for the conveyors can easily be made via the display, too. And the display gives access to machine-related information such as fuel consumption or service hours.




**Steering**  
For turning a large radius, fine steering allows to pre-set a track position which is maintained automatically without a need for manual intervention by the operator.




**Choice of Engine Speed Ranges**  
For the engine, 3 modes exist to select from: MIN, ECO and MAX. To swap 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 emission 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 floats.







# THE ErgoPlus® SCREED CONSOLE

## Easy Operation Guaranteed

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

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

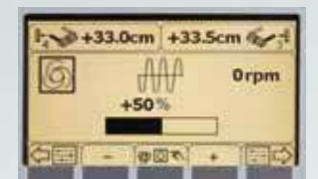
### The Screed Console

The screed console is designed in keeping with the conditions prevailing on the job site. For the functions operated from the screed console, push-buttons are provided. These are watertight and enclosed in a perceptibly raised ring, 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 his console allows the screed operator to control and monitor both the left and the right side of the screed. Machine-related parameters such as tamper 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.



### NIVELTRONIC Plus® (Option)

NIVELTRONIC Plus®, the cutting-edge VÖGELE System for Automated Grade and Slope Control, is very easy to learn and achieves outstanding paving results. All important functions of NIVELTRONIC Plus® can be accessed directly on menu level 1. The operator is provided with a variety of information, such as the sensor currently selected or the specified and actual values for layer thickness.

An electronic system installed in the screed tow point rams picks up the tow points' positions. Display of the current tow point positions and of the transverse slope on the screed console greatly facilitates set-up of the screed. All sensors connected are recognized automatically by NIVELTRONIC Plus® and can be monitored and controlled from either screed console. An open interface is provided for connection of a GPS system, thus permitting 3D paving.



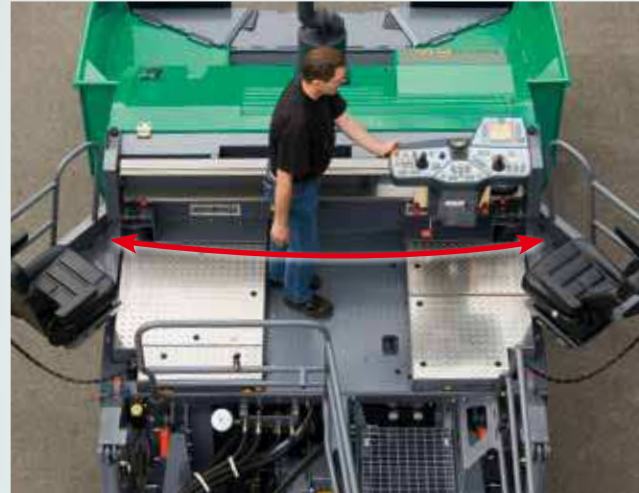
### Automatic Mode for Augers, Reversing Auger Rotation

Just like the paver operator, the screed operator, too, can select Manual Mode or Automatic Mode for conveyors and augers. Very useful and comfortable in practice is the function of "Reversing Auger Rotation".





# THE ErgoPlus® OPERATOR STAND



## Excellent All-Round Visibility

- ▶ The comfortable operator stand gives 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 paver's feed with mix and the process of paving.
- ▶ The seats swinging out to the sides and an operator stand of streamlined design provide for maximum visibility of the auger tunnel, thus permitting the paver operator to keep an eye on the head of mix in front of the screed at all times.

## Working Comfort

- ▶ A few adjustments are all it takes for the paver operator to position his console exactly in keeping with his personal needs. It can be displaced across the full width of the operator's stand, swivelled out to the sides and tilted.
- ▶ When working with the seat swung out, the paver operator's console can be swivelled out together with the operator's seat. In this way, an ergonomically optimized workplace is set up in no time at all. A legroom kept warm adds to operator comfort during the cold season.

## A Place for Everything and Everything in its Place

- ▶ The operator's stand of streamlined design is well organized, so that the paver operator enjoys a professional workplace.
- ▶ The operator's console can be protected by a shatter-proof cover to prevent wilful damage.
- ▶ Plenty of stowage space makes it easy to keep the machine tidy. Access to all vital service points on the machine has been designed to be extremely clear and ergonomic.

## Hardtop Gives Excellent Protection

- ▶ The modern hardtop made of glass fibre reinforced polymer material shelters the operator whether rain or shine. The hardtop, including exhaust pipe, raises up or lowers down quickly and with effortless ease by a manually operated hydraulic pump. Wide sunshades, extending easily, give the operator optimal protection when his seat is moved out.
- ▶ Six bright working lights are integrated into the hardtop. Raising the lights in this way floods the job site with light (Xenon lamps available as an option).



## Screeds to Meet all Needs



Based on its enormous tractive power and the capability of handling highest laydown rates, the SUPER 2100-2 is a tough performer when it comes to working across large pave widths and achieving high compacting results. VÖGELE offer a variety of screed options and screed versions to combine with SUPER 2100-2.

- The SB 250 Fixed-Width Screed handles a maximum pave width of 13m and is ideally suited to use on large-scale job sites. High performance and cost-effective paving are its strengths. The SB 250 in TVP2 version equipped with the full package of compacting systems achieves a maximum degree of density. Thanks to 75cm hydraulic bolt-on extensions, the pave width is infinitely variable within a range of 1.5m.
- AB 500-2 and AB 600-2 Extending Screeds, standing out through high adaptability, are ideal for paving in varying widths. Their sturdy single-tube telescoping system allows screed width control with highest precision. Even with the screed set to its maximum width, the telescoping tubes are extended by no more than half, thus providing for superb screed stability and zero flexing.

- For the SUPER 2100-2, VÖGELE AB 500-2 and AB 600-2 Extending Screeds are available in TV version (with tamper and vibrators) for standard compaction or in TP1 or TP2 versions (with 1 or 2 pressure bars) for high compaction. For paving binder course and base course achieving highest precompaction, the paver can be combined with the AB 600-2 Extending Screed in TP2 Plus version.
- **Transverse Pavement Profiles**
  - Positive and negative crown can be paved with all screed types.
  - The AB screeds' extending units adjustable in height and spindles provided on either side of each extending unit allow the Extending Screeds to be set up to a variety of additional special profiles.

- **Electric Screed Heating**
  - Homogeneous surface texture thanks to uniform heating of screed plates, tamper bars and pressure bar(s).
  - Even with the paver's engine running at minimum rpm, the time required for the screed to reach its operating temperature is reduced substantially thanks to an intelligent Generator Management.
  - With paver functions set to automatic, the Generator Management activates Alternating Mode for screed heating (heats the screed alternately to left and right), a feature which is easy on the engine and reduces fuel consumption considerably.



## Screed Options for SUPER 2100-2



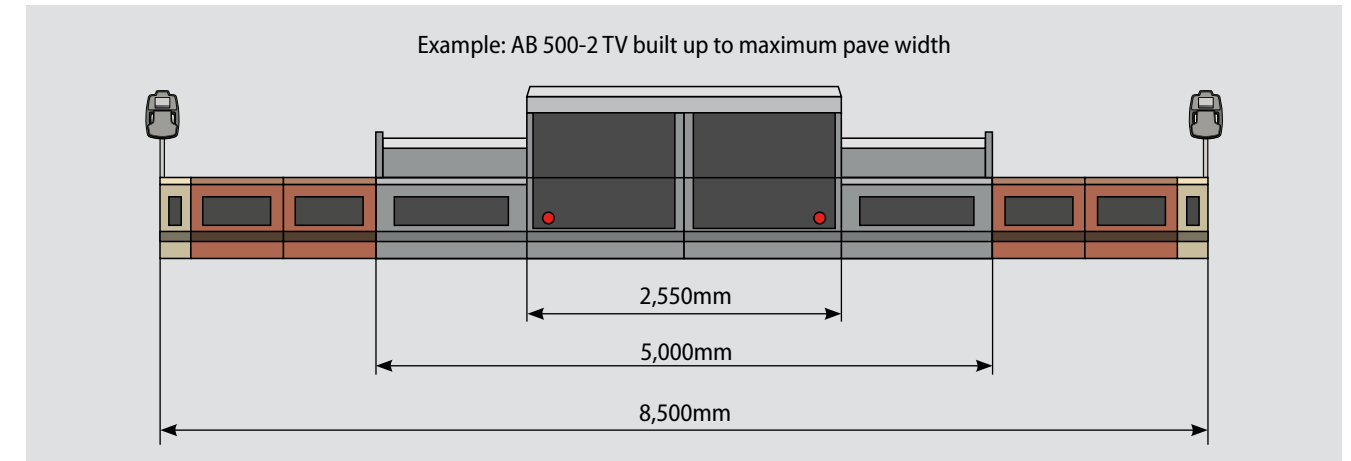
### AB 500-2

#### Pave Widths

- Infinitely variable range from 2.55m to 5m.
- Larger widths by addition of bolt-on extensions up to a maximum of 8.5m.

#### Screed Versions

- AB 500-2 TV with tamper and vibrators
- AB 500-2 TP1 with tamper and 1 pressure bar
- AB 500-2 TP2 with tamper and 2 pressure bars



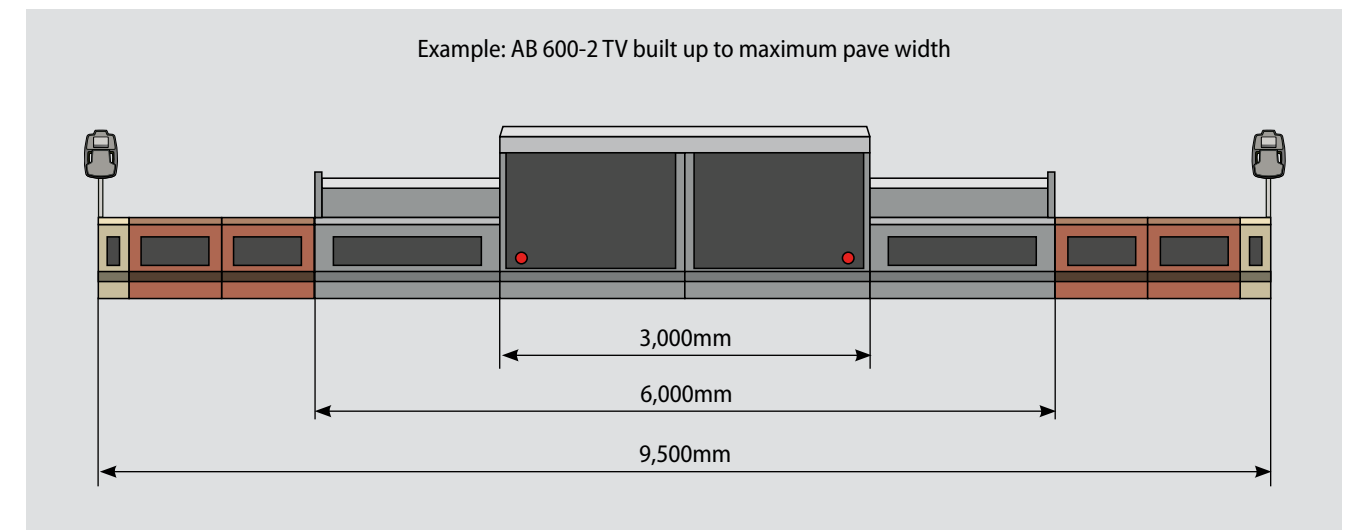
### AB 600-2

#### Pave Widths

- Infinitely variable range from 3m to 6m.
- Larger widths by addition of bolt-on extensions up to a maximum of 9.5m.

#### Screed Versions

- AB 600-2 TV with tamper and vibrators
- AB 600-2 TP1 with tamper and 1 pressure bar
- AB 600-2 TP2 with tamper and 2 pressure bars
- AB 600-2 TP2 Plus with tamper and 2 pressure bars for highest precompaction



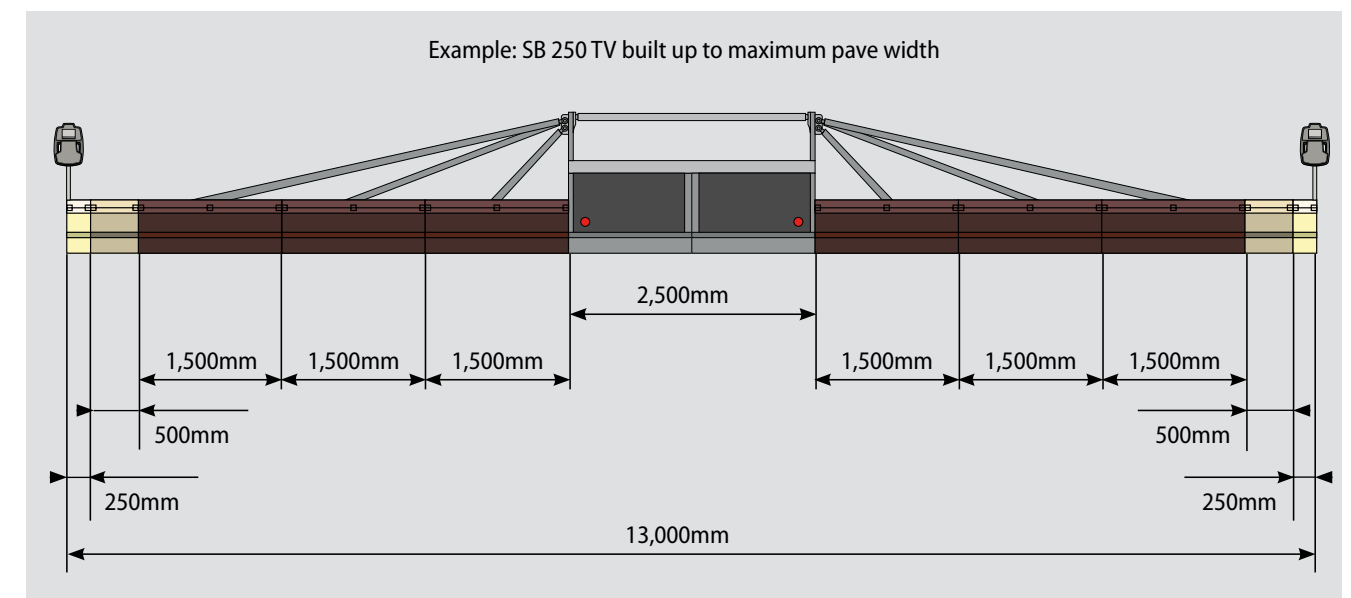
### SB 250

#### Pave Widths

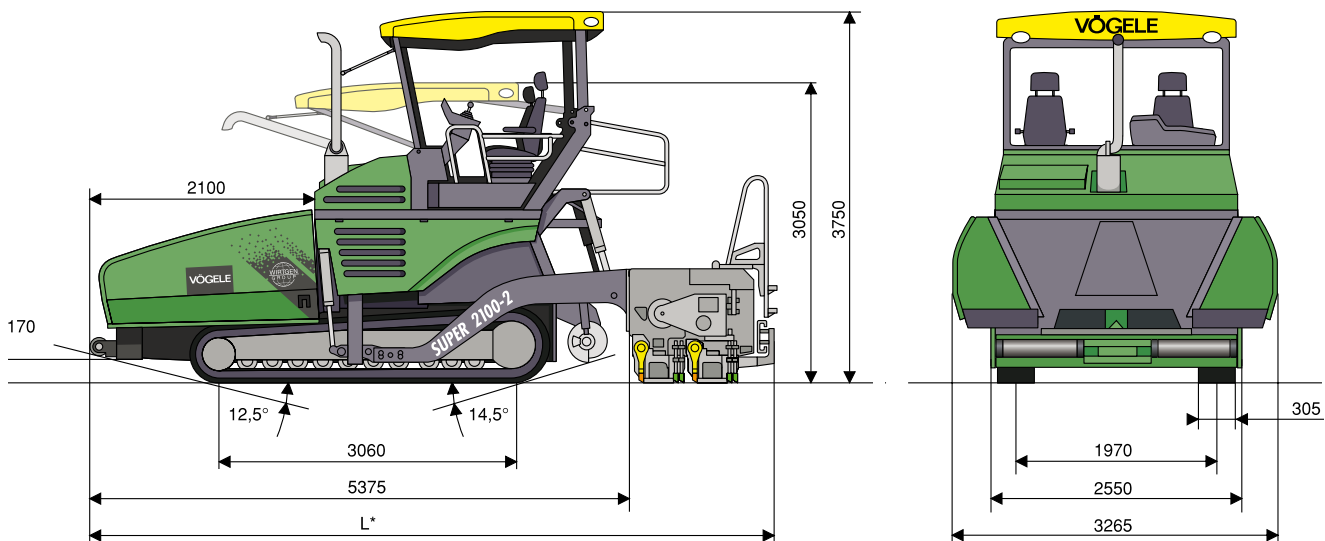
- Basic width 2.5m. Larger widths by addition of bolt-on extensions up to a maximum of 13m.
- Thanks to 75cm hydraulic bolt-on extensions, pave width is infinitely variable within a range of 1.5m.

#### Screed Versions

- SB 250 TV with tamper and vibrators
- SB 250 TP1 with tamper and 1 pressure bar
- SB 250 TP2 with tamper and 2 pressure bars
- SB 250 TVP2 with tamper, vibrators and 2 pressure bars







Dimensions in mm  
L\* = Dependent on Screed Type (see Specification)

#### Power Unit

Engine:	6-cylinder DEUTZ diesel engine, liquid-cooled
Type:	TCD 2013 L06 2V
Output:	Nominal: 182kW at 2,000 rpm (according to DIN)
	ECO Mode: 169kW at 1,700 rpm
Fuel Tank:	450 litres
Electrical System:	24 V

#### Undercarriage

Crawler Tracks:	provided with rubber pads
Ground Contact:	3,060mm x 305mm
Suspension:	rigid
Track Tension Adjuster:	spring assembly
Track Rollers:	lifetime grease lubricated
Traction Drive:	hydraulic, separate drive and electronic control
	provided for each crawler track
Speeds:	- Paving: up to 25m/min., infinitely variable
	- Travel: up to 4.5km/h, infinitely variable
Steering:	by alteration of track running speeds
Service Brake:	hydrostatic
Parking Brake:	spring-loaded multiple-disk brake, maintenance-free

#### Material Hopper

Hopper Capacity:	14 tonnes
Width:	3,265mm
Feed Height:	615mm (bottom of material hopper)
Push-Rollers:	oscillating, displaceable forwards by 100mm

#### Conveyors and Augers

Conveyors:	2, with replaceable feeder bars, conveyor movement reversible for a short time
	Drive: hydraulic, separate drive provided for each conveyor
	Speed: up to 33m/min., infinitely variable (manual or automatic)

Augers:	2, with replaceable auger blades, auger rotation reversible
	Diameter: 480mm
	Drive: hydraulic, separate drive provided for each auger
	Speed: up to 60 revs/min., infinitely variable (manual or automatic)
	Auger Height:
	- Standard: infinitely variable by 15cm, mechanical
	- Option: infinitely variable by 15cm, hydraulic
Lubrication:	Centralized Lubrication System with electrically driven grease pump for conveyor and auger bearings

#### Screed Options

SB 250:	basic width 2.5m, maximum width (TV/TP1) 13m
AB 500-2:	basic width 2.55m, infinitely variable range 2.55m to 5m
	maximum width (TV/TP1/TP2) 8.5m
AB 600-2:	basic width 3m, infinitely variable range 3m to 6m
	maximum width (TV/TP1/TP2) 9.5m

Screed Versions:	TV, TP1, TP2, TP2 Plus (AB 600-2), TVP2 (SB 250)
Layer Thickness:	up to 30cm
Screed Heating:	electric by heating rods
Power Supply:	three-phase A.C. generator

#### Dimensions and Weights

Length:	Tractor Unit and Screed in Transport Position:
	- SB 250 TV/TP1/TP2/TVP2: 6.55m
	- AB 500-2/AB 600-2 TV: 6.6m
	- AB 500-2/AB 600-2 TP1/TP2: 6.75m
Weights:	Tractor Unit with AB 500-2 Screed in TV Version:
	- Pave Widths up to 5m: 21.4 tonnes
	- Pave Widths up to 8.5m: 24.7 tonnes

#### Optional Equipment

	Hydraulic hopper front. Xenon lamps for working lights.
	Hardtop of glass fibre reinforced polymer material. Sonic sensors to monitor head of mix in front of the screed. Automated Steering Control. Washdown system. NIVELTRONIC Plus® for Automated Grade and Slope Control (various sensors available).
	For more optional extras please contact your VÖGELE partner.

**Key:** T = equipped with Tamper      P1 = equipped with 1 Pressure Bar      SB = Fixed-Width Screed  
V = equipped with Vibrators      P2 = equipped with 2 Pressure Bars      AB = Extending Screed

Technical alterations reserved.

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