Highway Class

SUPER 2000-3i

TRACKED PAVER

Maximum paving width 28 ft. 3 in. (8.6 m)
Maximum laydown rate 1,540 tons/h (1,400 tonnes/h)
Transport width 10 ft. (3.05 m)

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With the SUPER 2000-3i VÖGELE has now developed an entirely new paver for the North American market. The tracked SUPER 2000-3i is designed primarily for use in highway construction and large-scale commercial applications, which are all about power and productivity. With a powerful, 6-cylinder engine rated at 250 hp (186 kW) and high-output hydraulic drives, it is fully equipped for these jobs.

The SUPER 2000-3i also comes with the latest version of our operating system, the popular ErgoPlus 3, which has been enhanced with a number of new ergonomic and functional features. With its new mounting system, the paver operator’s console can be shifted conveniently and easily between the right and left sides of the operator’s stand during operation. In addition, it now has a large color display that ensures good readability even in poor lighting conditions. The screed operating consoles have been completely redesigned, making operation of this “Dash 3” machine even easier for the entire paving crew.

With its new Highway Class paver, VÖGELE also offers the right screed for every application. The SUPER 2000-3i can be combined with the VF 600, the screed with front-mounted extensions, as well as the VR 600 and AB 600, two screeds with rear-mounted extensions. The AB 600 Extending Screed is equipped with both a vibration system and tamper, meaning it can achieve higher compaction. It is ideal for placing recycled materials or RCC applications.

All of these features make this Highway Class machine a truly SUPER paver!
The highlights of the SUPER 2000-3i

- Powerful engine complying with US EPA standard Tier 4f
- The VÖGELE EcoPlus low-emissions package significantly reduces fuel consumption and noise levels
- Innovative and reliable drive concept for accurate tracking
- Optimum feeding with mix thanks to the large material hopper
- ErgoPlus 3 with a number of additional ergonomic and functional advantages
- Daily maintenance-free paver with auto-lubrication and more
- The right screed for every application. The paver can be combined with the VF 600, VR 600 or AB 600 Extending Screeds

10-foot tracked Highway Class paver with a large range of applications and paving widths up to 28 ft. 3 in. (8.6 m)
Given its enormous tractive effort and high laydown rate, the SUPER 2000-3i is the ideal machine for paving in large widths. In order to achieve an optimal paving result for every kind of application, VÖGELE offer screeds which operate with high precision. Several screed options are available for the SUPER 2000-3i, featuring different equipment with compacting systems. The paver can be combined with the VF 600 for multivariable width applications, the VR 600 for mainline applications and the AB 600 screed, with rear-mounted extensions, achieves higher compaction thanks to vibration and tamper. This screed is particularly suited for placing cold RAP (Reclaimed Asphalt Pavement) for roadbase and polymer modified asphalt.
Efficiency, performance and low fuel consumption

The driving force behind this Highway Class paver is its powerful, six-cylinder diesel engine rated at 250 hp (186 kW).

Both low fuel consumption and low-noise operation are made possible by intelligent engine management with an ECO mode.

Minimum input – maximum output: All drive components, including the three-phase generator, are supplied from the central splitter gearbox and operate at maximum efficiency.

High-traction crawler tracks efficiently convert drive power into forward motion.
State of the art drive technology

**Three main components** define the power unit of a SUPER 2000-3i: its modern, liquid-cooled diesel engine, a splitter gearbox flanged directly to the engine and a large cooler assembly.

The driving force in this power pack from VOGELE is its diesel engine. The six-cylinder engine delivers 250 hp (186 kW) at 2,000 rpm. Yet the fuel-saving ECO mode is sufficient for many applications. And even then, the SUPER 2000-3i still has a full 235 hp (175 kW) at its disposal. Moreover, the machine generates even less noise when running at just 1,700 rpm.

A large cooler assembly ensures that the power unit always delivers its full output. With innovative air routing and a variable-speed fan, temperatures are continually maintained within the optimum range, significantly extending the service life of both the diesel engine and the hydraulic oil. A further advantage is that the machine can operate without difficulty in all climate regions worldwide.

All hydraulic elements are supplied with hydraulic oil directly from the splitter gearbox, the advantage being that all pumps and valves are combined in one spot that is easily accessible for maintenance work.

Even the powerful generator for screed heating is flanged directly onto the splitter gearbox. Its integrated oil cooling system makes it completely maintenance-free and very quiet.

The large cooler assembly is made up of three parts: it ensures that engine coolant, charge air and hydraulic oil are maintained at the optimum temperature.

**Machines with the suffix “i” in their product designation are not only economical, but also extremely clean.**

The “i” stands for “intelligent emission control” and is found in the type names of all machines from the WIRTGEN GROUP equipped with the latest engine technology. Thanks to their sophisticated exhaust gas after-treatment, these engines comply with the strict EPA (Tier 4f) and CARB standards.

**Powerful 6-cylinder engine delivers 250 hp (186 kW) at 2,000 rpm.**

**ECO mode at 1,700 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.**

**The fuel tank holds 100 gallons (380 liters), more than enough for a day’s work. The SUPER 2000-3i additionally has a DEF tank with sufficient capacity.**

**A powerful, oil-cooled generator with direct drive ensures rapid, uniform heating of the screed. The generator is directly driven by the splitter gearbox and therefore maintenance-free.**
It goes without saying that our road pavers conform to the applicable emissions directives, but we like to go much further. That’s why the machine concept of the “Dash 3” generation uses environmentally friendly innovations in machine technology, resulting in lower consumption, lower emissions and lower costs.

One of these innovations is the VÖGELE EcoPlus low-emissions package. Fuel savings of up to 25% can be achieved with VÖGELE EcoPlus, depending on the application and capacity utilization of the paver.

That doesn’t just result in considerable savings for the contractor – it is good news for the environment, too. That’s because every liter of fuel saved reduces carbon dioxide (CO₂) emissions.

25% FUEL SAVING
25% LESS CO₂ Emitted
LOWER NOISE EMISSIONS

The technical innovations

01 Splitter gearbox with ability to disengage hydraulic pumps
When the paver is stationary, all the hydraulic pumps needed for “traction”, “conveyors and augers” and “compaction” are disengaged automatically. The result? Lower fuel consumption.

02 Controlled hydraulic oil temperature circuit
A bypass circuit gets the hydraulic oil to its optimum operating temperature very quickly, enabling rapid, fuel-saving operation of the paver.

03 Variable-speed fan
The variable-speed fan automatically adapts to the engine load and the ambient temperature. This type of drive saves energy and reduces noise emissions.

VÖGELE EcoPlus: Less is more

VÖGELE

SUPER 2000-3i

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Efficient translation of tractive power

A strong point of the SUPER 2000-3i are the continuous rubber tracks. Due to the large track width of 18 in. (457 mm), paving speeds up to 250 fpm (76 m/min.) are possible. The large footprint also provides excellent flotation and tractive effort.

The powerful, separate drives are integrated directly into the drive wheel of the rubber track, meaning that engine output is transmitted without any loss of power. As a result, the SUPER 2000-3i can push any feed truck with ease.

The SUPER 2000-3i also displays impressive maneuverability and high mobility. It can turn on the spot and easily masters difficult terrain with inclines and slopes.

- **Continuous rubber tracks**, 18 in. (457 mm) wide, with self-aligning front idlers provide for optimal steering under any conditions. Dual track tensioning cylinders provide perfect alignment.
- **Powerful track drives** and engine output deliver 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.
Precision paving with material management

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.

Thanks to its large material hopper, the SUPER 2000-3i can be supplied with material easily and quickly.

The high-performance and precision systems that convey and spread the material support high laydown rates and consistent quality.

SUPER 2000-3i
Extra large material hopper and easy material feed

- The large material hopper holding 16.5 tons (15 tonnes) is dimensioned so that a sufficient quantity of mix is stored at all times. Coping with difficult situations such as paving under bridges, for instance, poses no problem. Two cylinders per side provide smooth operation of the hopper wings.

- Sloped inner design of the hopper for an optimal flow of material to prevent segregation.

- Easy truck exchange due to 24 in. (620 mm) 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 truck docking. A truck hitch is available as an option.

- 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.

- An insert material hopper for the paver is available for supplying mix from a material transfer vehicle.
Precision material delivery prevents segregation

Thanks to effective spreading of the material, the SUPER 2000-3i always has an optimal head of mix in front of the screed to meet the demands of every paving situation.

The wide conveyor tunnel and powerful, separate hydraulic drives for the conveyors and augers support high laydown rates of up to 1,540 tons/h (1,400 tonnes/h).

- **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 onto the augers.
- **Large, 16 in. (40 cm) diameter auger flights** with precision pitch ensure excellent spreading of the material when paving in large widths or at lower engine rpm. VÖGELE’s unique flight design provides prolonged service life versus standard flight designs.
- **Narrow conveyor guard** in the material hopper guarantees uniform material flow.

The optional Power Tunnel is perfect for changing paving widths. The hydraulically adjusted limiting plates adapt to the screed width automatically, ensuring an optimal head of mix in front of the screed all the way to the end gates, even when the screed extensions are fully moved out.

Hydraulically adjustable augers are infinitely variable in height within a range of 6 in. (15 cm). 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.
The ErgoPlus 3 operating system

Even the very best machine with the most advanced technology can only really show its strengths if it can be operated easily and as intuitively as possible. At the same time, it should offer an ergonomic and safe working environment for the operating team. Therefore, the ErgoPlus 3 operating system focuses on the operator. With VÖGELE pavers, the operator consequently retains full control over the machine and construction project.

On the following pages you will find detailed information on the extensive functions of the ErgoPlus 3 operating system. ErgoPlus 3 encompasses the operator’s stand, the paver operator’s console, the screed console and Niveltronic Plus, the System for Automatic Grade and Slope Control.
The paver operator’s ErgoPlus 3 console

“Full control for the machine operator!”
The paver operator's ErgoPlus 3 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 just where they would expect them to be.

On the ErgoPlus 3 console, all push-buttons are easily identifiable by touch even when wearing work gloves. This is due to the "Touch and Work" principle. The mate- rial's backlit user interface ensures brilliant readability even in poor lighting conditions. Vital information is shown on menu level 1, such as the positions of the screed tow point cylinders or the material level in the conveyor tunnel. Further paver functions such as speeds for tamper and vibration or feed rates 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.

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.

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

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.

Safe operation during the night

Glarefree backlighting comes on automatically as darkness sets in so that the paver operator can also work safely on night-time jobs.

Display of the paver operator’s console

The paver operator’s ErgoPlus 3 console is switched on and off with a large switch located on the front panel. Displaying a high-contrast user interface ensuring brilliant readability even in poor lighting conditions, Vital information is shown on menu level 1, such as the positions of the screed tow point cylinders or the material level in the conveyor tunnel. Further paver functions such as speeds for tamper and vibration or feed rates 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.

Choice of operating modes for the paver

On the ErgoPlus 3 console, 4 different operating modes are available to select from. By pressing the arrow buttons, up or down, the operator changes modes in the following order: “Neutral”, “Job Site”, “Positioning” and “Paving”. An LED indicates the mode selected. When leaving “Pave” 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.
**The ErgoPlus 3 screed console**

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

With ErgoPlus 3, the screed operator has the process of paving at his fingertips. All functions are easily comprehensible and all controls are clearly arranged.

**The display of the screed console**

The display of the screed console allows the screed operator 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, self-explanatory symbols neutral in language, makes operating the display panel both simple and safe.

**Crown adjustment at the press of a button**

The crown can be conveniently adjusted at the press of a button on the screed operator’s console. When pressing the “plus” or “minus” keys, the set crown value is shown on a pop-up window. The conveyors and augers are adjusted accordingly.

**Ergonomic screed width control in two speeds**

The screed width can be effortlessly adjusted by means of the “SmartWheel”. This is done in two speeds: slow, for precise control e.g. along an edge, or fast, for rapid extension or retraction of the screed.

**Optimum visibility even in darkness**

The screed console is specially designed for night-time operation. To prevent operator errors, the buttons are backlit as soon as dusk falls or in darkness. What’s more, the downward-angled high-power LED lighting gives the operator a perfect view of all processes associated with the end gate.
The **ErgoPlus 3** remote control

In addition to the screed operating consoles, a compact and very durable remote control is available for each side of the screed to operate the VF 600 and VR 600 screeds. The remote controls can be securely stowed in the holders on the main screed, or on the ends of the screed extensions. The holders are magnetic, meaning that the remote controls are easy to grab at any time, giving the operator a large radius of movement so that he can always find the most effective working position in any paving situation.

All the main paving functions of the screed can be controlled using one of the two handy screed remote controls. Intuitive operation is possible thanks to self-explanatory and language-neutral symbols.

1 // Setting: Conveyor, automatic/manual
2 // Setting: Auger, automatic/manual
3 // Setting: Screed, tow point cylinder
4 // Control: Screed width
5 // Setting: Power tunnel, automatic/manual
6 // Setting: Berm
7 // Setting: Slope
8 // Setting: Screed extension, height
9 // Lock: Screed extension
VÖGELE Niveltronic Plus

Niveltronic Plus, the System for Automatic Grade and Slope Control, is an in-house development by VÖGELE based on many years of experience in grade and slope control technology. Easy operation, precision and reliability are its hallmarks, ensuring perfect mastery of all grade and slope control jobs.

This fully integrated system is optimally adapted to the machine technology of the Premium Line pavers. All wiring and connections, for instance, are integrated into the tractor and screed, effectively eliminating all risk of damage to these components.

VÖGELE naturally offer a particularly large and practical selection of sensors permitting versatile use of the Niveltronic Plus system. Whether for instance car parks, roundabouts or highways need to be built or rehabilitated, VÖGELE offer the right sensor for every job site situation.

Sensors can be changed quickly and easily, for Niveltronic Plus automatically detects which sensor is connected, thus simplifying the configuration process for the user.

<table>
<thead>
<tr>
<th>Left-hand side of screed</th>
<th>Right-hand side of screed</th>
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<tbody>
<tr>
<td>The value (in inches) displays the height of the tow point cylinder on the left-hand side.</td>
<td>The value (in inches) displays the height of the tow point cylinder on the right-hand side.</td>
</tr>
<tr>
<td>Shows the value specified for the sensor on the left-hand side. For grade sensors, values are indicated in inches. When working with the slope sensor, values are indicated in percent.</td>
<td>Shows the value specified for the sensor on the right-hand side. For grade sensors, values are indicated in inches. When working with the slope sensor, values are indicated in percent.</td>
</tr>
<tr>
<td>Shows the type of sensor selected for the left-hand side. Displayed here in this example is the symbol of the sonic sensor used in Ground mode.</td>
<td>Shows the type of sensor selected for the right-hand side. Displayed here in this example is the symbol of the sonic sensor used in Ground mode.</td>
</tr>
<tr>
<td>Shows the actual value picked up by the sensor.</td>
<td>Shows the actual value picked up by the sensor.</td>
</tr>
<tr>
<td>Shows the sensitivity set for the sensor selected.</td>
<td>Shows the sensitivity set for the sensor selected.</td>
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</table>
The **ErgoPlus 3** operator’s stand

1. **The comfortable operator’s stand** gives an 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.

2. **The seats swinging 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 keep an eye on the head of mix in front of the screed at all times.

3. **Working comfort**
   On the “Dash 3” machines, the paver operator’s seat and console, as well as the screed consoles can now be adjusted even more easily to personal needs.

4. **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’s console can be protected by a shatter-proof cover to prevent willful damage.

5. **Hardtop gives excellent protection**
   The modern hardtop made of glass fiber reinforced polymer material shelters the operator whether rain or shine.

6. **Consistent service concept**
   All “Dash 3” pavers have a consistent maintenance concept with identical service intervals.

7. **Ergonomic screed console**
   The height and position of the console are easily adjusted. The high-contrast color display can be read clearly from all angles.

8. **Easy transport**
   The machine can be prepared quickly and easily for transport on a low-bed trailer. Even the hardtop can be folded down to transport position using a manual hydraulic pump.
Several screed options are available for the SUPER 2000-3i, featuring different equipment with compacting systems. The paver can be combined with the VF 600, the VR 600 and the AB 600 Extending Screeds.

**VÖGEL VE VF 600** screed, with unequal-width front-mounted extensions for multivariable width applications. Maximum paving width is 25 ft. 6 in. (7.75 m) with bolt-on extensions.

**VÖGEL VE VR 600** screed, with rear-mounted extensions for mainline applications. Maximum paving width is 28 ft. 3 in. (8.6 m) with bolt-on extensions.

**VÖGEL VE AB 600** screed, with rear-mounted extensions, achieves higher compaction thanks to vibration and tamper. The screed is particularly suited for placing cold RAP (Reclaimed Asphalt Pavement) for roadbase and polymer modified asphalt. Maximum paving width is 27 ft. 11 in. (8.5 m) with bolt-on extensions.

**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 its operating temperature is reduced substantially due to an intelligent generator management system.
Screed options for SUPER 2000-3i

VF 600 Screed with front-mounted extensions
Built up to maximum paving width

Paving widths
- Infinitely variable range from 10 ft. to 19 ft. 6 in. (3.05 m to 5.95 m)
- Maximum paving width with bolt-on extensions 25 ft. 6 in. (7.75 m)

Compacting system
- VF 600 V with vibration

VR 600 Screed with rear-mounted extensions
Built up to maximum paving width

Paving widths
- Infinitely variable range from 10 ft. to 19 ft. 8 in. (3.05 m to 6 m)
- Maximum paving width with bolt-on extensions 28 ft. 3 in. (8.6 m)

Compacting system
- VR 600 V with vibration

AB 600 TV Screed with rear-mounted extensions
Built up to maximum paving width

Paving widths
- Infinitely variable range from 9 ft. 10 in. to 19 ft. 8 in. (3 m to 6 m)
- Maximum paving width with bolt-on extensions 27 ft. 11 in. (8.5 m)

Compacting systems
- AB 600 TV with tamper and vibration
All the facts at a glance

<table>
<thead>
<tr>
<th>Key</th>
<th>Meaning</th>
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<tr>
<td>BOC</td>
<td>Extended Screed</td>
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<tr>
<td>SCR</td>
<td>Selective Catalytic Reduction</td>
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<tr>
<td>AB</td>
<td>Extending Screed</td>
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<tr>
<td>VF</td>
<td>Screed with Front Mounted Extensions</td>
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<tr>
<td>VR</td>
<td>Screed with Rear Mounted Extensions</td>
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### Power unit
- **Engine**
  - Type: 6-cylinder diesel engine, liquid-cooled
  - Manufacturer: Cummins
  - Model: QSB6.7-C250
- **Output**
  - Nominal: 250 hp (186 kW) at 2,000 rpm (according to DIN)
  - ECO mode: 235 hp (175 kW) at 1,700 rpm
- **Exhaust emissions**
  - Standard: EU Stage 4, US EPA Tier 4F
  - Exhaust after treatment: DOC, SCR

### Material hopper
- **Hopper capacity**: 16.5 tons (15 tonnes)
- **Width**: 11 ft. 3 in. (3,420 mm)
- **Height**: 24 in. (600 mm)
- **Option**: oscillating
- **Conveyors and augers**
  - Conveyors: 2, with exchangeable feeder bars, conveyor movement reversible for a short time
  - Drive: separate hydraulic drive provided for each conveyor
  - Speed: up to 197 fpm (60 m/min.) infinitely variable (manual or automatic)

### Conveyors and augers
- **Augers**
  - Diameter: 16 in. (400 mm)
  - Drive: separate hydraulic drive provided for each auger
  - Speed: up to 130 rpm, infinitely variable (manual or automatic)
  - Height: infinitely variable by 6 in. (15 cm), hydraulic
- **Lubrication**: automatic centralized lubrication system with electrically driven grease pump

### Screed options
- **VF 600**
  - **Infinitely variable range**: 10 ft. to 19 ft. 8 in. (3.05 to 6 m)
  - **Maximum width**: 25 ft. 6 in. (7.75 m)
- **VR 600**
  - **Infinitely variable range**: 10 ft. to 19 ft. 8 in. (3.05 to 6 m)
  - **Maximum width**: 28 ft. 3 in. (8.6 m)

### Screed heating
- **VF 600**: Electric by heating rods
- **VR 600**: Three-phase 400 V generator

### Dimensions (transport) and weights
- **Lengths**
  - **VF 600 V**: 21 ft. 9 in. (6.625 m)
  - **VR 600 V**: 22 ft. 6 in. (6.865 m)
  - **AB 600 TV**: 21 ft. 4 in. (6.510 m)
- **Weights**
  - **VF 600 V**: 49,053 lbs. (22,250 kg)
  - **VR 600 V**: 49,935 lbs. (22,650 kg)
  - **AB 600 TV**: 49,714 lbs. (22,550 kg)

### Fuel tank
- **100 gallons (380 liters)**

### Undercarriage
- **Crawler track**
  - Continuous rubber track
- **Ground contact**: 9 ft. 10 in. x 1 ft. 6 in. (2,994 x 457 mm)
- **Traction drive**: Separate hydraulic drive and electronic control provided for each crawler track
- **Speeds**
  - Paving: up to 250 fpm (76 m/min.), infinitely variable
  - Towed: up to 7.5 mph (12 km/h), infinitely variable

### Technical literature noted.