

Tracked Paver

VISION 5100-2

Universal Class



Maximum Paving Width 19 ft. 6 in.
Maximum Laydown Rate 770 tons/h
Transport Width 8 ft. 3 in.

www.voegele.info

Highlights

» Superior technology with very low noise emission

» Powerful Cummins engine provides 170 h.p.

» Highly efficient cooling for longevity of all paver components

» Large fuel tank holding 70 gallons for more than a day's work

» Advanced technology provides precise material handling

» Innovative and reliable drive concept for accurate tracking

» Compact machine design is ideal for precise maneuverability

» Equipped with central lubrication, auto-lubrication is available as an option

» ErgoPlus for easy paver operation and unobstructed operator visibility



The Most Innovative Paver Technology



The **VÖGELE VISION 5100-2** is a cutting-edge, 8-foot-class paver suitable for a wide variety of applications. Typical jobs are the building of secondary roads and highways. Due to its compact design, the tracked paver is also ideal for commercial and municipal paving jobs.

The super quiet VISION 5100-2 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 the material hopper, auger tunnel, and screed.

VISION Series pavers are extremely cool and quiet during operation. Just look at it!

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

Powerful and Efficient Drivetrain



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

The overall design of the VISION 5100-2 is tailored to ensure high performance for its class.

Needless to say, the high performance values are only possible due to efficient cooling of the overall system. The VÖGELE cooling system is based on innovative air routing which not only permits operation in all climatic zones the world over, but also helps enhance the durability of all components.



- » Powerful 6-cylinder CUMMINS engine delivers 170 h.p. at 2,000 rpm. Ideal weight-to-horsepower ratio.
- » A “smart” memory feature stores the most recent settings for paver functions. When resuming work after moving the paver, these settings are automatically retrieved at the push of a button for consistent pavement quality.
- » ECO mode at 1,800 rpm provides low noise levels and low fuel consumption. ECO mode is sufficient for most paving applications.
- » Powerful three-phase A.C. generator. Low-maintenance generator directly driven by the pump drive gearbox.
- » Unique engine exhaust system includes fumes evacuation.
- » 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 70 gallons provides more than enough capacity for a day’s work.

High Flotation, Maximum Traction and Precision Drive



- » 14 in. wide, continuous rubber tracks are perfectly aligned by the precisely manufactured undercarriage.
- » Powerful track drives and engine output provides maximum torque with no loss of power.
- » Large footprint ensures maximum tractive effort and high flotation, allowing the paver to work at a constant speed even when operating on difficult terrain.
- » The most advanced steering control in the industry provides precise straight-line tracking and smooth, accurate turns.

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

Extra Large Material Hopper and Easy Material Feed

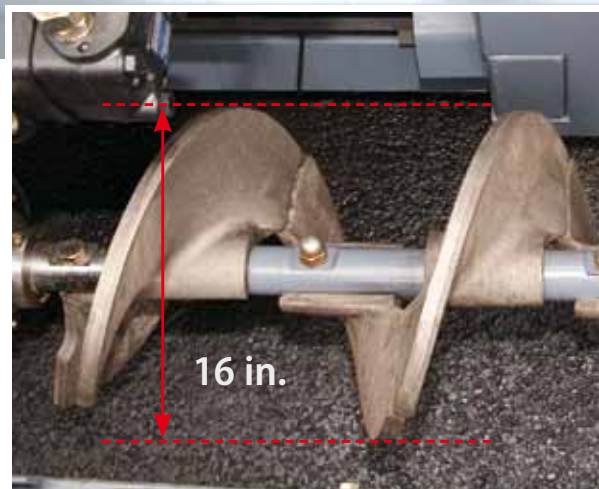


Special design of the material hopper prevents mix from sticking and creates optimal conditions for a consistent material flow. Segregation is thus avoided.



- » Large material hopper holds 190 cubic feet (24,480 lbs.).
- » Sloped inner design of the hopper for an optimal flow of material to prevent 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.
- » Hydraulically operated hopper apron prevents material spills during truck exchanges, so no hand work is required.

Perfect Material Delivery Prevents Segregation



With **automatic mode** selected for conveyors and augers, the paver operators can focus their attention on other areas of the job. In this mode, conveyance and spreading of the material are fully automatic.

- » **Powerful, individual hydraulic drives** 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.
- » **Inclined conveyors** provide ideal delivery of the material onto the augers.
- » **Hydraulically adjustable augers** are infinitely variable in height within a range of 6 inches.
- » **Large, 16 in. diameter auger flights** with precision pitch ensure excellent spreading of the material.
- » **VÖGELE's unique long-life flight design** and high-alloy nickel steel provides low operating cost.
- » **Narrow conveyor housing** in the material hopper guarantees uniform material flow.

Easy Servicing



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



- » **Automatic lubrication system** (optional) is designed to supply the required amounts of grease to the conveyor and auger bearings for optimal performance.
- » **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 with sufficient clearance for easy service access.
- » **The hydraulic system** is equipped with all necessary test ports for service and troubleshooting.
- » **High level of commonality** among 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 paver's key points.

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, easy-to-learn operation.
- » 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. If needed, it offers the great advantage of easy replacement of single modules without having to replace the entire unit.



Paver Operator's ErgoPlus Console



ErgoPlus Screed Console



ErgoPlus Operator's Stand

The Paver Operator’s ErgoPlus 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 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.

Examples of Paver Functions

Reversing Conveyor Movement

To prevent 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 the 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.



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 cylinders or the paving speed. Further paver functions such as speeds for tamper and vibration or feed rate for the conveyors can easily be set up via the display, too. And the display gives access to machine-related information such as fuel consumption or service hours.

Potentiometer for Steering

For long curves with constant radii, the desired track position can be preselected through the potentiometer for steering. As long as this function is not deactivated, the feeder automatically follows the curve without need for operator intervention.

Choice of Engine Speed Ranges

For the engine, there is a choice of 3 modes to select from: MIN, ECO, and MAX. To switch modes for engine rpm, all the operator needs to do is press the arrow buttons, up or down. In ECO mode, the engine delivers sufficient power for a great number of paving applications. Operating in ECO mode reduces noise 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.

MODULE 1

Conveyors and Augers, Traction

MODULE 3

Material Hopper and Steering

MODULE 2

Screed



The ErgoPlus Screed Console

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 paving process 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 tamper speed or conveyor speed can be adjusted conveniently via the screed console's display panel. The clear menu structure, combined with easily understandable, universal, language-neutral symbols, 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.

All sensors connected are recognized automatically by Niveltronic Plus and can be monitored and controlled from either screed console.



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.



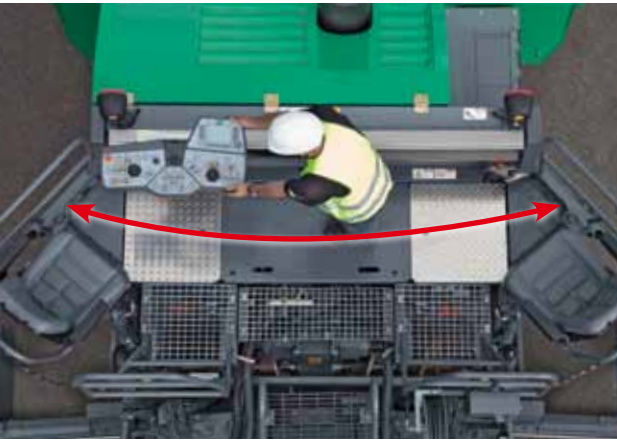
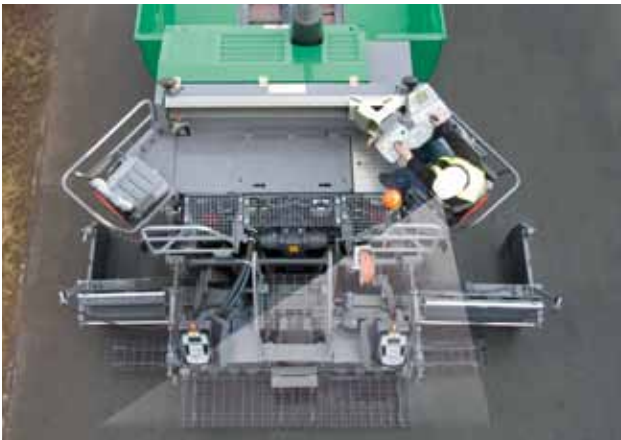
The ErgoPlus Operator's Stand



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's stand of streamlined design provide for maximum visibility of the auger tunnel, 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 prevent 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, offering the paver operator 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 5100-2.

» VÖGELE VF 500 Screed, with front-mounted extensions for multivariable width applications. Maximum paving width is 19 ft. 6 in.

» Carlson EZ III/IV Screed, no strike off, with front-mounted extensions for multivariable applications. Maximum paving width is 19 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 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.

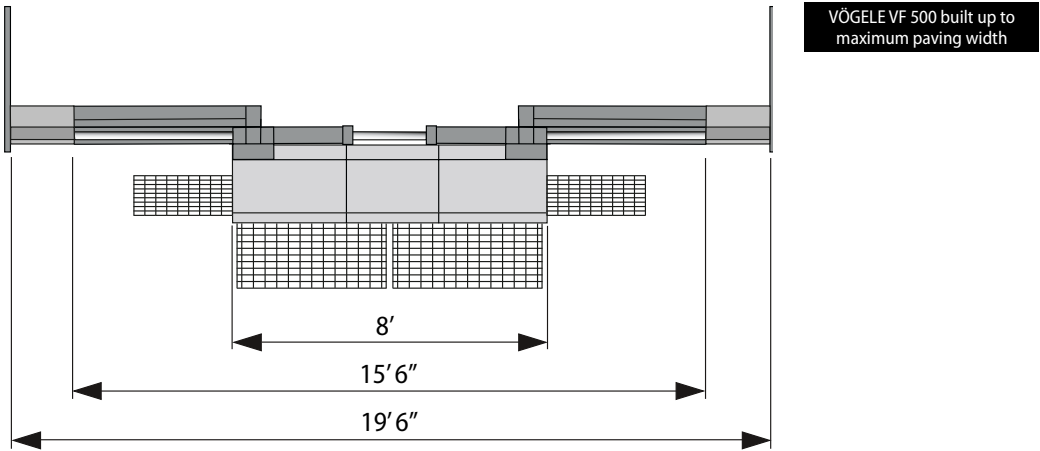
Screed Options

VÖGELE VF 500

Screed with front-mounted extensions

Paving Widths

- » Basic paving range from 8 ft. to 15 ft. 6 in.
- » Maximum paving width with bolt-on extensions 19 ft. 6 in.



CARLSON EZ III-08

Screed with front-mounted extensions and no pre-strike off

Paving Widths

- » Basic paving range from 8 ft. to 13 ft. 6 in.
- » Maximum paving width with bolt-on extensions 19 ft.

CARLSON EZ IV-815

Screed with front-mounted extensions and no pre-strike off

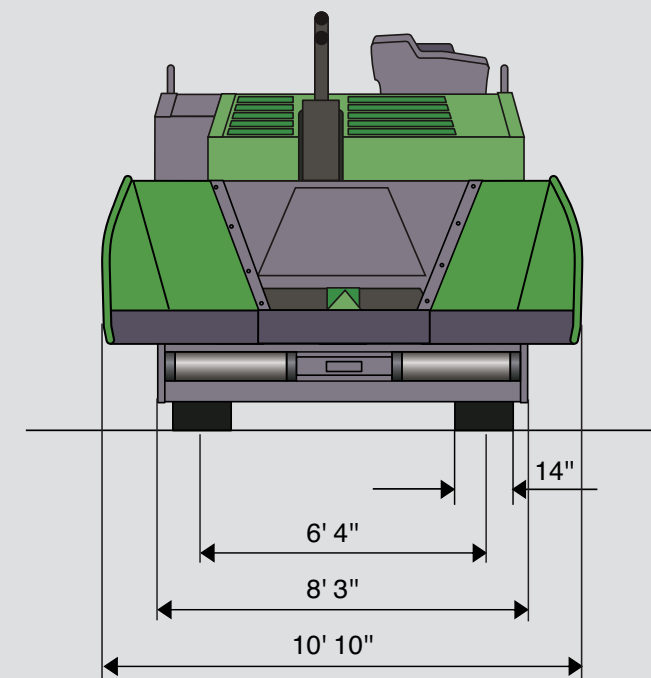
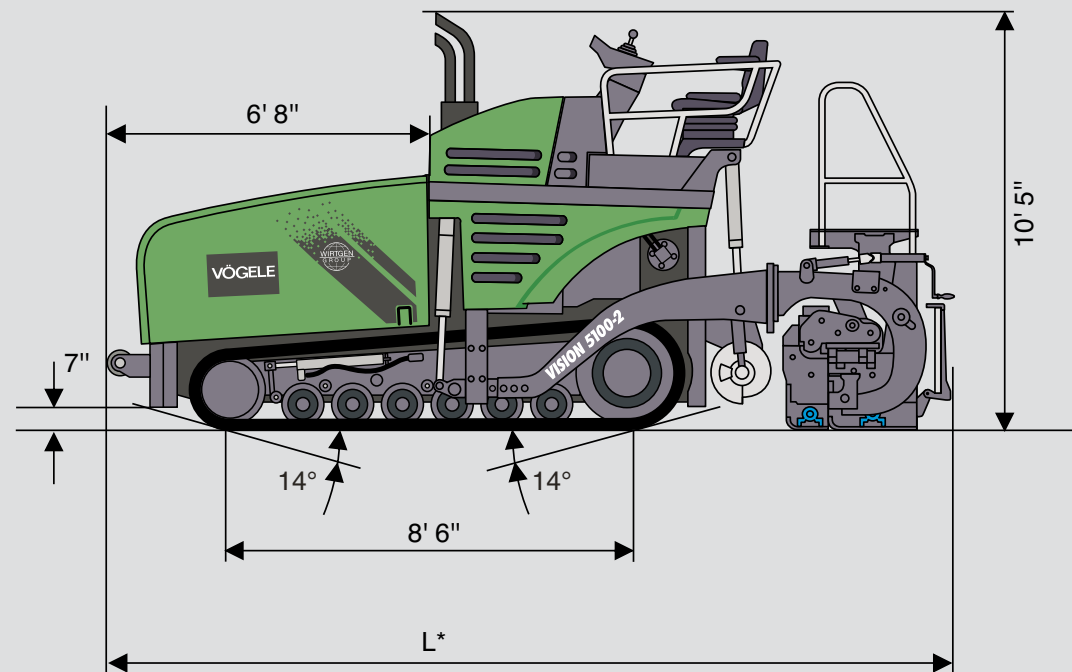
Paving Widths

- » Basic paving range from 8 ft. to 15 ft.
- » Maximum paving width with bolt-on extensions 19 ft.

VISION 5100-2 with VF 500 screed



All the Facts at a Glance



**L* = Dependent on screed type
(see specification)**

POWER UNIT

Engine:	6-cylinder Cummins diesel engine, liquid-cooled
Type:	QSB 6.7 C-170
Output:	Nominal: 170 h.p. at 2,000 rpm ECO Mode: 160 h.p. at 1,800 rpm
Fuel Tank:	70 gal. (US)
Electrical System:	24 V

UNDERCARRIAGE

Crawler Tracks:	continuous rubber band
Ground Contact:	8 ft. 6 in. x 1 ft. 2 in.
Suspension:	track carriers mounted on bogies
Track Tensioning:	automatic (hydraulic)
Track Rollers:	lifetime grease lubricated
Traction Drive:	separate hydraulic drive and electronic control
	provided for each crawler track
Speeds:	Paving: up to 250 fpm, infinitely variable
	Travel: up to 7.5 mph, infinitely variable
Steering:	by alteration of track running speeds
Service Brake:	hydraulic
Parking Brake:	spring-loaded multiple-disk brake, maintenance-free

MATERIAL HOPPER

Hopper Capacity:	190 cu. ft. (24,480 lbs.) including conveyor tunnel
Width:	10 ft. 10 in.
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 110 rpm, infinitely variable (manual or automatic)
	Auger Height: infinitely variable by 6 in., hydraulic
Lubrication:	centralized lubrication system, auto-lubrication available as an option

SCREED OPTIONS

VF 500:	basic width 8 ft., infinitely variable range 8 ft. to 15 ft. 6 in., maximum width 19 ft. 6 in.
Carlson EZ IV-815:	basic width 8 ft., infinitely variable range 8 ft. to 15 ft., maximum width 19 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

Lengths:	Tractor unit and screed in transport position
	- VF 500: 17 ft. 8 in.
	- Carlson EZ IV-815: 18 ft. 2 in.
Weights:	Tractor unit and screed
	- VF 500: 34,400 lbs.
	- Carlson EZ III-08: 33,000 lbs.
	- Carlson EZ IV-815: 34,050 lbs.

Key: **V** = equipped with Vibration

VF = Screed with front-mounted extensions

Specifications subject to change without notice.

OPTIONAL EQUIPMENT

- Niveltronic Plus for automatic grade and slope control (various grade sensors available)
- Separate washdown tank
- Xenon lamps for working lights
- Automatic lubrication system

For additional optional equipment, contact your VÖGELE representative.



Your VÖGELE QR Code
leading you directly
to the "VISION 5100-2"
on our website.



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