A WIRTGEN GROUP COMPANY

VÖGELE

Tracked Paver

SUPER 1800-3i SprayJet

PERFECT IN ALL CLASSES

The right paver for every job

VÖGELE's seamless product range is considered unique in the industry. Whether a service road or a motorway, an airfield or a race track, a new construction or a rehabilitation job, thick or thin, hot or cold – customers will find the right machine in our paver range for every paving task.

VÖGELE PRODUCT RANGE

MINI CLASS
> Maximum paving width 10 ft. 6 in. (3.2 m)
> Maximum laydown rate 275 tons/h (250 tonnes/h)

COMPACT CLASS
> Maximum paving width 13 ft. 9 in. (4.2 m)
> Maximum laydown rate 385 tons/h (350 tonnes/h)

UNIVERSAL CLASS
> Maximum paving width 32 ft. 10 in. (10 m)
> Maximum laydown rate 770 tons/h (700 tonnes/h)

HIGHWAY CLASS
> Maximum paving width 42 ft 8 in (13 m)
> Maximum laydown rate 1,540 tons/h (1,400 tonnes/h)

SPECIAL CLASS
> SprayJet

VÖGELE

HIGHLIGHTS

Perfectly equipped

DRIVE

01 Drive concept

> Powerful and economical drive concept, even when operating at full load in any climate zone.

02 VÖGELE EcoPlus

> The VÖGELE EcoPlus low-emissions package significantly reduces fuel consumption and noise levels.

OPERATION

03 ErgoPlus 3 operating system

> ErgoPlus 3 operating system with numerous convenient and automatic functions.
> ErgoPlus 3 screed operator's console with SmartWheel for convenient screed width control.

04 Niveltronic Plus – the System for Automated Grade and Slope Control

> Fully-integrated system perfectly matched to the machinetechnology of VÖGELE road pavers.
> Wide range of sensors for flexible use in all fields of application.
> User-friendly operation and monitoring of all Niveltronic Plus functions.

MATERIAL MANAGEMENT

05 Receipt of mix

> Large material hopper with a capacity of 28,660 lbs. (13 tonnes) ensures optimum feeding with mix.
> A hydraulically operated hopper front directs the mix inside the material hopper straight onto the conveyors, conveying the entire mix properly in front of the screed.

06 PaveDock Assistant

> Facilitates communication during transfer of mix.

SPRAY TECHNOLOGY

07 World's unique spray paver

> World's unique spray paver for placing thin asphalt overlay as well as conventional binder and surface courses.
> Emulsion sprayed at a rate of 0.06 to 0.33 lbs./sq.ft. (0.3 to 1.6 kg/m²)* in a clean and controlled process.

QUALITY

08 "Dash 3" service concept

> Uniform "Dash 3" service concept ensures easy maintenance and cuts training costs.

PAVING

09 Advanced screed technology

> Advanced and precise screed technology for perfect high-quality pavements.

VÖGELE SUSTAINABILITY

VÖGELE SUSTAINABILITY describes innovative technologies and solutions that are consistent with the sustainability objectives of the WIRTGEN GROUP.

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01 Exact spraying pattern and clean working along kerbs
02 ErgoPlus 3 operating concept for paver and spray module
03 Advanced precision screed technology for even, high-quality pavements
04 PaveDock Assistant communication system for optimum material feed
05 Large material hopper with a capacity of 28,660 lbs. (13 tonnes)
06 ErgoPlus 3 screed operator's console with SmartWheel for convenient screed width control

SUPER 1800-3i SPRAYJET

Unique and innovative

SprayJet technology from VÖGELE has proved its value for many years and is used for pavement rehabilitation and construction in countries around the world.

The VÖGELE SprayJet features a large array of impressive innovations. One feature of fundamental importance is that operation of the spray module has been integrated into the ErgoPlus 3 operating concept.
The module is designed as a completely self-contained functional unit. This modular design makes the SUPER 1800-3i SprayJet simple to service and allows it to be used both as a spray paver and as a conventional asphalt paver. It has a maximum spray width of 19 ft. 8 in. (6 m).

As a conventional paver without spray function it can even pave widths of up to 29 ft. 6 in. (9 m). It goes without saying that the paver also includes all the "Dash 3" features. The VÖGELE EcoPlus package, for instance, significantly reduces both fuel consumption and noise levels.

With the SUPER 1800-3i SprayJet VÖGELE present a spray paver, unique worldwide, for paving thin asphalt overlay and conventional binder and surface courses.

AREAS OF APPLICATION AS A CONVENTIONAL ASPHALT PAVER AND AS A SPRAY PAVER

For many road construction and civil engineering contractors, the SUPER 1800-3i SprayJet offers an excellent opportunity to employ their paver in a variety of applications, be it as a conventional upper mid-range paver or as a special machine for particular jobs.

The machine technology of the SUPER 1800-3i SprayJet is ideal in all cases. It is based on the modular concept developed by VÖGELE. As a result, the paver can be used either with the SprayJet module or, after only minor conversion, as a conventional asphalt paver without SprayJet module.


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01 **Resurfacing work on a motorway**

02 **Resurfacing a roadway in a residential area**

03 **Used as a conventional paver**

04 **Pavement rehabilitation of a causeway**

PAVING THIN OVERLAY ON SPRAY SEAL, “HOT ON HOT”

Cost-effective asphalt paving method
for rehabilitating and renewing surface courses

Small layer thickness
between 0.5 to 0.8 in. (1.2 to 2 cm)

Quicker paving process
than in conventional road construction

This is a cost-effective asphalt paving method for rehabilitation or renewal of the surface course. It can be used on all traffic areas. The layer thickness is normally no more than 0.5 to 0.8 in. (1.2 to 2 cm). The method owes its cost-effectiveness to saving expensive surface course material. The procedure is ideal in municipal areas, as paving thin overlay does not require any costly adaptation of curbs or other pavement fittings.

With the SUPER 1800-3i SprayJet, thin overlay can be paved on a spray seal three to five times faster than with conventional equipment. The bitumen emulsion is sprayed and the asphalt placed by the VÖGELE machine in a single pass. This way, job site vehicles do not drive over the sprayed surface and never damage the emulsion film.

ADVANTAGES OF THE TECHNIQUE

Cost savings

> Thin layer saves up to 50 % of material cost.

> No costly adaptation or new installation of kerbs required.

> When a spray paver is used, there is no possibility of job site vehicles driving over the sprayed area. This means that other roads in the area are not soiled and need not be cleaned once the job is complete.

> Short construction time: roadworks are completed quickly, allowing the road to be reopened to traffic sooner.

High quality

> An excellent bond between layers, perfect sealing and effective protection of the existing base all add up to a long service life for the road.

> High initial and permanent roughness of the resurfaced road are guaranteed.

PAVING BINDER AND/OR SURFACE COURSE ON SPRAY SEAL

This classical method is widely known in many countries for rehabilitating traffic areas. Until now, it has been common practice to spray the surface with bitumen emulsion beforehand so that the water could evaporate over night.
This left a bitumen coat that was subsequently overlaid with a binder course or surface course. However, the time and equipment required was one considerable disadvantage of this method.

Another problem that should be avoided wherever possible is that of transport vehicles crossing over and ruining work on surrounding areas, roads and curbs.

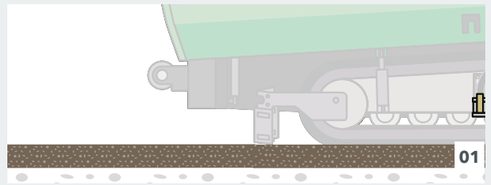
These problems are now a thing of the past, thanks to SprayJet technology from VÖGELE. With the VÖGELE technology, the fresh emulsion is directly overlaid with asphalt as soon as it is sprayed.

Pavement rehabilitation using porous asphalt (OPA) is a method of growing importance in several countries. It currently is used mainly for noise control both on municipal roads and on motorways.
On innumerable construction projects around the world, the VÖGELE paver with SprayJet module has proven that its special spray technology makes it the perfect machine – in terms of both quality and cost-efficiency – for all road construction contractors.

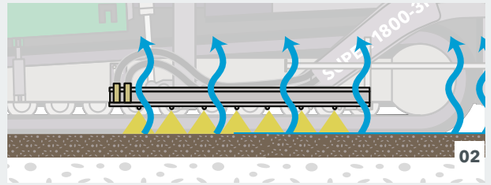
VÖGELE > GOOD TO KNOW

What happens when bitumen emulsion "breaks"?

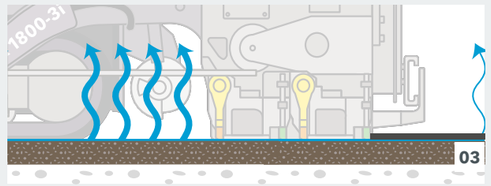
The water begins to evaporate as wsoon as the hot bitumen emulsion is sprayed at a temperature of 158 to 176 °F (70 to 80 °C). The remaining water evaporates spontaneously when the emulsion comes into contact with asphalt heated to more than 212 °F (100 °C). In this way, the emulsion "breaks" when using SprayJet technology from VÖGELE.



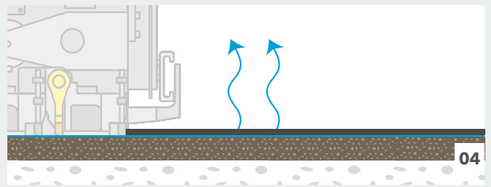
Prepared base: milled surface or freshly laid binder course.



Hot bitumen emulsion at a temperature between 158 to 176 °F (70 to 80 °C) is applied by the spray paver.

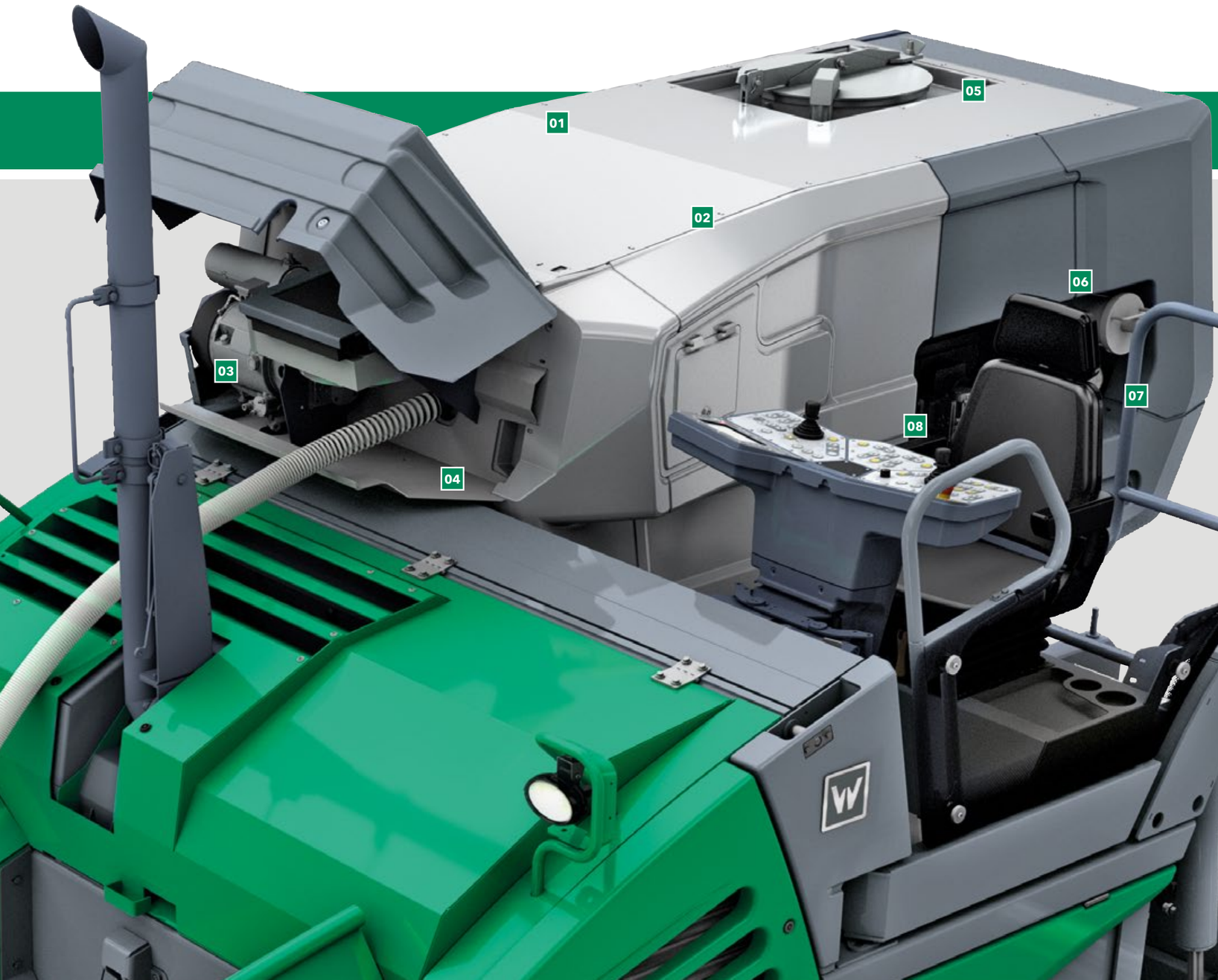


Paving of a binder or surface course. The bitumen emulsion "breaks" immediately as the hot asphalt causes the water to evaporate, leaving a firmly adhering film of bitumen.



Any water still remaining in the emulsion evaporates through the "open pores" of the asphalt overlay.

THE SPRAYJET MODULE



ErgoPlus 3 operating concept
for paver and spray module

Controlled spraying process
in a range from 0.06 to 0.33 lbs./sq.ft. (0.3 to 1.6 kg/m²)

01 **Effective insulation and the integrated electric heating system** (2 x 9.5 hp (2 x 7 kW)) ensure that the emulsion is maintained at the temperature required for spraying.

02 **The capacity of the emulsion tank**
The capacity of the emulsion tank has been increased to 555 gallons (2,100 liters) to extend the paver's range.

03 **Compressed air system** integrated into the spray module.

04 **Large hinged panels**
Even with the spray module installed, all the main service points are readily accessible behind large hinged panels.

05 **An auxiliary gas heating system** rapidly heats the bitumen emulsion to the required temperature if it is too cold on delivery.

06 **Heated emulsion pump**
A heated emulsion pump circulates the bitumen emulsion in the tank and ensures that it is permanently homogenized.

07 **Electronically-controlled ball valves**
All circuits are switched automatically via electronically controlled ball valves.

08 **Additional filler port**
An additional filler port on the left-hand side ensures greater flexibility when refilling the emulsion tank of the "Dash 3" spray module.

VÖGELE SPRAY TECHNOLOGY

The SUPER 1800-3i SprayJet is equipped with 5 spray bars. The front spray bar has 6 spray nozzles and is located between the machine's crawler tracks, right behind the push-rollers.
An articulated spray bar installed on each side of the paver comes with 7 nozzles per side. Finally, a short spray bar with 2 nozzles is provided right behind each crawler track. This arrangement of the spray bars allows full coverage of the existing surface with emulsion, even when the paving width varies. The rate of spread can be selected accurately within the range of 0.06 to 0.33 lbs./sq.ft. (0.3 to 1.6 kg/m²).

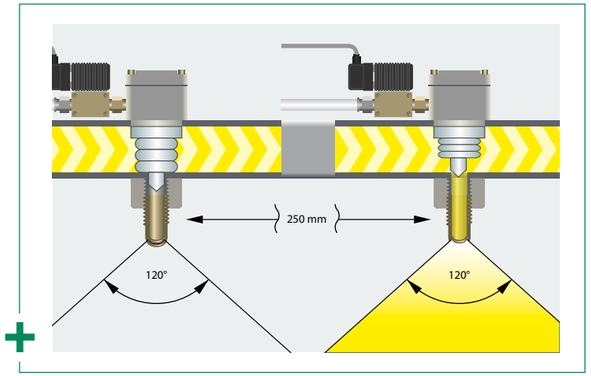
Seamless application of emulsion
even when pave widths vary

Low spray pressure
for clean, environmentally-friendly working

01 The spray nozzles are opened and closed pneumatically. A compressed air system is integrated into the SprayJet module for this purpose.
02 A very low spraying pressure of no more than 43.6 psi (3 bar) allows absolutely uniform spreading of bitumen emulsion and a clean result when spraying along curbs.
03 The particularly high quality of the spray nozzles guarantees perfect spraying.

The SprayJet nozzles do not spray the emulsion continuously, but operate instead in pulsed mode. The frequency of the spray pulses is adjusted automatically as a function of the selected rate of spread, paving speed and paving width. As a result, complete coverage of the existing surface with a uniform film of emulsion is achieved without any overlaps.

Emulsion is applied at an exceedingly low spray pressure of no more than 43.6 psi (3 bar). In combination with the high-quality spray nozzles, this allows the emulsion to be sprayed cleanly and without burdening the environment.



Pulsed mode
The nozzles do not spray the emulsion continuously, but operate instead in pulsed mode. The frequency of the spray pulses is adjusted automatically as a function of the selected rate of spread, paving speed and paving width.

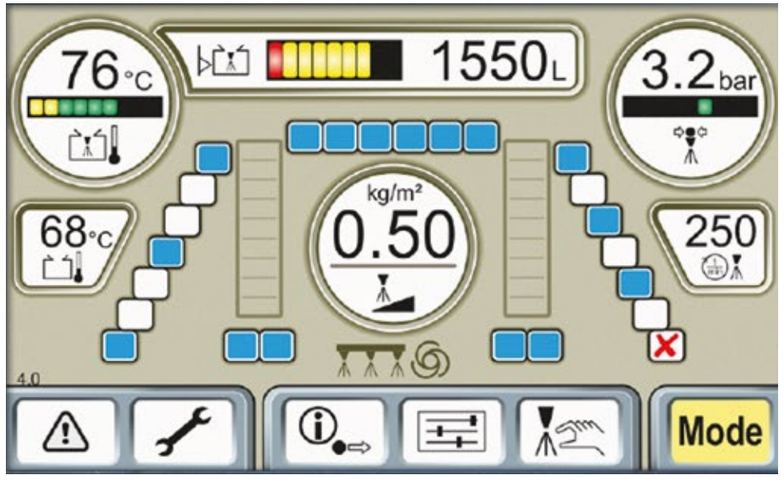
* The rate of spread per square metre must be determined as a function of the emulsion to be used. The rate of spread depends on the emulsion's consistency and temperature when applied, and on the size of nozzles used for spraying.

PERFECT SPRAYING EVEN AT SMALLEST RATES OF SPREAD

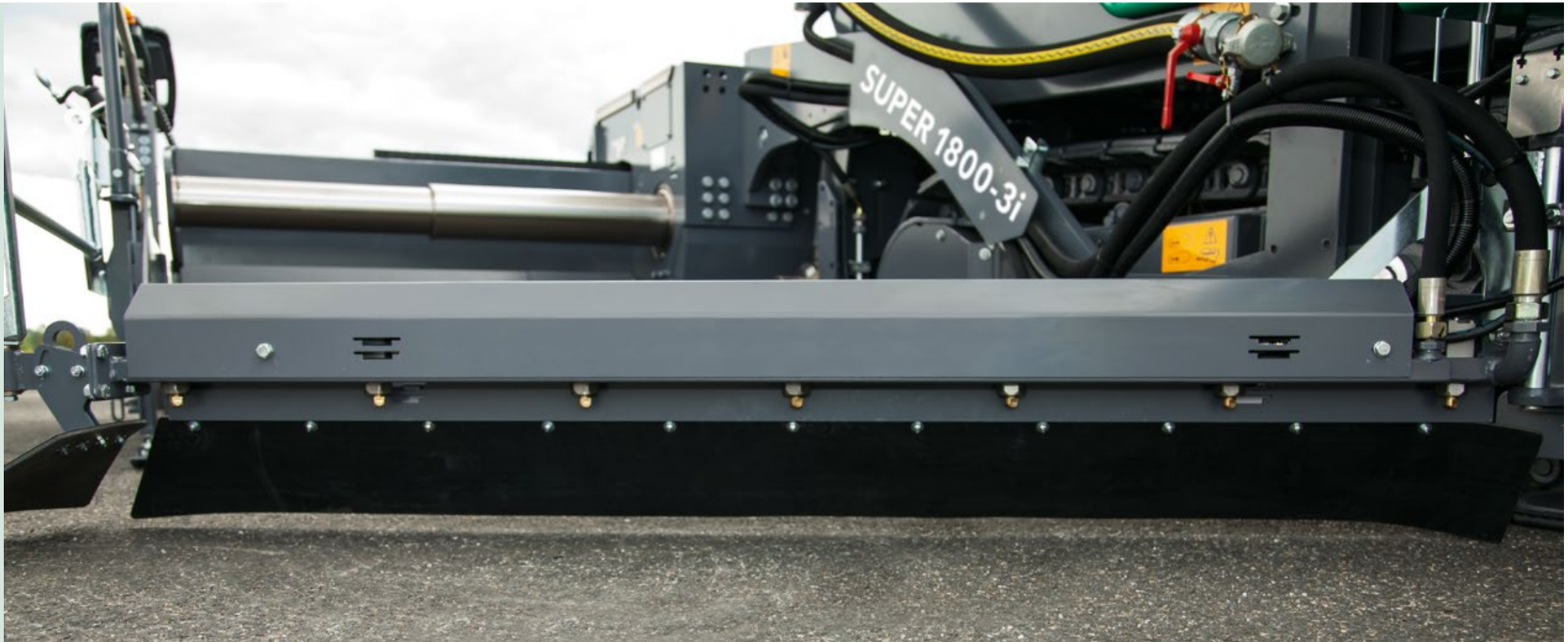
The VÖGELE SprayJet module allows to precisely select a rate of spread ranging from a very small quantity of emulsion through to a large quantity. The range is from 0.06 to 0.33 lbs./sq.ft.* (0.3 to 1.6 kg/m²). Rate of spread and paving width can be selected independently of the paving speed. The possibility of spreading emulsion accurately at a very small rate of just 0.06 lbs./sq.ft.* (0.3 kg/m²) makes VÖGELE SprayJet technology unique in the market.

Attention should be paid to the fact that the spread rates depend on the kind of emulsion used, the emulsion viscosity and the temperature when applied.

The SprayJet module's color touchscreen display provides the operator with all the important information and allows him to easily set the desired rate of spread.



The module's color touchscreen display provides the operator with all the key information and makes it very easy for him to set the desired rate of spread.



For the spray bars on the SprayJet module, three different types of spray nozzles are available: Size 7, 10 or 16. Size 10 nozzles are fitted as standard. The spray nozzles size 07 have a throughput of some 70 % compared to the nozzles of size 10 (100 %). The nozzles size 16 have a throughput of some 160 %.

AVAILABLE NOZZLE TYPES

Nozzle size	Spray pressure	Quantity	Length of sprayed patch
07	29 psi (2 bar)	0.06 – 0.1 lbs./sq.ft (0.3 – 0.5 kg/m²)	1.6 – 2.4 in. (40 – 60 mm)
10	36.3 – 43.6 psi (2.5 – 3 bar)	0.1 – 0.2 lbs./sq.ft (0.5 – 1 kg/m²)	1.6 – 2.4 in. (40 – 60 mm)
16	36.3 – 43.6 psi (2.5 – 3 bar)	0.2 – 0.33 lbs./sq.ft (1 – 1.6 kg/m²)	2 in. – 3.1 in. (50 – 80 mm)

* The rate of spread per square meter must be determined as a function of the emulsion to be used. The rate of spread depends on the emulsion's consistency and temperature when applied, and on the size of nozzles used for spraying.

STANDARD EMULSION TANK AND EXTRA EMULSION TANK

In addition to the standard emulsion tank, the SUPER 1800-3i SprayJet can be equipped with an extra tank.

The standard version of the SUPER 1800-3i SprayJet is equipped with a 555 gallons (US) (2,100 liters) emulsion tank. As a matter of principle, the tank should be filled with hot emulsion. In order to keep the bitumen emulsion at the desired temperature, a heating unit (2 x 9.5 hp (7 kW)) is installed. In addition, effective insulation of the tank avoids loss of heat.

Temperature sensors are fitted in order to prevent the emulsion from burning and to automatically turn off heating as soon as the emulsion level drops below a defined limit. The emulsion temperature can be set via controller to a value between 32 to 176 °F (0 to 80 °C). In case the emulsion supplied is too cold, an auxiliary gas heating system quickly heats it to the desired temperature.

Large emulsion tank
with a capacity of 555 gallons (US) (2,100 liters)

Optional extra tank
with an additional capacity of 1,321 gallons (US) (5,000 liters)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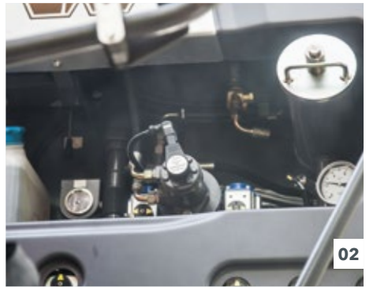
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01 A heating unit (diesel fuel) featuring a heating capacity of 40 hp (30 kW) maintains an ideal emulsion temperature.
02 The extra tank has its own pump.
03 When equipped with the extra emulsion tank, supply of the paver with mix is by a material feeder transferring the material, via a receiving bin in the extra tank, right onto the paver's conveyors.

For contracts requiring very large rates of spread, an extra emulsion tank is available as an option for the VÖGELE spray paver. The extra tank holds 1,321 gallons (US) (5,000 liters), so that a total of 1,876 gallons (US) (7,100 liters) of bitumen emulsion can be carried on board the paver.
The extra tank is accommodated in the paver's material hopper. A stand-alone heating unit operated with diesel fuel and featuring a heating capacity of 40 hp (30 kW) is installed in the extra tank, thus keeping the emulsion at the desired temperature. Furthermore, the extra tank comes with its own pump circulating the emulsion and maintaining it in a highly homogeneous state. If the emulsion level in the standard tank drops below 264 gallons (US) (1,000 liters), emulsion is automatically delivered from the extra tank into the standard tank.

VÖGELE > GOOD TO KNOW

Heated emulsion pump

The tank of the SUPER 1800-3i SprayJet comes with a powerful heated emulsion pump to keep the bitumen in a homogeneous state. Beyond that, if the tanker supplying the emulsion does not have its own on-board pump, this circulation pump can be used for filling the paver's emulsion tank. The pump delivers up to 71 gallons (US) (270 liters) per minute.

STATE-OF-THE-ART DRIVE TECHNOLOGY

High output with low consumption

Three main components define the power unit of a SUPER 1800-3i SprayJet: its modern, liquid-cooled diesel engine, a splitter gearbox flanged directly to the engine and a large cooler assembly.

The driving force in this VÖGELE power pack is its diesel engine. This six-cylinder engine delivers 173 hp (129 kW) at 2,000 rpm. Yet the fuel-saving ECO mode is sufficient for many applications. Moreover, the machine generates less noise when running at just 1,700 rpm.

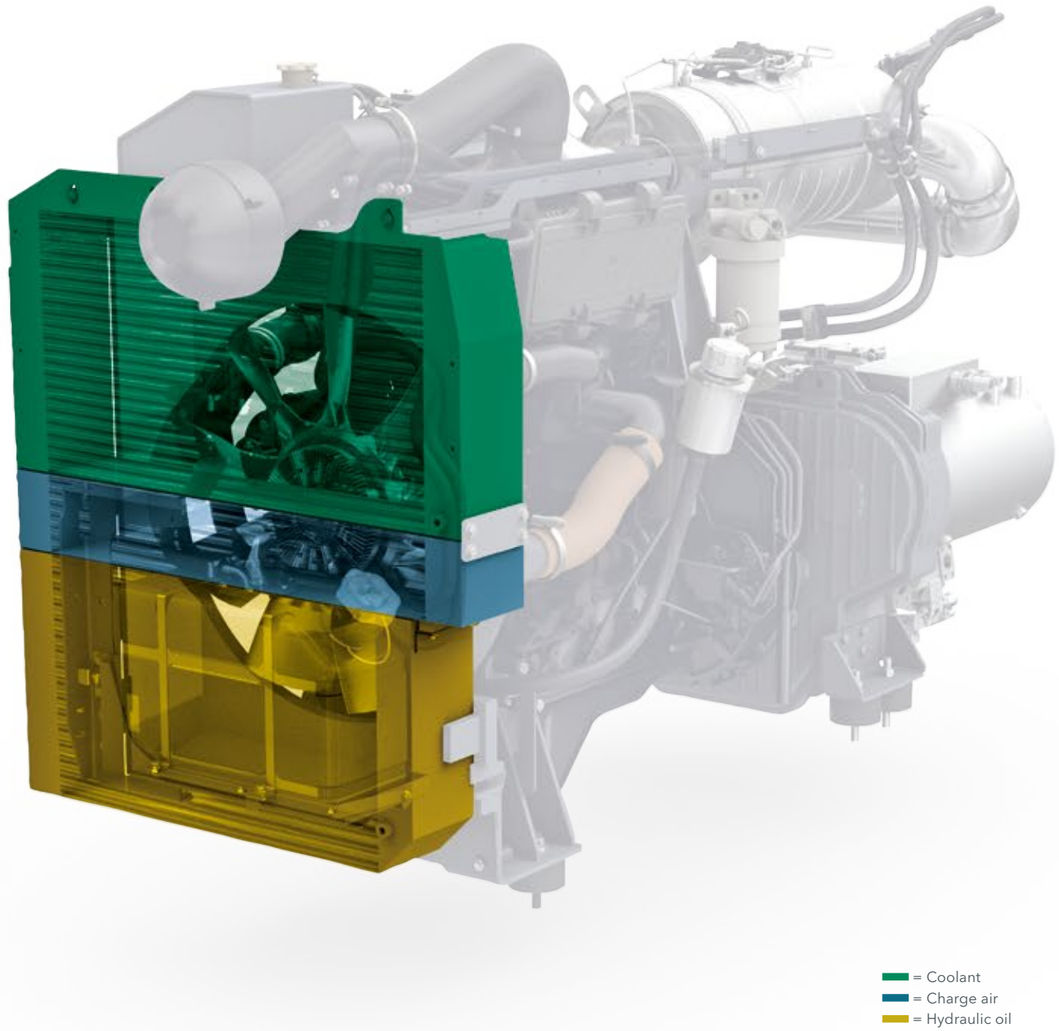
A large cooler assembly ensures that the power unit always delivers its full output. With innovative air routing and a variable-speed fan, temperatures are continually maintained within the optimum range, significantly extending the service life of both the diesel engine and the hydraulic oil. A further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

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

ECO mode at 1,700 rpm
reduces operating costs

79 gallons (US) (300 liters)
Capacity fuel tank

Generator
is oil-cooled and powerful



VÖGELE > GOOD TO KNOW

Exhaust emissions after-treatment and VÖGELE EcoPlus

On engines of exhaust emission Stage V, exhaust emissions after-treatment is provided by the diesel oxidation catalyst (DOC), a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) catalytic converter.

VÖGELE EcoPlus furthermore significantly reduces emissions. This package is capable of reducing consumption and CO_2 emissions by up to 25% and likewise reduces noise emissions.

EFFICIENT TRANSMISSION OF ENGINE POWER

High-quality separate hydraulic drives are essential components of the VÖGELE drive concept. They make VÖGELE pavers extremely cost-efficient, with a high performance level.

Since the traction drive units are directly integrated into the drive wheels of the crawler tracks, engine output is translated into paving speed without any loss of power.

> The hydraulic systems for the traction drive, conveyors and augers, as well as the compacting systems all operate in separate closed loops for maximum efficiency.

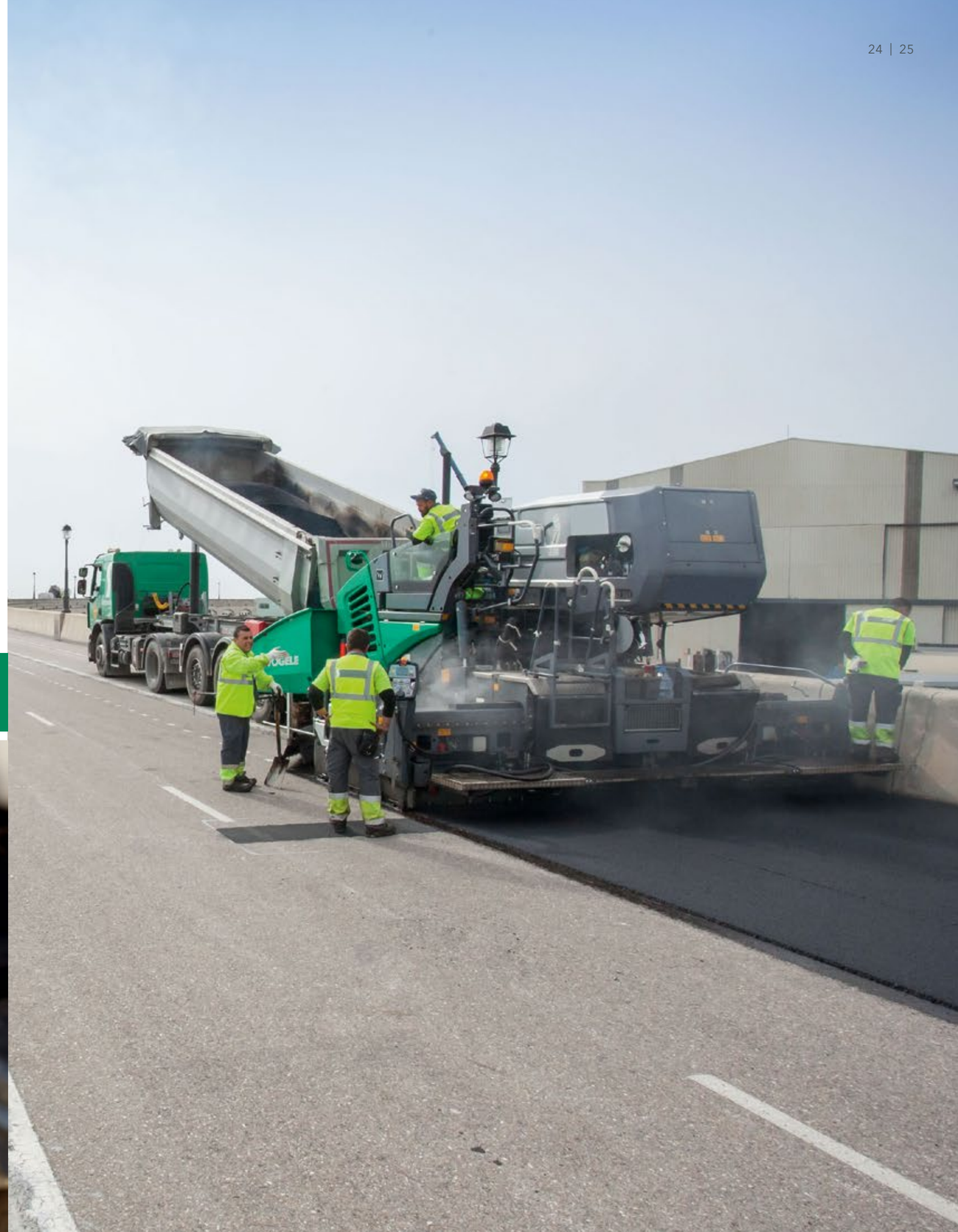
> Long crawler tracks with large footprints provide for maximum tractive effort, allowing the paver to get on well at a constant speed even when working on difficult terrain.

> Positive tracking when moving straight and accurate cornering due to separate drive and electronic control provided for each crawler track.

Hydraulic drives
directly in the sprockets

Consistent straight moving
thanks to separate electronically-controlled drives

Long crawler tracks
for maximum traction



ADVANTAGES OF THE “DASH 3” GENERATION

The SUPER 1800-3i SprayJet can be used both as a spray paver and as a conventional paver at any time. Regardless of the application, the machine always offers its operators all the various advantages resulting from the innovative edge of the “Dash 3” paver generation.

Despite all their differences, the “Dash 3” features have one thing in common: they are all consistently designed to improve the operator’s control of the machine and the paving process, as well as to make the paver more eco-friendly. As a result, the SUPER 1800-3i SprayJet is also ideal for use as a powerful and versatile conventional paver.

Despite all their differences, the “Dash 3” features have one thing in common: they are all consistently designed to improve the operator’s control of the machine and the paving process, as well as to make the paver more eco-friendly. As a result, the SUPER 1800-3i SprayJet is also ideal for use as a powerful and versatile standard paver.

Advantages of the “Dash 3” generation

VÖGELE EcoPlus
The innovative VÖGELE EcoPlus low-emissions package includes a number of features for reducing both noise levels and fuel consumption. Fuel costs are cut by around 25 % through the combination of an energy-optimized tamper drive, variable-speed fan, controlled hydraulic oil temperature circuit and splitter gearbox with ability to disengage hydraulic pumps.

PaveDock Assistant
PaveDock Assistant is the communication system between the paver operator and the feed vehicle driver. It allows particularly fast and reliable transfer of mix to the paver. The PaveDock Assistant communication system contributes greatly to process safety during transfer of the material.

ErgoPlus 3 operating concept
The paver operator’s ErgoPlus 3 console comes with a large colour display which provides brilliant readability even in poor lighting conditions. The extremely robust screed operator’s console also has a large high-contrast colour display with push-buttons that are backlit in the hours of twilight and darkness to prevent operating errors.

THE ERGOPLUS 3 OPERATING CONCEPT

Improved efficiency, reliability and convenience

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 user consequently retains full control over the machine and construction project.

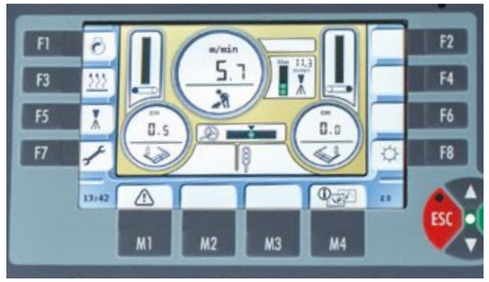
On the following pages, example illustrations will provide you with more detailed information on the extensive functions of the ErgoPlus 3 operating system. For the SUPER 1800-3i SprayJet, ErgoPlus 3 encompasses the paver operator's console, the screed consoles and the control panel for the SprayJet module.

THE PAVER OPERATOR'S ERGOPLUS 3 CONSOLE

Clearly arranged in line with experience from the field

Like all "Dash 3" generation pavers, the SUPER 1800-3i SprayJet comes with the VÖGELE ErgoPlus 3 operating system which substantially facilitates the paver's handling. In this way, VÖGELE offers the operators every conceivable convenience expected of a modern operating system. All the important, commonly used functions are clustered in logical groups. This makes their operation easy to learn.

Important spraying functions have been integrated into the large color display on the paver operator's console which offers outstanding legibility even in poor lighting conditions. The maximum possible paving speed is displayed here for the paver operator as a function of the set rate of spread. In addition, the handy automatic functions "Start of Job" and "End of Job" can be activated at the push of a button.



Indication of maximum pave speed
The display shows the maximum possible pave speed which still ensures full coverage of the road surface.

"Start of Job" and "End of Job"
The convenience functions "Start of Job" (F6) and "End of Job" (F8) are provided so that spraying always starts and ends at exactly the required point and continues over full pave width.

01 Conveyors and augers, traction
All controls for the conveyor and auger are located here. The traction main switch, the operating mode selector and the setpoint adjuster for the pave speed are also included in this function group.

02 Screed functions
All controls for the screed are grouped at the centre of the paver operator's console.

03 Material hopper and steering
This function group includes the controls for the material hopper, the steering and the diesel engine. Various options are also operated from here.

04 Display of the paver operator's console
The high-contrast color display has a high-contrast user interface ensuring brilliant readability even in poor lighting conditions. Vital information is shown on menu level 1. Further paver settings as well as information about the machine can be found at the secondary levels.

ERGOPLUS 3 SCREED CONSOLE

Safe and easy handling of all screed functions is a factor of utmost importance for high-quality road construction. All the essential data are displayed on the two ErgoPlus 3 screed consoles. Universal symbols make it easy to set or adjust parameters for the screed, conveyors and augers or grade and slope control.

The VÖGELE SmartWheel is an exceedingly practical innovation. With it, the pave and spray width can be conveniently adjusted in two speeds: slow, for precise screed width control along an edge, or fast for swift extension and retraction of the screed. The two outermost nozzles on the lateral spray bars can be switched on and off via the screed console to produce an accurate, clean spray line.

01 The screed console display

02 Ergonomic screed width control in two speeds

01 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 is more, the downward-angled high-power LED lighting gives the operator a perfect view of all processes associated with the end gate.
02 The screed width can be effortlessly adjusted by means of the "SmartWheel".

01 The screed console display

The two active outer spray nozzles can be switched on and off via the screed console. In this way, even more challenging job sites can be mastered by the screed operator and a perfect result produced.

02 SmartWheel

Both the paving width and the spray width are conveniently adjusted in two speeds by means of the SmartWheel.

THE ERGOPLUS 3 CONTROL PANEL FOR THE SPRAYJET MODULE

Operation of the SprayJet module has been consistently integrated into the ErgoPlus 3 operating system. This applies not only for the symbols used on the operator interface, but also for the "Touch and Work" principle. All functions for preparation, spraying and cleaning are conveniently selected and started via the touchscreen mounted directly on the module. Work sequences pass off automatically in accordance with the function which has been selected.
All this makes operation of the SUPER 1800-3i SprayJet module extremely safe and simple.

01 Preparation
All the functions needed to prepare for spraying can be set via the menus 5.1 to 5.3. Menu **5.1** controls the process of filling the emulsion tank, menu **5.2** is used to set-up the nozzles, while the parameters for heating and circulating the emulsion are set in menu **5.3**.

02 Cleaning
The ErgoPlus 3 SprayJet module includes an all-automatic cleaning program ensuring that the lines and valves are thoroughly cleaned.

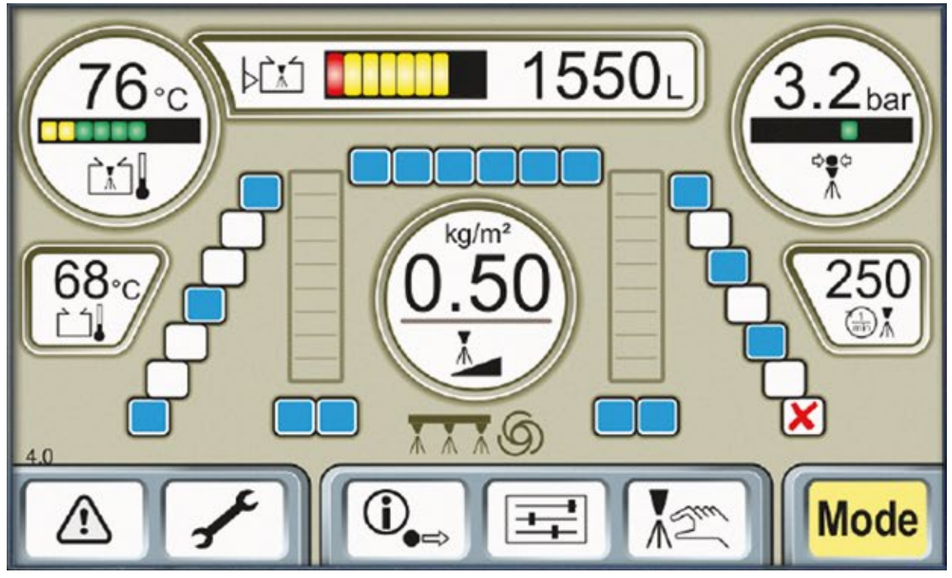
03 Spraying
The paver operator can set up and monitor all relevant spraying parameters, such as the filling level of the emulsion tank, temperature, spray pressure and rate of spread, as well as nozzle activity.

THE ERGOPLUS 3 CONTROL PANEL FOR THE SPRAYJET MODULE

Operation of the SprayJet module is effected entirely via the ErgoPlus 3 control panel on the module. Clearly legible in all weather conditions, the touchscreen assures the operator of full control over the spraying process at all times.
The “Dash 3” generation VÖGELE spray paver offers a large number of convenient automatic functions meeting practical needs. For the operator, they fundamentally simplify preparation of the spray module, the spraying process itself and cleaning of the spray module:
All the settings required for replenishing, circulating and heating the emulsion can be entered and monitored directly via the touchscreen.

Depending on the installed nozzle size and the selected rate of spread, the maximum paving speed is calculated by the SprayJet module’s control unit and displayed on the paver operator’s ErgoPlus 3 console. This ensures uniform application of the emulsion.

The rate of spread can be set here just as easily and the nozzles calibrated or switched on and off individually. Correct operation of the front spray bar is monitored electronically, as it is out of sight of the screed operator. Lines and valves are cleaned in a fully automated process controlled by a separate program.



Operating the SprayJet module
via the ErgoPlus 3 display of the spray module

Menu for “Spraying”
The entire spraying process is monitored here. The operator can monitor all settings and values at a glance, such as spray nozzle activity (active / inactive / switched off) and spray pressure.

Menu for “Nozzle set-up”
The installed nozzle size can be entered via this menu, and nozzles can be tested and the rate of spread checked here.

Menu for “Cleaning”
The number of cleaning cycles is shown here as a function of the degree of fouling. The circuits to be cleaned are actuated individually. A preservative can be added to the final cleaning cycle. Once started, the cleaning process is executed entirely automatically.

VÖGELE EXTENDING SCREEDS FOR PERFECT PAVING QUALITY

For the SUPER 1800-3i SprayJet, two state-of-the-art screeds are available: the AB 500 and AB 600. Either of these extending screeds can handle spraying widths up to 19 ft. 8 in. (6 m). The AB 600 comes with a basic width of 9 ft. 10 in. (3 m) and extends hydraulically up to 19 ft. 8 in. (6 m).

The AB 500 can be built up to its maximum width of 19 ft. 8 in. (6 m) with additional bolt-on extensions 2 ft. 6 in. (75 cm).The widths of the screeds are limited electronically to a maximum of 19 ft. 8 in. (6 m). Either screed is available in the TV version (with tamper and vibration) or the TP1 version (with tamper and 1 pressure bar) for high compaction.

POSSIBLE CONFIGURATIONS

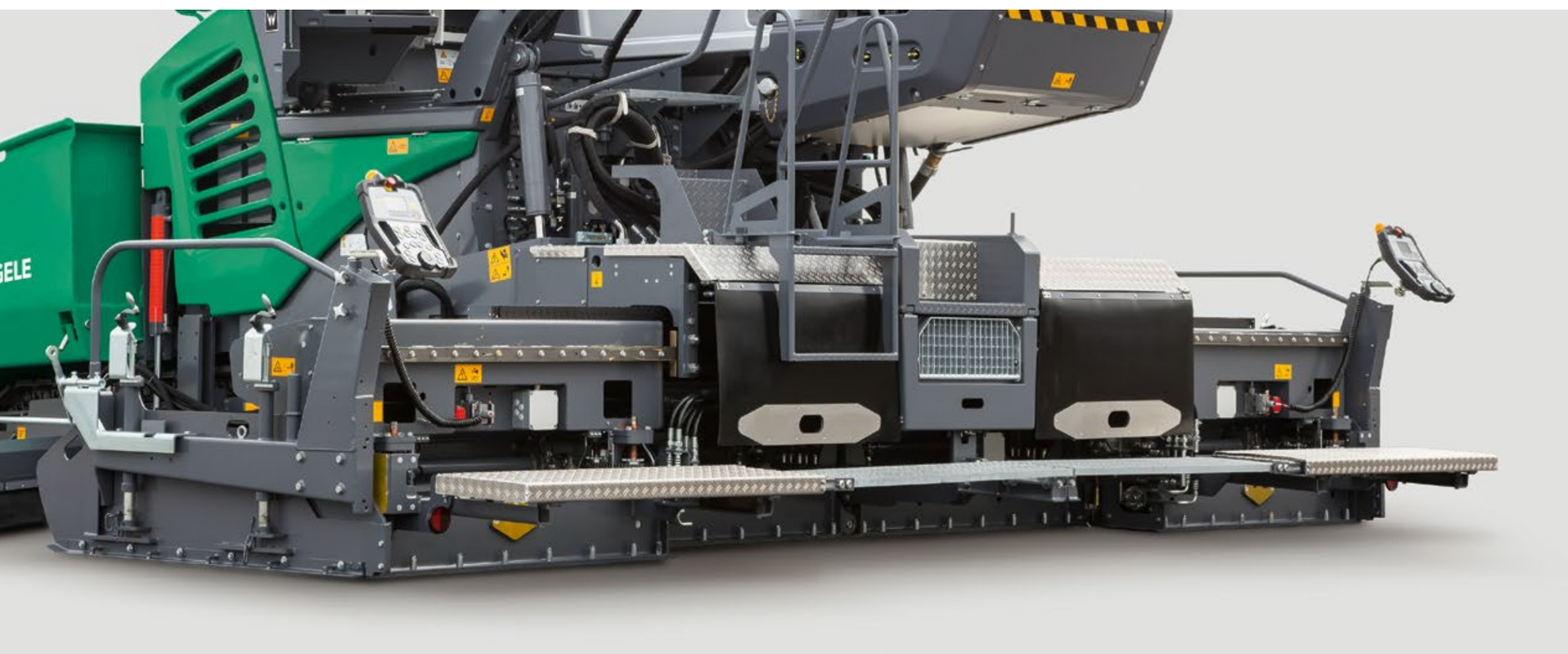
SUPER 1800-3i SprayJet	Maximum spray width 19 ft. 8 in. (6 m)	Extra emulsion tank
AB 500 TV Extending Screed	■	■
AB 500 TP1 Extending Screed	■	■
AB 600 TV Extending Screed	■	■
AB 600 TP1 Extending Screed	■	■

Uniform heating
of screed plates, tamper bar and pressure bars for uniform surface courses

Much shorter preheating time
as a result of the electric heating system's intelligent generator management system - even when the engine is idling

Alternating mode for screed heating
powers each half of the screed heating system alternately

Hydraulic crown adjustment
Crown can be conveniently adjusted at the touch of a button on the screed operator's console.



Like all VÖGELE screeds, the AB 500 and AB 600 Extending Screeds feature a very efficient electric heating system. The screed and emulsion tank are heated independently, so that heating of the emulsion can take place without having to heat the screed.

The two ErgoPlus 3 screed consoles display all the critical information for the screed operators. Thanks to universal symbols, set-up and adjustments can be made easily.

AB 500

Paving Widths

> Infinitely variable range from 8 ft. 4 in. to 16 ft. 5 in. (2.55 m to 5 m).

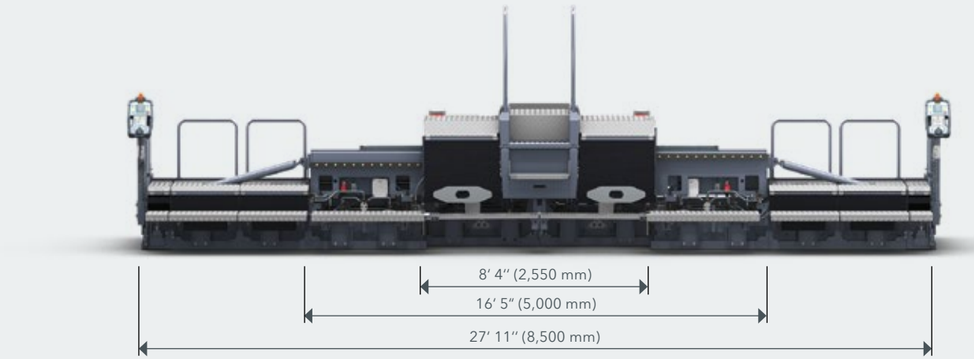
> Maximum paving width with bolt-on extensions 27 ft. 11 in. (8.5 m).

Compacting System

> AB 500 TV with tamper and vibration

> AB 500 TP1 with tamper and 1 pressure bar

Built up to maximum paving width



AB 600

Paving Widths

> Infinitely variable range from 9 ft. 10 in. to 19 ft. 8 in. (3 m to 6 m).

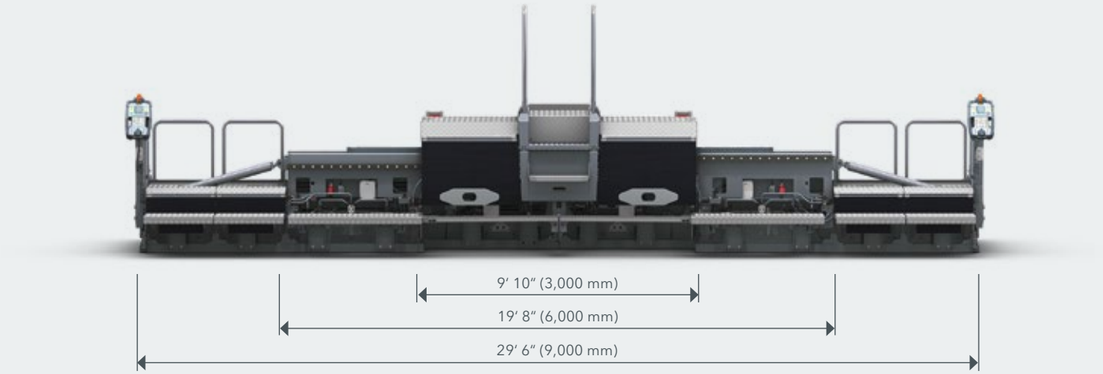
> Maximum paving width with bolt-on extensions 29 ft. 6 in. (9 m).

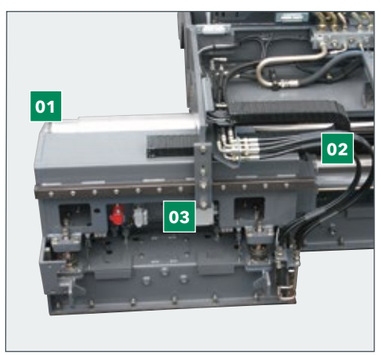
Compacting System

> AB 600 TV with tamper and vibration

> AB 600 TP1 with tamper and 1 pressure bar

Built up to maximum paving width

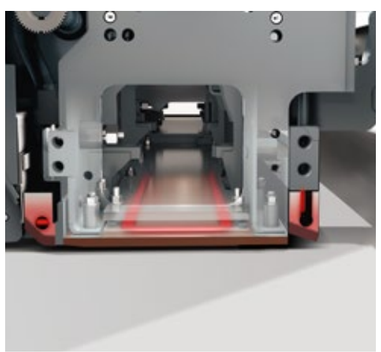




VÖGELE single-tube telescoping system

The hydraulic extensions of all VÖGELE extending screeds slide in and out smoothly on a single-tube telescoping system. The three-section telescoping tube is amply dimensioned (diameter 6 /6.7/7.5 in. (150/170/190 mm)) and perfectly stabilised. Even with the screed set to its maximum width, each tube section is extended by no more than half.

The 3-point suspension of the screed's hydraulic extensions prevents the screed's telescoping system being affected by the torsional forces exerted on these units by the pressure of the mix. Forces are absorbed at the telescoping tube's point of attachment (01), the bearing of the fixed guide tube (02) and a torque restraint system (03), ensuring that the screed's hydraulic extensions extend and retract smoothly, with no jamming or catching.



Innovative screed heating

In order to optimise compaction performance and to produce a smooth surface structure, all compacting elements are heated across full screed width. Screed plates are fitted as standard with heating elements which distribute heat throughout the plates. The plates are thoroughly insulated on top so that 100 % of the heat is directed to where it is needed: the area of contact with the mix. Tamper bar and pressure bars are fitted with heating rods for quick and uniform heating from the inside. Sophisticated control technology is installed to allow automated management of screed heating.

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The WIRTGEN GROUP brands are specialists in their field with decades of experience in applications; our customers benefit from this expertise. In our WIRTGEN GROUP training courses, we are delighted to to pass our knowledge on to you, customised to suit both operators and servicing staff.
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Telematics solutions

At the WIRTGEN GROUP, construction machinery involving leading-edge technology goes hand in hand with sophisticated telematics solutions. Intelligent monitoring systems such as WITOS or JD Link* not only make it easier for you to plan the maintenance of your machines, they also increase productivity and efficiency.
> www.wirtgen-group.com/telematics

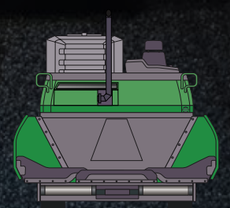
* Neither WITOS nor JD Link are currently available in all countries.
Please contact the subsidiary or dealer responsible for you for more information about this.

ALL THE FACTS AT A GLANCE

SUPER 1800-3i SprayJet Tracked Paver

TECHNICAL DATA

SUPER 1800-3i SprayJet



> Maximum spray width: 19 ft. 8 in. (6 m)

> Maximum pave width: 29 ft. 6 in. (9 m)

> Maximum laydown rate: 770 tons/h (700 tonnes/h)

> Transport width: 8 ft. 4 in. (2.55 m)

VÖGELE

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