10 ft. CLASS WHEELED PAVER

WIRTGEN GROUP

VÖGELE

Wheeled Paver

VISION 5203-2i

VISION 5203-2i

Maximum Paving Width 25 ft. 6 in.
Maximum Laydown Rate 1,300 tons/h
Transport Width 10 ft.

www.voegele.info

The Most Innovative Paver Technology

Paver operators agree the VÖGELE paver includes outstanding features. The super quiet VISION 5203-2i comes with ErgoPlus®, the revolutionary concept for easy paver operation. ErgoPlus® simplifies the operators' work and provides comfort.

ErgoPlus® also offers unobstructed operator visibility of material hopper, screed and auger tunnel. The VISION series pavers are extremely cool and quiet during operation. Just look at it!

A number of different drive options (6x2, 6x4 and 6x6) are available for VISION 5203-2i, allowing the paver to reach unsurpassed versatility. To high versatility also adds the paver's small turning radius, permitting easy and quick maneuvering even in tight corners.

VISION 5203-2i

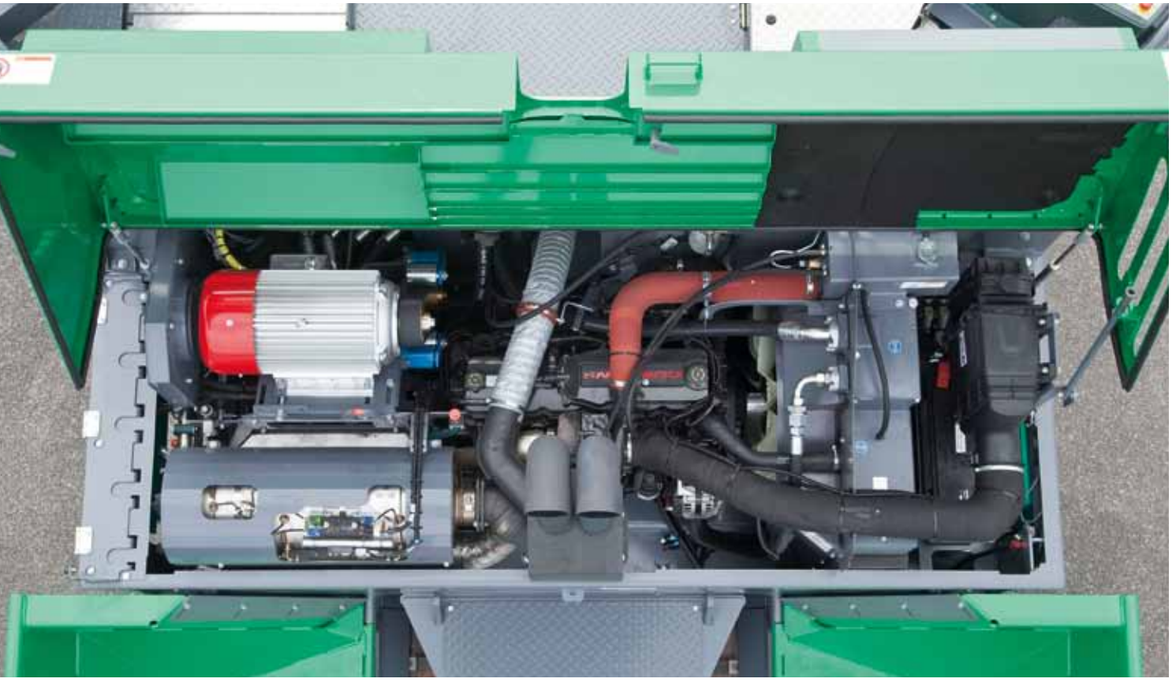
At a Glance

- Superior technology with very low noise emission.
- Powerful EPA Tier 4i Cummins engine provides excellent horsepower-to-weight ratio.
- Highly efficient cooling for longevity of all paver components.
- Large fuel tank holding 106 gallons for more than a day's work.
- Advanced design provides precise material handling.
- Two or four powered front wheels are available as options.
- Electronic traction management.
- ErgoPlus®, the concept for easy paver control and unobstructed operator visibility.
- Daily maintenance-free paver with auto-tensioning of conveyors, auto-lubrication (optional) and more.

Wheeled Paver VISION 5203-2i

- Perfect pavement, precise material handling.
- Superior, powerful drive concept.
- Easy, environmentally-friendly paver operation.
- Excellent, efficient material management.

Powerful and Efficient Drivetrain



The VISION 5203-2i paver reaches laydown rates up to 1,300 tons of mix per hour. For this high performance, a powerful engine is installed. With an output of 250 h.p. at 2,000 rpm, the Cummins engine is a real powerhouse. It complies with the current exhaust emissions standards EPA Tier 4i.

Naturally these extremely high performance values can only be achieved if cooling of the entire system is efficient. In VÖGELE road pavers, a large cooler assembly ensures ideal temperatures of engine cooling liquid, hydraulic oil and charge air based on innovative air routing. Such efficient cooling not only allows paver operation in all climatic zones the world over, but also contributes to a long service life of all paver components. Noise emission of the cooling system is very low, which supports the low noise levels of the VISION 5203-2i.

Three engine speed ranges are available which are selected conveniently at the push of a button (MIN, ECO, MAX).

- Powerful 6-cylinder Cummins engine delivers 250 h.p. at 2,000 rpm. Ideal weight-to-horsepower ratio of 158 lbs./h.p.
- ECO mode at 1,800 rpm provides low noise levels and low fuel consumption. ECO mode is sufficient for most paving applications.
- Self-diagnostics and sensors for all engine vitals eliminate daily checks. Simply put, the engine is daily maintenance-free.
- Powerful three-phase A.C. generator. Generator output in compliance with the paving requirements.
- Large cooler assembly with innovative air flow for perfect temperature control of engine coolant and hydraulic oil as well as a low emission level.
- A high cooling capacity maintains an ideal temperature inside the hydraulic system and top performance of all drive units even when working under full load and at high ambient temperatures (WAT World Ambient Temperature design).
- Fuel tank holding 106 gallons provides more than enough capacity for a day's work.

Traction and Precision Drive on Wheels

A strong point of the VISION paver is its excellent traction behaviour. Separate drive and electronic control provided for each powered wheel ensure optimal transmission of power, constant straight-line tracking and accurate turns.

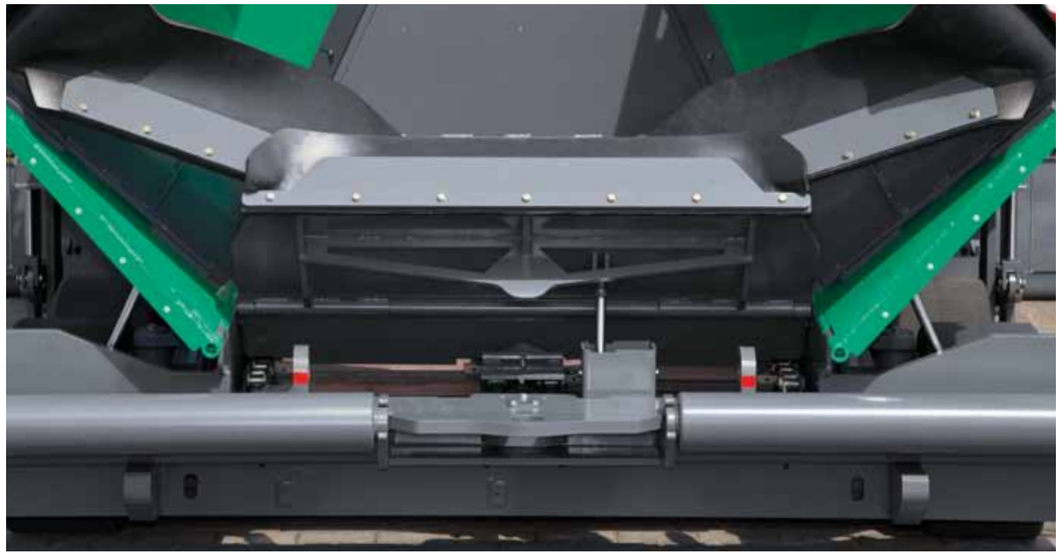
- Maximum power and torque from hydrostatic drives. Separate hydraulic drives are provided for each of the rear wheels. Two or four powered front wheels are available as options.
- Electronic traction management ensures optimum tractive effort and protects the engine against overload.
- Permanent ground contact of front wheels with pivoting bogies.
- Travel speed of 12 mph allows the paver to maneuver quickly on the job site.

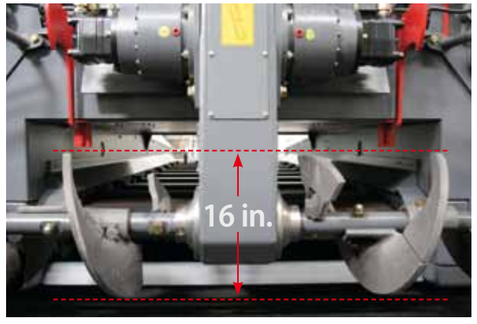
Extra Large Material Hopper and Easy Material Feed

The hydraulically operated hopper apron prevents material spills during truck exchanges. It directs the material inside the hopper directly onto the conveyors, so no hand work is required. All of the mix is properly conveyed to the screed.

- The large material hopper holds 240 cubic feet (31,400 lbs.) and is dimensioned so that plenty of mix is stored at all times. Two cylinders per side provide smooth operation.
- Sloped inner design of the hopper for an optimal flow of material to avoid segregation.
- Hassle-free truck exchange due to 24 in. dump height, wide hopper wings and sturdy rubber flashing.
- Independently operated hopper wings.
- Large push-rollers can be set to 2 different positions for convenient and shock-free docking of trucks. A truck hitch is available as an option.

Perfect Material Delivery Avoids Segregation





Hydraulically adjustable augers are infinitely variable in height within a range of 6 inches. Hydraulic auger height adjustment (including bearing boxes and limiting plates for the auger tunnel) provides optimal spreading of the material even when paving thin layers or on sections where thickness varies.

- Powerful, individual hydraulic drives (closed loops) for conveyors and augers are installed for high laydown rates and optimal material handling.
- Proportional control and continuous monitoring of conveyors and augers guarantee a constant head of material in front of the screed.
- Inclined conveyors from the front to the rear of the machine provide ideal delivery of the material to the augers.
- Large 16 in. diameter auger flights with precision pitch ensure excellent spreading of the material when paving in large widths or lower engine rpm. VÖGELE's unique flight design provides extended wear versus standard flight designs.
- Narrow conveyor housing in the material hopper guarantees a uniform flow of material.

Daily Maintenance-Free Paver

The well-thought-out maintenance and service concept is perfectly geared to the requirements of the workshop and service staff.

- Daily maintenance-free paver with auto-tensioning of the conveyors. The automatic lubrication system (optional) is designed to provide the required amounts of grease to the conveyor and auger bearings for optimal performance.
- Automatic chain tensioning system for conveyors reduces maintenance and maximizes component life.
- Full-length side doors, a raised engine cowling and two maintenance openings on the operator platform give easy access to all paver components.
- Hydraulic pumps are neatly arranged on the transfer gearbox with sufficient clearance for easy service access. The system is equipped with all necessary test ports for service and troubleshooting.
- A uniform service concept for all VÖGELE pavers simplifies maintenance and reduces training costs.

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 the operator the maximum in ergonomic comfort and workplace safety. Therefore, the ErgoPlus® operating concept focuses on the operator.

On the following pages you will find detailed 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 Automatic 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.

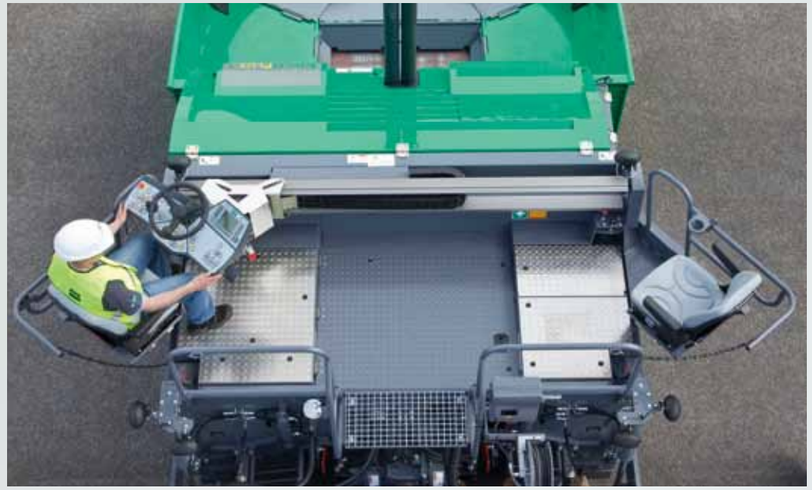
All told, the ErgoPlus® operating concept enables the operator to respond to job site working processes and situations more quickly and accurately, giving him total control over the machine and the project.

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 the maximum in ergonomic comfort.
- All vital paver functions are arranged in logical groups on the paver operator's console for intuitive operation that is easy to learn.
- Easy operation of VÖGELE NIVELTRONIC Plus®, the System for Automatic 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's Stand

THE ErgoPlus® PAVER OPERATOR'S CONSOLE

Full Control for the Machine Operator

THE ErgoPlus® PAVER OPERATOR'S CONSOLE

Clear and Logical Arrangement of Controls

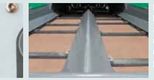
The ErgoPlus® paver operator's console has been designed according to practice-related principles. All controls are clearly arranged. Paver functions are clustered in logical goups so that operators find their controls where they would expect them to be.

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, just like in a car. This makes night work easy and relaxed.

- **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.

Examples of Paver Functions



Reversing Conveyor Movement
In order to avoid material 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 material 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 and augers.

Automatic Functions
For conveyors and augers, operators can easily select "Manual Mode" or "Automatic Mode". When selecting "Automatic Mode" for the augers, sensors installed for the material level in the auger tunnel provide that exactly the desired amount of mix is spread in front of the screed.

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 following order: "Neutral", "Job Site Mode", "Positioning Mode" and "Paving Mode". An LED indicates the mode selected. When leaving "Paving Mode", a smart Memory feature stores the last settings for paver functions so that, when resuming work after a move of the paver on site, these settings are restored automatically.

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 cylinders or the paving speed. Set-up of further paver functions such as speed for vibration 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.

Hopper Wings and Hydraulic Hopper Apron
The hydraulically operated hopper apron prevents spills of material when feed trucks change.
The two hopper wings can be folded separately or both together at the push of a button.

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 (Optional)
This button switches Screed Assist on (LED lights up) or off. Screed Assist pressure and balance can be set via the display. Screed Assist is active only when the screed is floating.

THE ErgoPlus® SCREED CONSOLE

Easy Operation Guaranteed

The screed is crucial for pavement quality. Therefore, easy and positive handling of all screed functions is of the utmost importance for high-quality road construction. With ErgoPlus®, the screed operator has the process of paving at his fingertips. All functions are intuitively and logically 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 the screed operator's console allows him to control and monitor both the left and the right side of the screed. Machine-related parameters such as vibration speed or conveyor speed can be adjusted conveniently via the display panel of the screed console. The clear menu structure, combined with easily understandable, universal symbols neutral in language, makes operating the display panel both simple and safe.

NIVELTRONIC Plus® (Optional)
NIVELTRONIC Plus®, the cutting-edge VÖGELE System for Automatic 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.

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. The function of "Reversing Auger Rotation" is very useful and convenient in practice.

THE ErgoPlus® OPERATOR STAND

Excellent All-Round Visibility

- The comfortable, raised operator's stand (66 in. off ground level) gives an unobstructed view of all important areas of the paver such as material hopper, steering guide, augers and screed. It allows the paver operator to easily monitor the paver's material feed. A low, sloped engine cowling guarantees an unobstructed view into the material hopper.
- The seats which swing 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 observe the head of mix in front of the screed at all times.

Working Comfort

- The ergonomically designed operator environment allows for convenient and comfortable working conditions.
- Unique engine exhaust and fumes extraction provide low noise and no heat at the operator station. Friendly working conditions avoid operator errors and maintain maximum operator efficiency.

A Place for Everything and Everything in its Place

- The operator's stand with its streamlined design is well organized, so that the paver operator can enjoy a professional workplace.
- The operator console is protected by a cover to prevent unauthorized access and vandalism.
- 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.

Screed Options

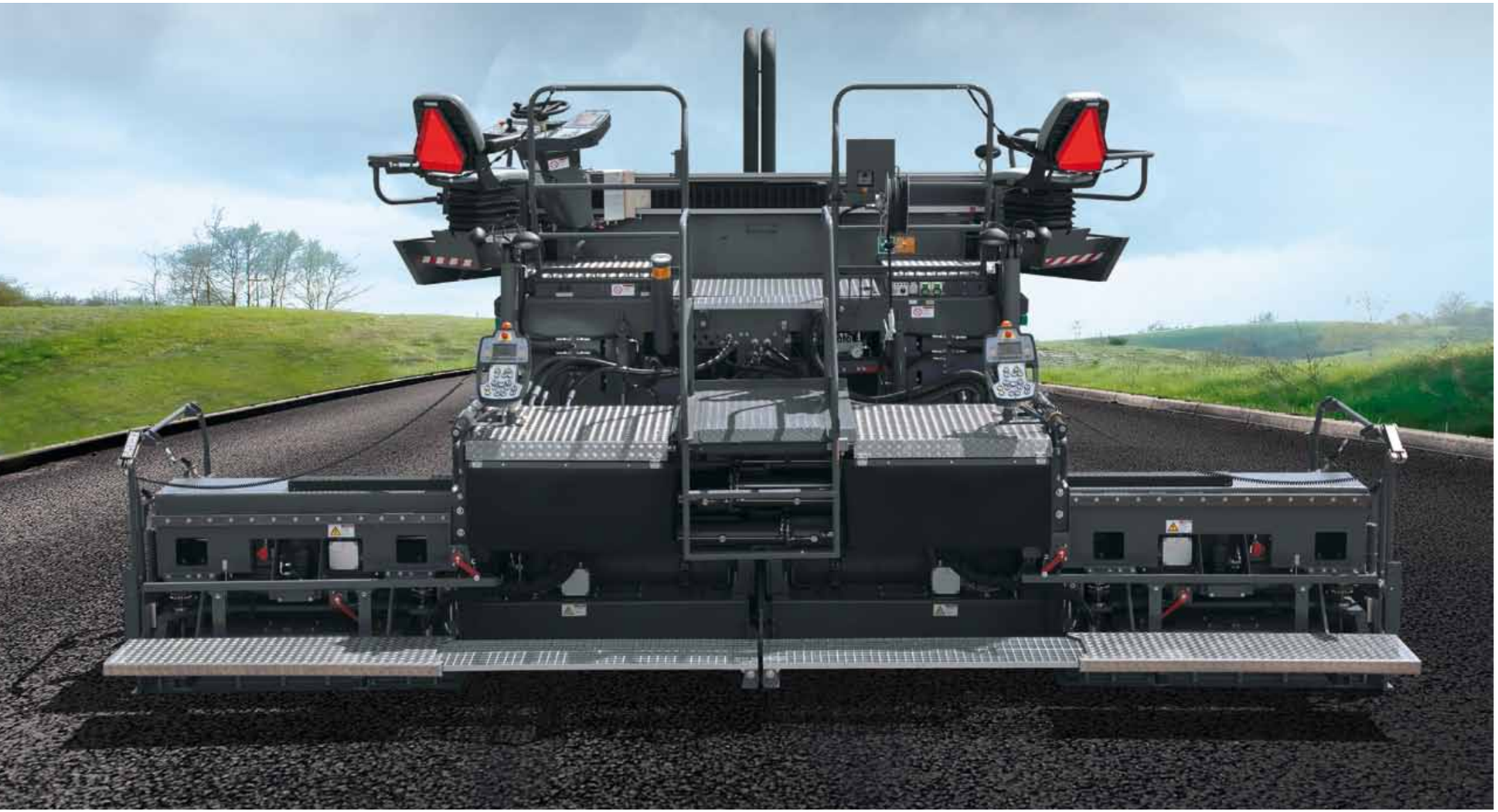
A powerful tractor calls for a screed to match. Each application has its particular requirements. It's the users' everyday applications that decide which screed is the right choice. These screeds are available for combination with VISION 5203-2i:

- VÖGELE VF 600 Screed, with front-mounted extensions for multivariable width applications. Maximum paving width of 25 ft. and 6 in. (with extensions).
- VÖGELE VR 600 Screed, with pre-strike off and rear-mounted extensions for mainline applications. Maximum paving width of 24 ft. (with extensions).
- Carlson EZ IV-1019 Screed, no strike off, with front-mounted extensions for multivariable applications. Maximum paving width of 25 ft.

- **Electric Screed Heating**
  - A consistent surface texture is provided by uniform heating of the screed plates.
  - With the engine running at minimum rpm, the time required for the screed to reach the operating temperature is reduced substantially due to an intelligent generator management system. Typical heat-up time is 20 minutes.
  - With paver functions set to automatic, the generator management system activates alternating mode for screed heating (heats the screed alternately on the left and right), a feature which reduces engine wear and fuel consumption.

- **Transverse Pavement Profiles**
  - Positive and negative crown can be paved with all screed types.
  - The heights of the screed extensions are hydraulically adjustable. Spindles provided on each side of the extensions allow set-up to a variety of profiles.

VÖGELE VR 600: Screed with Rear-Mounted Extensions for Multi-Lane Paving



When paving across large widths, absolute accuracy of line and level is a crucial criterion for prime-quality results, regardless of the paving width and layer thickness involved. The new VÖGELE VR 600 Extending Screed boasts impressive abilities in this respect: its basic width is 10 ft. and it can be extended hydraulically up to 19 ft. 8 in. – to nearly twice the basic width. With bolt-on extensions fitted, the screed builds up to a maximum width of 24 ft. It is equipped with vibration across the full paving width. The quick-fitting system allows the 26-in. wide bolt-on extensions to be mounted very easily and quickly.

Based on its outstanding overall technical concept, the VR 600 is the perfect choice for medium and large-scale road construction projects. When it comes to paving asphalt layers across multiple lanes, the new screed also yields substantial advantages over single-lane paving as it avoids joints, the weak points in every asphalt pavement.

VR 600

At a Glance

- Extremely sturdy single-tube telescoping system with 3-point suspension.
- Basic width 10 ft.
- Infinitely variable range 10 ft. to 19 ft. 8 in.
- Maximum paving width 24 ft.
- Bolt-on extensions 26 in.
- Vibration compacting system up to 50 hz.
- Sloping extension up to 10%.
- Automatic slope control.
- Capable of many screed profiles with crown and sloping extensions.
- Innovative electric screed heating.
- Easy-to-use ErgoPlus® operating system.

VÖGELE VF 600: Screed with Front-Mounted Extensions for Multivariable Width Applications

Working at high paving speeds with varying paving widths requires a screed that can always be relied on to deliver precise results. The VF 600 from VÖGELE is just such a system.

Several constructive features greatly support the fast and precise retraction of the screed. For instance, the material offers virtually no resistance at the beveled leading edges of the extensions and blockades and obstacles are avoided.

An additional advantage is that the side plates of a front-mounted screed are only about half as long as those of a rear-mounted screed, permitting particularly precise paving, working close up to obstacles. This, in turn, reduces the subsequent need for shoveling. Its variability is also evidenced in the wide range of possible profiles: crowns, transverse slopes and berms are set once and then built perfectly from the start to the end of the paving process.

All features combine to make the VF 600 equally suitable for building intersections on highways as for surfacing country roads with multiple obstructions. It is above all invaluable when tackling multivariable applications with many obstacles which require frequent changes to the paving width, such as parking lots with several islands, light poles and storm sewers or residential and city streets with gas and water mains.

VF 600

At a Glance

- Robust and smooth guide system for precise operation at all widths.
- Basic width 10 ft.
- Infinitely variable range 10 ft. to 19 ft. 6 in.
- Maximum paving width 25 ft. 6 in.
- Vibration compacting system up to 50 hz.
- Sloping extension up to 10%.
- Capable of many screed profiles with crown and sloping extensions.
- Berm is available as an option.
- Innovative electric screed heating.
- Easy-to-use ErgoPlus® operating system.
- Compact design allows for great visibility all around.

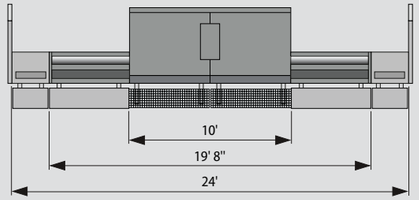
Screed Options

VÖGELE VR 600
Screed with rear-mounted extensions

Paving Widths

- Basic paving range from 10 ft. to 19 ft. 8 in.
- Maximum paving width with bolt-on extensions 24 ft.

VÖGELE VR 600 built up to maximum paving width

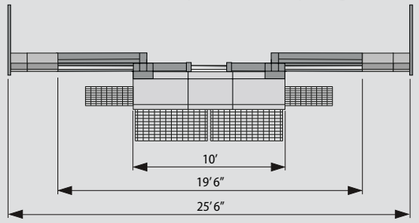


VÖGELE VF 600
Screed with front-mounted extensions

Paving Widths

- Basic paving range from 10 ft. to 19 ft. 6 in.
- Maximum paving width with bolt-on extensions 25 ft. 6 in.

VÖGELE VF 600 built up to maximum paving width

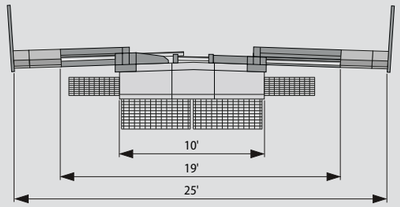


CARLSON EZ IV-1019
Screed with front-mounted extensions and no pre-strike off

Paving Widths

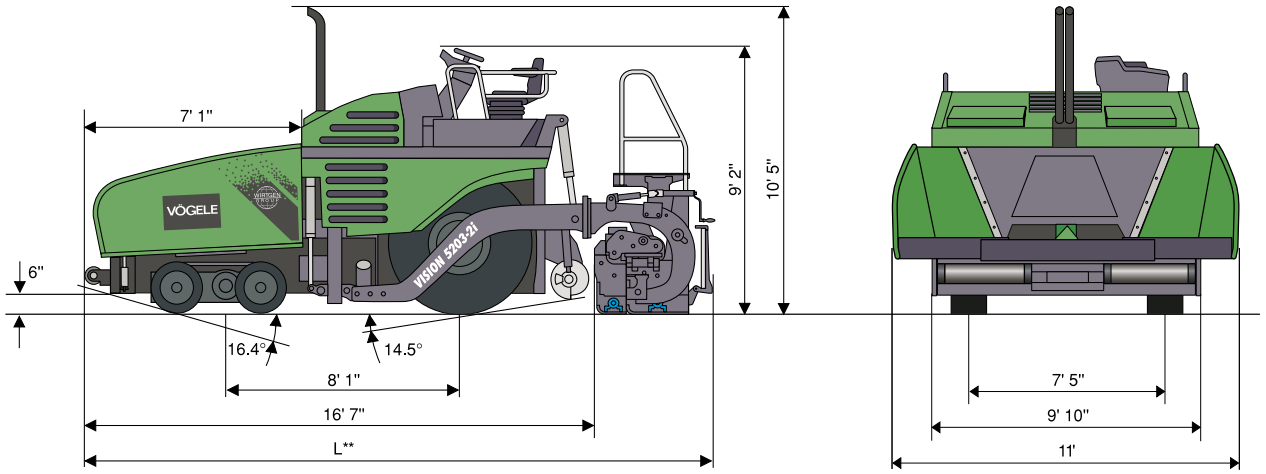
- Basic paving range from 10 ft. to 19 ft.
- Maximum paving width with bolt-on extensions 25 ft.

Carlson EZ IV-1019 built up to maximum paving width



VISION 5203-2 with VR 600

VISION 5203-2 with VF 600



L = Dependent on Screed Type (see Specification)**

Power Unit	
Engine:	6-cylinder Cummins diesel engine, liquid-cooled
Type:	QSB 6.7 C-250
Exhaust Emissions Standard:	EU Stage 3b, US EPA Tier 4i
Output:	Nominal: 250 h.p. at 2,000 rpm
	ECO Mode: 241 h.p. at 1,800 rpm
Fuel Tank:	106 gal. (US)
Electrical System:	24 V
Undercarriage	
Front Wheels:	4, mounted on pivoting bogies
Tire Equipment:	solid tires
Tire Size:	21.25 in. x 15.35 in.
Rear Wheels:	2, with high-floatation tires
Tire Size:	18.00 in. x 25 in.
Drive:	separate drive and electronic control provided for each
	driven wheel
	Standard: 2 powered rear wheels
	Option 1: 2 powered rear wheels and 2 powered front wheels
	Option 2: 2 powered rear wheels and 4 powered front wheels
Speeds:	Paving: up to 250 fpm, infinitely variable
	Travel: up to 12 mph, infinitely variable
Power Steering:	hydraulic
Service Brake:	amply-dimensioned multiple-disk brake operated by foot pedal
Auxiliary Brake:	hydraulic
Parking Brake:	spring-loaded multiple-disk brake, maintenance-free
Material Hopper	
Hopper Capacity:	240 cu. ft. (31,400 lbs.) including conveyor tunnel
Width:	11 ft.
Dump Height:	24 in. (bottom of material hopper)
Push-Rollers:	oscillating, displaceable forwards by 2 in. and 4 in.
Conveyors and Augers	
Conveyors:	2, with replaceable feeder bars, conveyor movement reversible
	for a short time
	Drive: separate hydraulic drive provided for each conveyor
	Speed: up to 102 fpm, infinitely variable (manual or automatic)
Augers:	2, with exchangeable auger flights, auger rotation reversible
	Diameter: 16 in.
	Drive: separate hydraulic drive provided for each auger
	Speed: up to 131 rpm, infinitely variable (manual or automatic)
	Auger Height: infinitely variable by 6 in., hydraulic
Lubrication:	Centralized lubrication system, electrically driven grease pump
	(optional)
Screed Options	
VF 600:	basic width 10 ft., infinitely variable range 10 ft. to 19 ft. 6 in.
	maximum width 25 ft. 6 in.
VR 600:	basic width 10 ft., infinitely variable range 10 ft. to 19 ft. 8 in.
	maximum width 24 ft.
Carlson EZ IV-1019:	basic width 10 ft., infinitely variable range 10 ft. to 19 ft.
	maximum width 25 ft.
Screed Version:	V
Layer Thickness:	up to 12 in.
Screed Heating:	electric by heating rods
Power Supply:	three-phase A.C. generator
Dimensions and Weights	
Length:	Tractor Unit and Screed in Transport Position:
	- VF 600: 20 ft. 8 in.
	- VR 600: 21 ft. 7 in.
	- Carlson EZ III-1017 / EZ IV-1019: 20 ft. 9 in.
Weights:	Tractor Unit and Screed:
	- VF 600: 39,496 lbs
	- VR 600: 40,047 lbs.
	- Carlson EZ IV-1019: 39,408 lbs.

Key: **V** = equipped with Vibration

VF = Screed with Front-Mounted Extensions
VR = Screed with Rear-Mounted Extensions

Specifications subject to change without notice.
*Optional bolt-on support recommended beyond 22 ft.

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Your VÖGELE QR Code leading you directly to the VISION 5203-2i on our website.

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