



PowerFeeder

MT 3000-3(i) STANDARD & OFFSET



INNOVATIVE TECHNOLOGIES MADE BY VÖGELE

A full product range is the basis of our ability to cover our customers' every requirement anywhere in the world.

We secure our customers' success with innovative machinery and solutions. Being the Number 1 in innovative technologies is consequently one of the guiding principles of our business activities. We are not interested in engineering achievements purely for their own sake - our objective is to convert these achievements into solutions for our customers.



VÖGELE PRODUCT RANGE

MINI CLASS

- > Maximum pave width 3.5 m
- > Maximum laydown rate 300 t/h

COMPACT CLASS

- > Maximum pave width 5 m
- > Maximum laydown rate 350 t/h

UNIVERSAL CLASS

- > Maximum pave width 10 m
- > Maximum laydown rate 700 t/h

HIGHWAY CLASS

- > Maximum pave width 18 m
- > Maximum laydown rate 1800 t/h

SPECIAL CLASS

- > SprayJet
- > InLine Pave

POWERFEEDER

- > MT 3000-3(i) Standard
- > MT 3000-3(i) Offset

HIGHLIGHT OVERVIEW

Perfectly equipped

OPERATION

- 01 ErgoPlus 3**
> Convenient, ergonomic, safe and simple to operate.
- 02 AutoSet Plus**
> Reliable repositioning, rapid readiness for use and reproducible material handling quality.

DRIVE CONCEPT

- 03 Modern drive concept**
> High conveying capacity with quiet, economical operation.
- 04 Environmentally-friendly machine technology**
> Maximum exhaust gas cleaning for low exhaust gas emissions.

MATERIAL MANAGEMENT

- 05 Redesigned material hopper**
> Rapid, simple docking and emptying of mix trucks.
- 06 Powerful transporting of mix**
> Rapid transporting of mix without loss, even under difficult conditions of use.
- 07 Belt heating**
> The diesel heating reliably prevents mix cooling and adhering.
- 08 Innovative material handling concept**
> The innovative new material handling concept actively counteracts thermal segregation.
- 09 PaveDock Assistant**
> Straightforward communication between material feeder operator and truck driver.
- 10 Pivoting conveyor**
> The pivoting conveyor of the MT 3000-3(i) Offset opens up a huge range of applications.



VÖGELE SUSTAINABILITY is our name for innovative technologies and solutions which contribute to the sustainability objectives of the WIRTGEN GROUP.



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MT 3000-3(i) STANDARD & OFFSET

Improved efficiency, reliability and convenience

VÖGELE's new PowerFeeders, the MT 3000-3(i) Standard and the MT 3000-3(i) Offset, combine reliable technology with a high level of operating convenience to make uninterrupted, smooth transfer of mix to the paver even simpler and to ensure top paving quality at maximum efficiency.

In the process of transferring mix from trucks to pavers, material feeders form a hub to guarantee a constant and efficient paving process and high paving quality on large job sites.

To increase user-friendliness and machine efficiency still further, PowerFeeders are equipped with the "Dash 3" machine concept. This includes, among other things, the intuitive ErgoPlus 3 operating concept, AutoSet Plus automatic functions and the PaveDock Assistant truck communication system.

The biggest contribution to greater efficiency is made by the optimised material handling concept with the new design of material hopper, improved conveyor control and effective conveyor belt heating. These measures allow mix to be received extremely quickly and transported without loss.

Both versions of the material feeder achieve a conveying capacity of up to 1,200 t/h and can take the entire mix load from a truck within 60 seconds. The MT 3000-3(i) Offset is furthermore fitted with a conveyor which can be pivoted through 55°. This offers a great many additional potential applications.

The new service and maintenance concept makes the "Dash 3" feeders quick and easy to service or clean after use. All the relevant areas are very easily accessible and can be identified at a glance.



01 Classic material feeding with the MT 3000-3(i) Standard
 02 Non-contact transfer of mix
 03 PaveDock Assistant truck communication system

04 Operator's ErgoPlus 3 console
 05 Redesigned material hopper
 06 New service and maintenance concept

VÖGELE MATERIAL FEEDERS ENSURE TOP QUALITY

Strong performance and top consumption values

Extremely even and durable road surfaces are no coincidence, but rather the product of clearly definable quality factors.

Every interruption to paving, for instance when asphalt runs out, every jolt of a feed lorry docking onto the paver and every instance of material segregation is immediately evident in the quality of the paved road. The use of a material feeder prevents this. It is a crucial link between the feed lorry and paver, continuously supplying the latter with mix without any physical contact whatsoever.

With the "Dash 3" generation of material feeders, VÖGELE offers a complete package for machine and paving technology, the components of which build logically on one another and interact effectively. This perfectly satisfies every requirement for quality and cost efficiency.

Powerful material handling concept

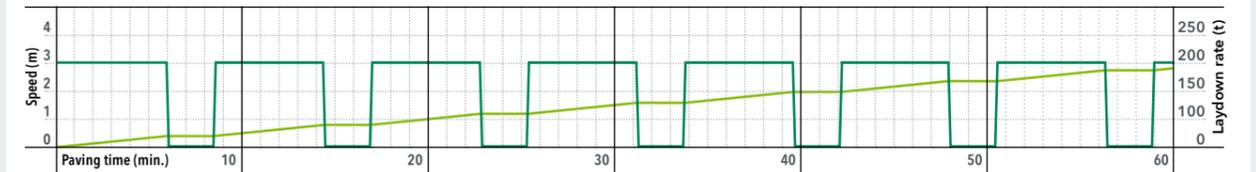
The powerful material handling concept of VÖGELE MT 3000-3(i) Standard and MT 3000-3(i) Offset PowerFeeders enables them to transport up to 1,200 t mix an hour.



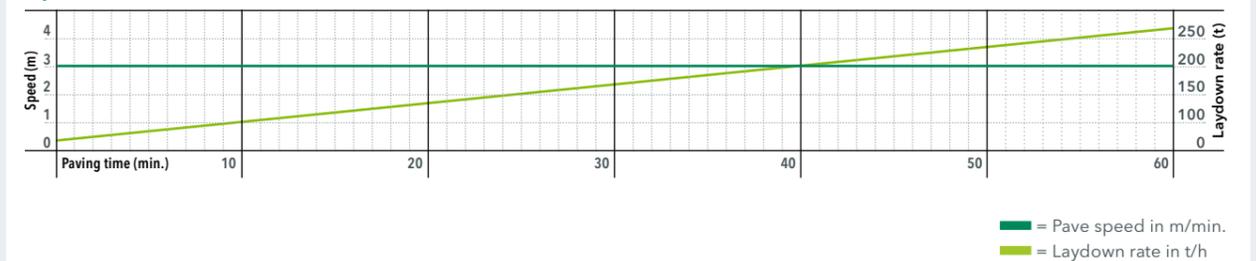
VÖGELE > GOOD TO KNOW

In addition to improving quality, paving with a material feeder also significantly increases laydown rate without increasing pave speed. The following comparison makes this very clear.

Operation without a material feeder (in m/min.)



Operation with a VÖGELE PowerFeeder (in m/min.)



Use without a material feeder

Without a material feeder, it is often impossible to avoid regular interruptions when switching mix trucks - in the graph, this can be seen in the form of repeated breaks in the dark green line. In the example calculated, laydown rate is estimated at 190 t/h.

Use with the VÖGELE PowerFeeder

With a VÖGELE PowerFeeder, the paver can pave continuously: the dark green line shows a constant pave speed without interruption. The result is a 30% higher laydown rate for the same pave speed.

STATE-OF-THE-ART DRIVE TECHNOLOGY

Strong performance and top consumption values

Three main components define the power unit of a MT 3000-3(i): its state-of-the-art, liquid-cooled diesel engine, a splitter gearbox flanged directly onto the engine, and a large cooler assembly.

The driving force in this power pack from VÖGELE is its diesel engine. The liquid-cooled 6-cylinder in-line engine is tuned to a perfect degree of efficiency for the overall system and thus ensures minimum expenditure on fuel and overall operation. Its exhaust gas after-treatment means that the engine meets the requirements of EU Stage V and US EPA Tier 4f. A version without exhaust emissions after-treatment is available for less regulated markets.

Perfect cooling

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.

Powerful three-phase AC generator

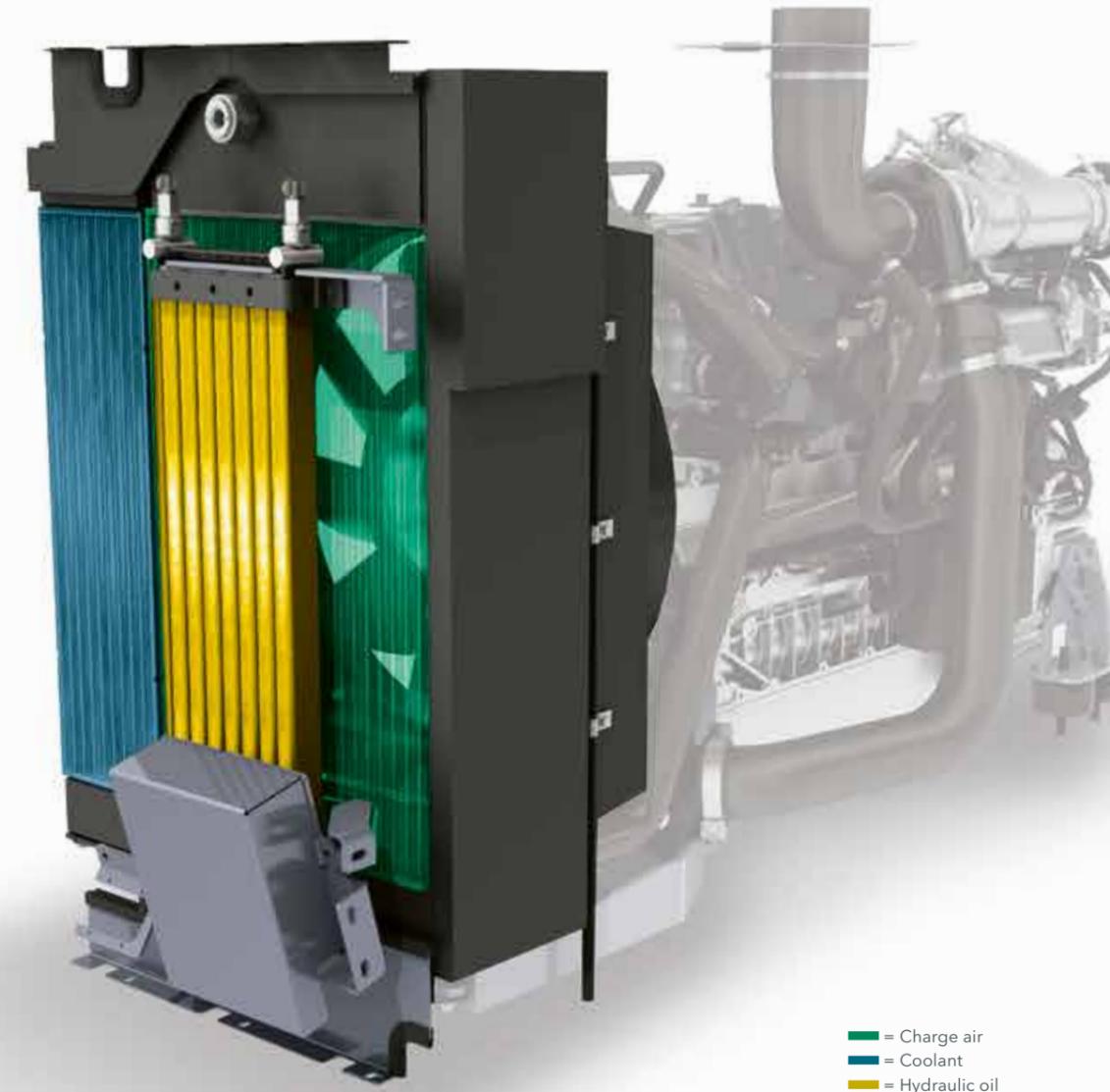
The machine is equipped with an electrical package for the supply of power. This contains a 230 V socket, heating rods for the belt scraper and two connections for light balloons. A powerful three-phase AC generator supplies the electrical energy required.

160 kW output
(MT 3000-3i)

142 kW output
(MT 3000-3)

450-litre
capacity fuel tank

Generator -
powerful, yet low-maintenance



Powerful diesel engine with efficient exhaust emissions after-treatment and regulated cooler assembly

Machines with the suffix "i" in the product name are not only economical, but also extremely clean. The "i" stands for "intelligent emission control" and is found in the type names of all WIRTGEN GROUP machines equipped with the latest engine technology. Depending on the design of their exhaust gas after-treatment, these engines comply with the strict standards of European exhaust emissions Stage V as well as Tier 4f of the US EPA standard. A version without exhaust emissions after-treatment is available for less regulated markets.

The MT 3000-3(i) also has a media-managed cooler assembly. This adapts its output to suit the temperature of charge air, fuel and coolant, thus reducing noise emissions by up to 5 dB.

EFFICIENT TRANSMISSION OF TRACTIVE POWER

High-quality separate hydraulic drives are essential components of the VÖGELE drive concept. Since the traction drive units are directly integrated in the sprockets of the crawler tracks, engine output is translated into pave 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 circuits for maximum efficiency.

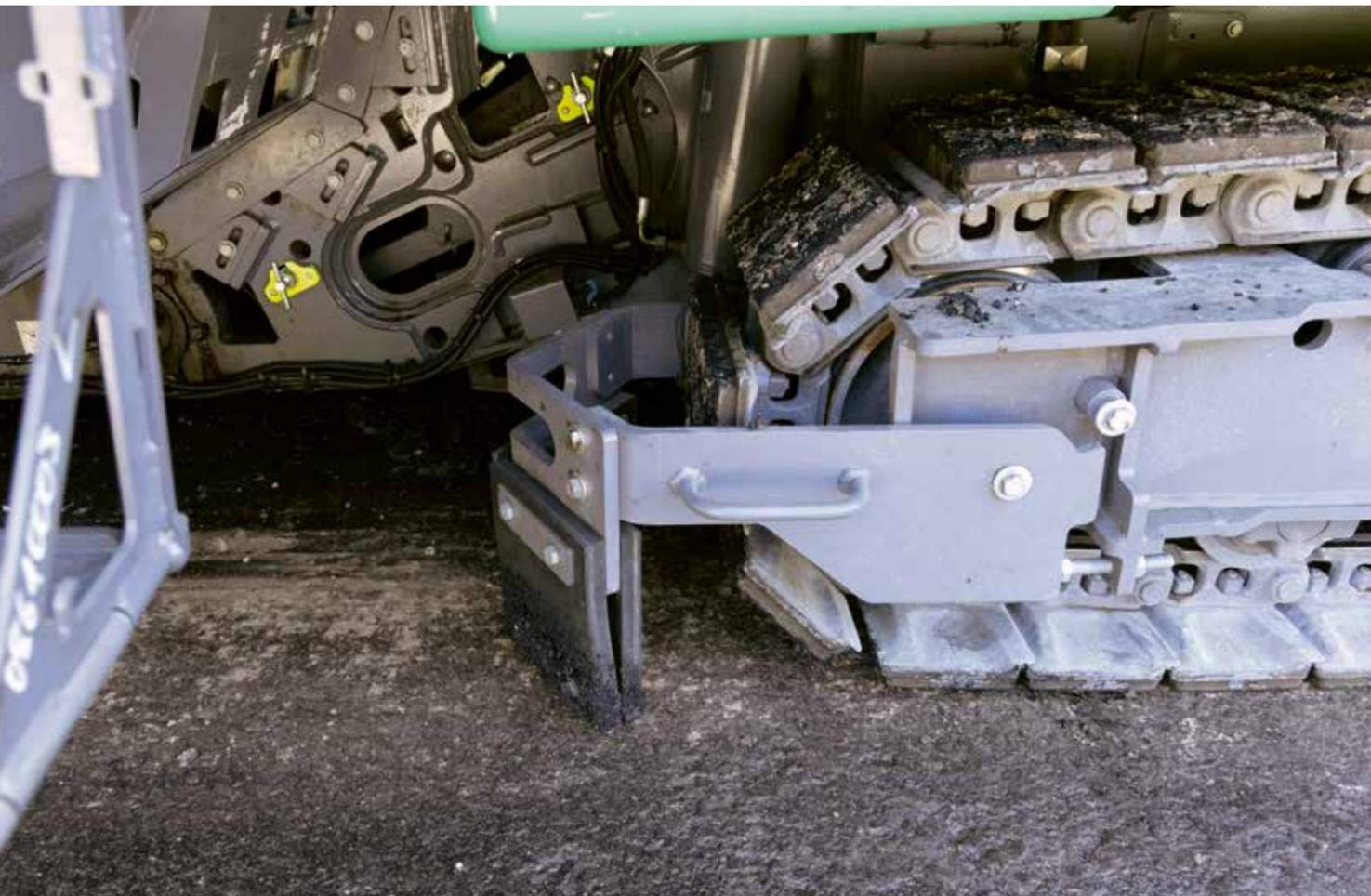
Long crawler tracks with large footprints ensure maximum tractive effort, allowing the paver to progress well at a constant speed, even when operating on difficult terrain.

Consistent straight moving

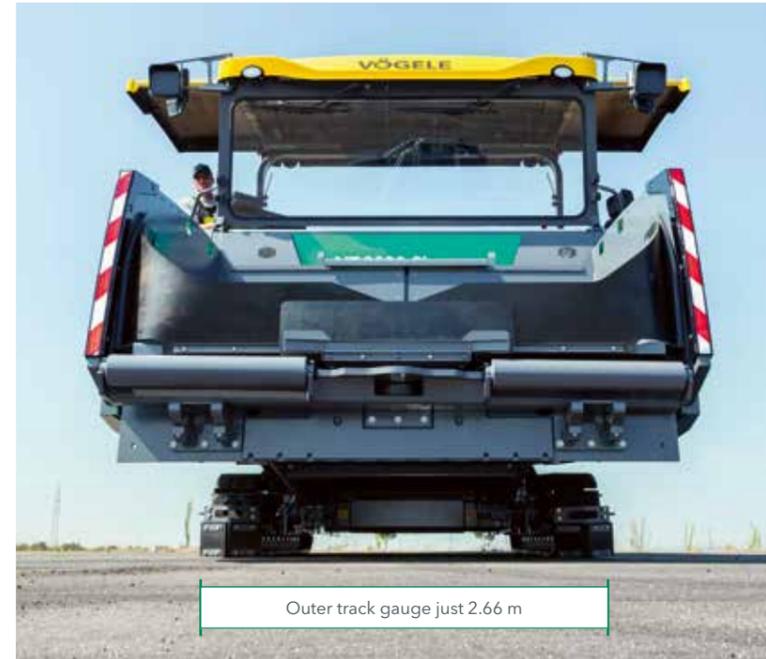
as a result of separate electronically-controlled drives

Rugged deflectors in front of the crawler tracks

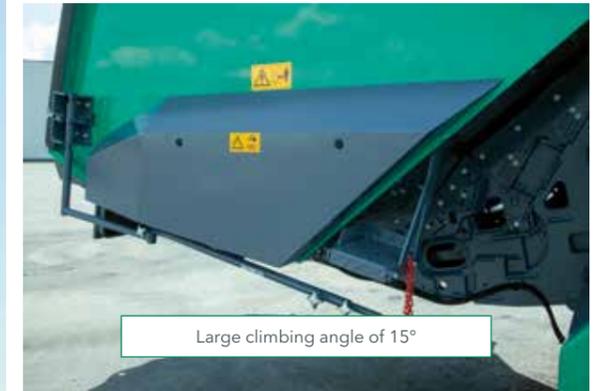
reliably clear any obstacles out of the way



EASY TRANSPORT



Outer track gauge just 2.66 m



Large climbing angle of 15°

Transporting a material feeder is a cost factor that should not be underestimated. From the outset, VÖGELE PowerFeeders of the "Dash 3" generation were designed for optimum transport, something with a positive impact on costs. As a result, the small outer track gauge of just 2.66 m and the

large climbing angle of 15° make it much easier to load the feeder onto standard low-loaders. The material hopper can be put down right at the front on the so-called goose neck of the low-loader, with the result that even the MT 3000-3(i) Offset complies with maximum transport length.



THE VÖGELE MATERIAL HANDLING CONCEPT



01 Wide material hopper

The wide material hopper with the transverse augers allows a complete truckload to be received and then transported on quickly without loss. Conical augers can be fitted as an option for active thermal homogenisation of the mix.



02 Innovative diesel heating

The optimised diesel heating system reliably keeps the mix at temperature from the first truck-load onwards, prevents mix adhering to the conveyor belt and facilitates the handling of critical mixes like low-temperature asphalt. Heating control has also been improved, with a sensor now measuring belt temperature.



03 Trough-shaped conveyor belt

The trough-shaped conveyor belt provides for stable material transfer and thus counteracts mechanical segregation. The conveyor always remains centred, even under difficult conditions such as crossfalls, for example. This prevents material loss and reduces wear.



04 Extra material hopper for the paver

The extra material hopper for the paver has no corners or edges: smooth transitions and steep sides prevent material from accumulating and blocking the flow of mix. As a result, all the mix is continuously fed to the paving process.

VÖGELE > GOOD TO KNOW

Automatic cleaning system for the material handling system

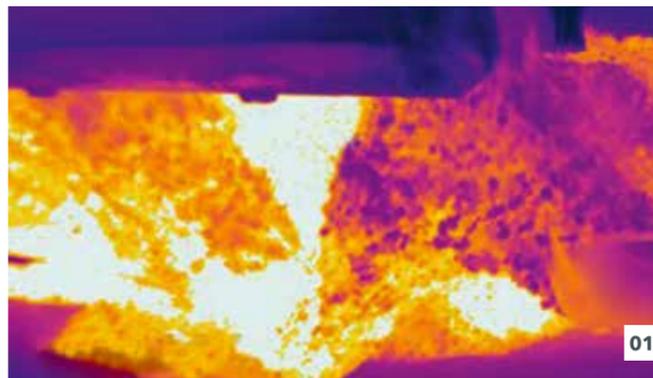
The MT 3000-3(i) has an automatic cleaning system to prevent material sticking. With the machine running, spray nozzles can be used to clean the following items: the sidess and back of the material hopper, the bottom of the material hopper, the hopper front and the augers. The transfer and discharge hoppers are also sprayed with cleaning emulsion.



THERMAL HOMOGENISATION

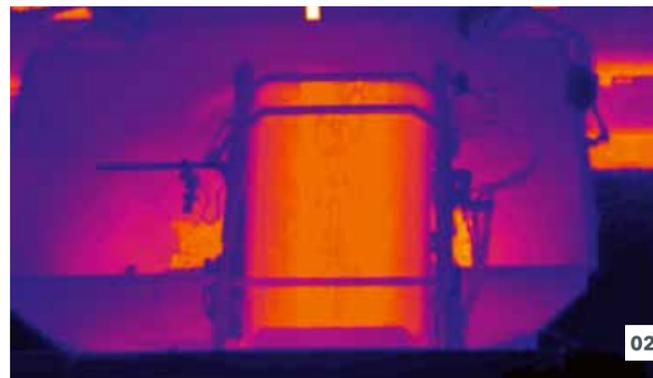
Effective homogenisation means high-quality mix

Modern VÖGELE technology promotes premium mix quality. The concept is geared entirely to ensuring gentle handling of the material and avoiding superfluous transfer points. An extremely practical and effective material handling concept is accordingly used in VÖGELE material feeders to counteract thermal segregation.



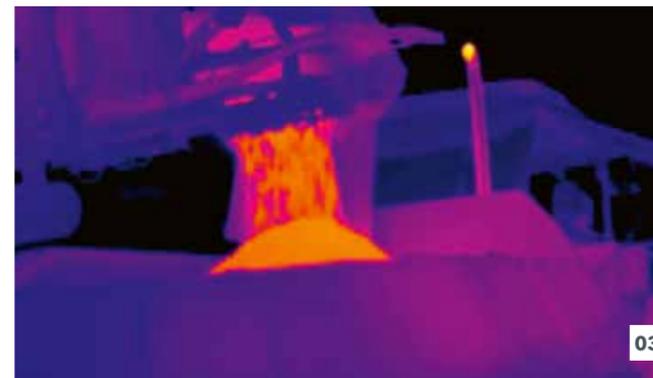
01 Material hopper

The infrared image shows how the transverse conical augers homogenise all the material in the feeder's material hopper by mixing the potentially cooler asphalt from the sides with the warmer material from the middle of the hopper.



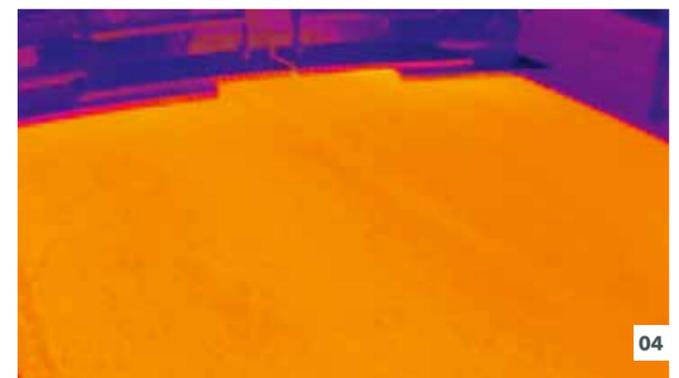
02 Conveyor belt

The trough-shaped conveyor belt gently transports homogenised material to the extra material hopper in the road paver.



03 Extra material hopper

The specially designed extra material hopper in the paver effectively prevents any material from sticking.



04 The result

The technical measures complement one another perfectly, ensuring that the paving material is in ideal condition when laid. VÖGELE technology counteracts both mechanical and thermal segregation.

OPTIMISED MATERIAL HOPPER

Feed with mix safely and quickly

Modified geometry allows material feeders of the "Dash 3" generation to be fed even more cleanly, safely and quickly. The hydraulically-operated hopper front ensures that the whole of the mix is incorporated in the material handling process. The raised hopper doors and the ends of the push-rollers are marked with fluorescent paint.



Improved hopper geometry
ensures rapid docking

Reflectors
for safe docking in the dark

Fluorescent paint
on the hopper doors



01 Hopper doors marked with fluorescent paint

Reflectors and fluorescent markings on the hopper sides, the raised hopper doors and the ends of the push-rollers ensure safe, quick docking, even on night shifts.

02 Inlet area has an extra seal

The offset and the additional seal in the inlet area prevent loss of mix and soiling of the conveyor belt.

NON-CONTACTING MATERIAL FEED PROCESS

Non-contacting transfer of mix is one of the key criteria for high paving quality. Making the feeder a hub in the paving process stops jolts from the mix truck being transmitted to the paver.

A non-contacting distance control system ensures the correct distance between paver and material feeder. Three laser sensors continuously measure the distance between the two machines so that the control system can automatically adjust the speed of the material feeder to that of the paver.

The system also automatically stops the paver colliding with the feeder. If the material feeder has to stop unexpectedly, the paver is also stopped automatically as soon as the distance between the two machines falls below the set minimum.



- 01** Mechanical distance control is also available for the MT 3000-3(i) Standard as an alternative to laser-controlled distance control.
- 02** Laser-controlled distance control for VÖGELE PowerFeeders consists of three individual laser sensors.



Redundant system comprising three individual laser sensors

The distance control system of VÖGELE PowerFeeders is a redundant system comprising three individual laser sensors. This means that the distance between paver and material feeder remains constant, even if one or more of the sensors is obscured, e.g. by workers moving past.



THE PAVEDOCK ASSISTANT COMMUNICATION SYSTEM

Perfect communication during transfer of the mix

PaveDock Assistant enables material feeder operators and truck drivers to communicate unambiguously without hooting or hand signals. This makes it particularly quick and safe to dock, dump the mix and drive trucks away.

Signal lights on the hardtop of the material feeder and the associated controls on the operator's ErgoPlus 3 console are key components of the system.



Dock		Stop	
Raise dump box		Lower dump box	
Drive off		Material feeder moving	



VÖGELE > GOOD TO KNOW

InLine Pave signal lights integrated for controlling type of mix

For work involving a VÖGELE InLine Pave train, type of mix can also be controlled by PaveDock Assistant. With IP mode activated, a red symbol is displayed for surface course material or a green one for binder course - depending on the distance selected. The truck signals can be actuated at any time to override the mix display.



AUTOMATED PROCESSES WITH AUTOSSET PLUS

Entering machine settings again is time-consuming and is always a potential source of mistakes. With AutoSet Plus, you can save processes and call them back up again automatically at the touch of a button to make work more efficient and more reliable.

As on VÖGELE pavers, AutoSet Plus provides two functional areas. However, these are adapted to the technology and to the requirements governing the use of material feeders.

Depending on the mode set, therefore, there are a total of three positioning functions, each of which is executed just by pressing the "Execute" button.

The Work programs section contains stored programs; you can also store your own.

Simply press a button in AutoSet Plus to activate the default material handling programs for working with the MT 3000-3(i) Offset in a VÖGELE InLine Pave train or to reset to factory settings.



- 01** The AutoSet Plus positioning function is activated just by pushing the "Execute" button. If the material feeder is in "Positioning" mode, for example, it is made ready for transport.
- 02** The material handling programs previously stored in AutoSet Plus can be selected and used via the menu over and over again.



Automated processes with AutoSet Plus

01 Faster positioning

AutoSet Plus makes it quicker to position the material feeder. The touch of a button accordingly prepares the machine for the operating states "Working", "Positioning" or "Transport".

02 Compiling individual material handling programs

The operator can furthermore compile individual material handling programs. To do this, set parameters such as the output of conveyors and augers, belt heating and distance control can all be saved in AutoSet Plus and activated at any time.



ERGOPLUS 3 OPERATING CONCEPT

Improved efficiency, reliability and convenience

The ErgoPlus 3 operating system comprises a well-organised operator platform, the feeder operator's console with its modular design and ergonomic driver seats.

This design puts the machine operator at the heart of things, guaranteeing comfort, safety and a good overview of the job site at all times.

The centrepiece is the feeder operator's console. All the controls required for main and frequent functions are arranged in logical groups. Operation is intuitive and hence easy to learn. In fact, for the majority of applications, only one person is needed to operate the material feeder.



OPERATOR'S ERGOPLUS 3 CONSOLE

Full control for the machine operator

The feeder operator's console has been designed with user convenience and a clear overview in mind, with all functions arranged in logical groups for rapid access. Once a button is pressed, a function starts directly. It's known as the "Touch and Work" principle.



Safe operation at night

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



OPERATOR'S ERGOPLUS 3 CONSOLE

Clearly arranged in line with experience from the field



MODULE 1

01 Drive

- > The electronically-controlled individual drives guarantee perfect manoeuvrability and constant forward movement, even on difficult terrain.
- > Just one button command is sufficient to rotate the machine about its own axis.

02 Distance control (option)

- > Automatic distance control automatically adapts the material feeder's speed to suit paver speed.

MODULE 2

03 Material handling

- > When the "Main drive switch" button is pressed, all conveyors and augers are activated in Automatic mode.
- > The speeds of the transverse augers and the conveyor belts are perfectly harmonised.
- > A sonic sensor monitors the quantity of mix transported and adapts feed rate automatically.

04 Belt heating

- > The diesel heating system reliably keeps the mix at temperature. A sensor measures belt temperature.

MODULE 3

05 Steering

- > A desired track position can be preselected using pre-set angle steering. The material feeder now automatically moves in line with the desired track position.

06 PaveDock Assistant (option)

- > The material feeder operator can use the PaveDock Assistant signal lights to indicate what actions the driver of the mix truck needs to take.

07 Automatic cleaning system (optional equipment)

- > The automatic cleaning system continuously cleans the material handling system with the machine running. The settings for this are selected in the operating menu. It is also possible to spray at any time with the touch of a button.

MODULE 4

08 Colour display

- > The operator can use the large colour display to monitor important information or to adapt settings if required.
- > The high-contrast user interface ensures brilliantly clear legibility, even in poor light conditions.

09 Simple menu structure

- > The clear menus simplify settings and provide support in the event of operating errors.



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OPERATOR'S ERGOPLUS 3 PLATFORM

Improved efficiency, reliability and convenience

The ErgoPlus 3 operating concept allows the majority of applications to be performed by just one operator. The operator can conveniently view the complete process - from the supply of mix to its transfer to the paver hopper. VÖGELE also provides a number of intelligent functions to make work much easier.

For example, automatic distance control ensures that paver and material feeder are always the perfect distance from one another. A second operator is not required except for complex material feed processes: the pivoting conveyor of the MT 3000-3(i) Offset can also be controlled by a second operator.

01 Convenient operator's platform

> The convenient operator's platform gives an unobstructed view of all the crucial areas on the feeder - such as the material hopper, the steering guide or the discharge point from the conveyor.

02 Control console can be moved and seats have an extra swivel joint for an optimum seated position

> A few adjustments are all it takes for the feeder operator to position his console exactly to meet his personal needs. It can be moved across the full width of the operator's platform, swivelled out to the sides and tilted, allowing an ergonomically optimised workplace to be set up in no time at all.

> The arrangement of the pivot-mounted seats provides maximum all-round visibility. It conveniently allows operators to monitor the supply of mix from the mix trucks on the one hand and the discharge point from the conveyor on the other.

03 Hardtop made of glass fibre reinforced polymer material

> The modern hardtop made of glass fibre-reinforced polymer material shelters the operator come rain or shine. Wide, easily extendable sunshades give the operator optimum protection, even when his seat is moved out.

04 Well-organised operator's platform

> The operator's platform, with its streamlined design, is well organised, providing the feeder operator with a professional workplace. The operator's console can be protected by a shatter-proof cover to prevent vandalism. Plenty of stowage space makes it easy to keep the machine tidy. Access to all the vital service points on the machine has been designed to be extremely clear and ergonomic.

05 Safe and convenient ascent

> The walkway and central step access on the screed ensure safe, convenient access to the operator's platform.

06 Pivoting conveyor operated with pin-point accuracy

> The pivoting conveyor is controlled by a joystick in the armrest of the operator's seat. The joystick ensures maximum precision when controlling the pivoting of the conveyor to the left or right, when raising or lowering it and when selecting conveying capacity. The Emergency Stop button halts the material transfer process immediately should a problem occur.

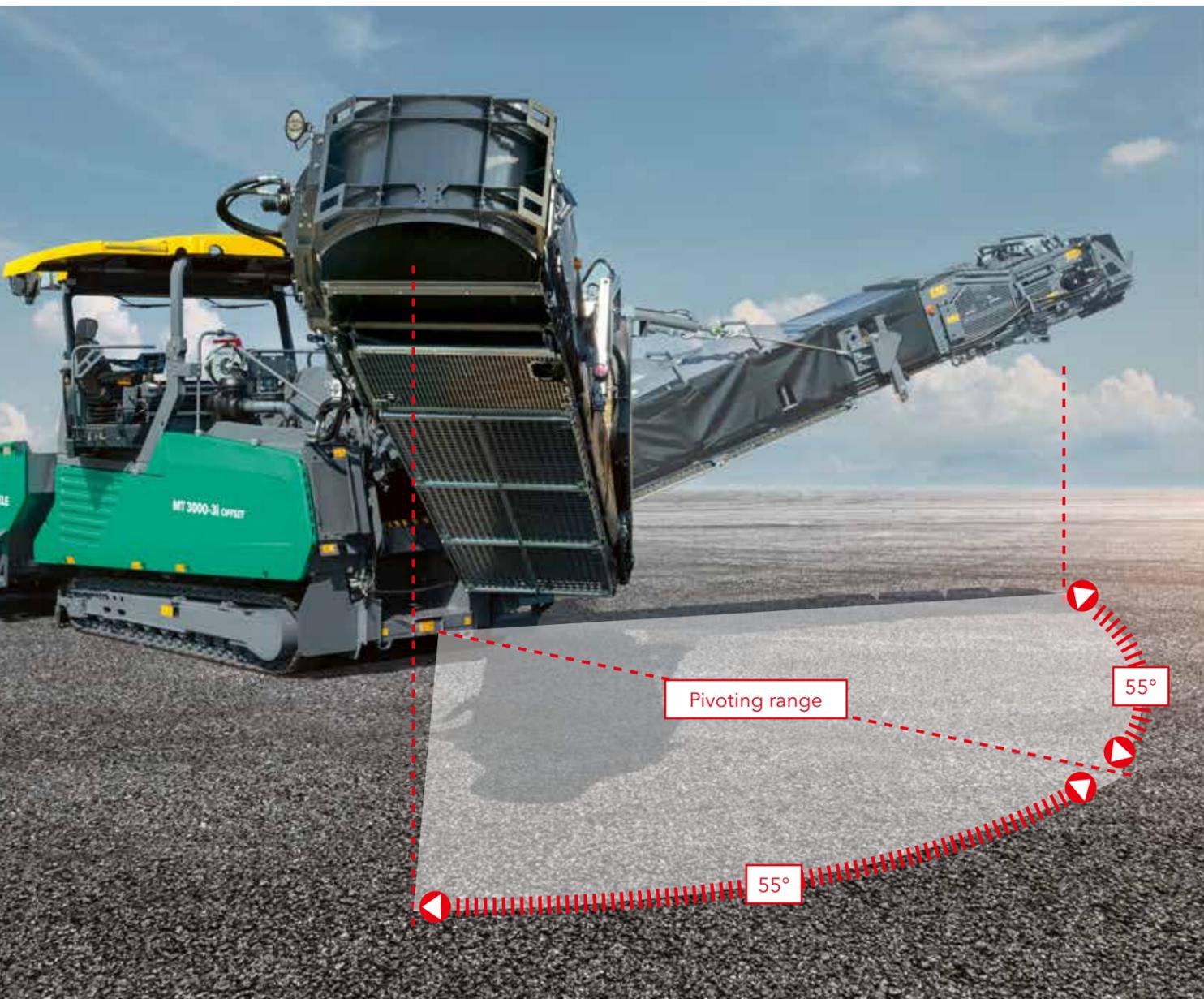
> For complex material feeding tasks involving the MT 3000-3(i) Offset, the pivoting conveyor can also be controlled by a second operator.

PIVOTING CONVEYOR FOR GREAT VERSATILITY

MT 3000-3(i) Offset PowerFeeder

Pivoting 55° to the left or right, the conveyor is a key factor behind the versatility of the MT 3000-3i Offset. The maximum distance from the outside edge of the material feeder to the centre of the discharge point is 3.5 m.

The conveyor can also be raised by up to 23° from the horizontal to a discharge height of 3.6 m and can even be increased to 3.9 m as an option.



*optional

VÖGELE > GOOD TO KNOW

Pivoting conveyor operated with pin-point accuracy

The pivoting conveyor of the MT 3000-3(i) Offset is controlled by a joystick in the armrest. The joystick ensures maximum precision when controlling the pivoting of the conveyor to the left or right, when raising or lowering it and when selecting conveying capacity. The Emergency Stop button halts the material transfer process immediately should a problem occur. For complex material feeding tasks involving the MT 3000-3(i) Offset, the pivoting conveyor can also be controlled by a second operator.



SERVICE-FRIENDLY MACHINE CONCEPT

The standardised service concept means that maintenance is quick and uncomplicated. Large hinged maintenance panels provide convenient access to all servicing points on the machine.

- 01** The transfer hopper of the MT 3000-3(i) Offset is designed with a hinge, and in combination with an extra step, allows asphalt residues to be removed conveniently and without any risk at all.
- 02** Both the MT 3000-3(i) Standard and the MT 3000-3(i) Offset can be cleaned in the operating position.
- 03** Clear arrangement of the drive module and of all valves and hoses.



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WIRTGEN GROUP CUSTOMER SUPPORT

Service you can rely on.

You can have confidence in reliable, swift support from us during the entire life cycle of your machine. Our wide range of services is ready with the right solution to every challenge you face.



Service

We keep our service promise with swift, straightforward assistance - on the job site or at our professional workshops. Our service team is trained to a professional standard and dedicated tools ensure that repair, care and maintenance tasks are completed quickly. We can support you with customised service agreements on request.

> www.wirtgen-group.com/service



Spare Parts

WIRTGEN GROUP original parts and accessories assure the long-term reliability and availability of your machines. Our experts will also be pleased to advise you about optimised wear part solutions to suit your application. Our parts are available all over the world at all times and are easy to order.

> parts.wirtgen-group.com



Training

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 pass our knowledge on to you, customised to suit both operators and servicing staff.

> www.wirtgen-group.com/training



Telematics solutions

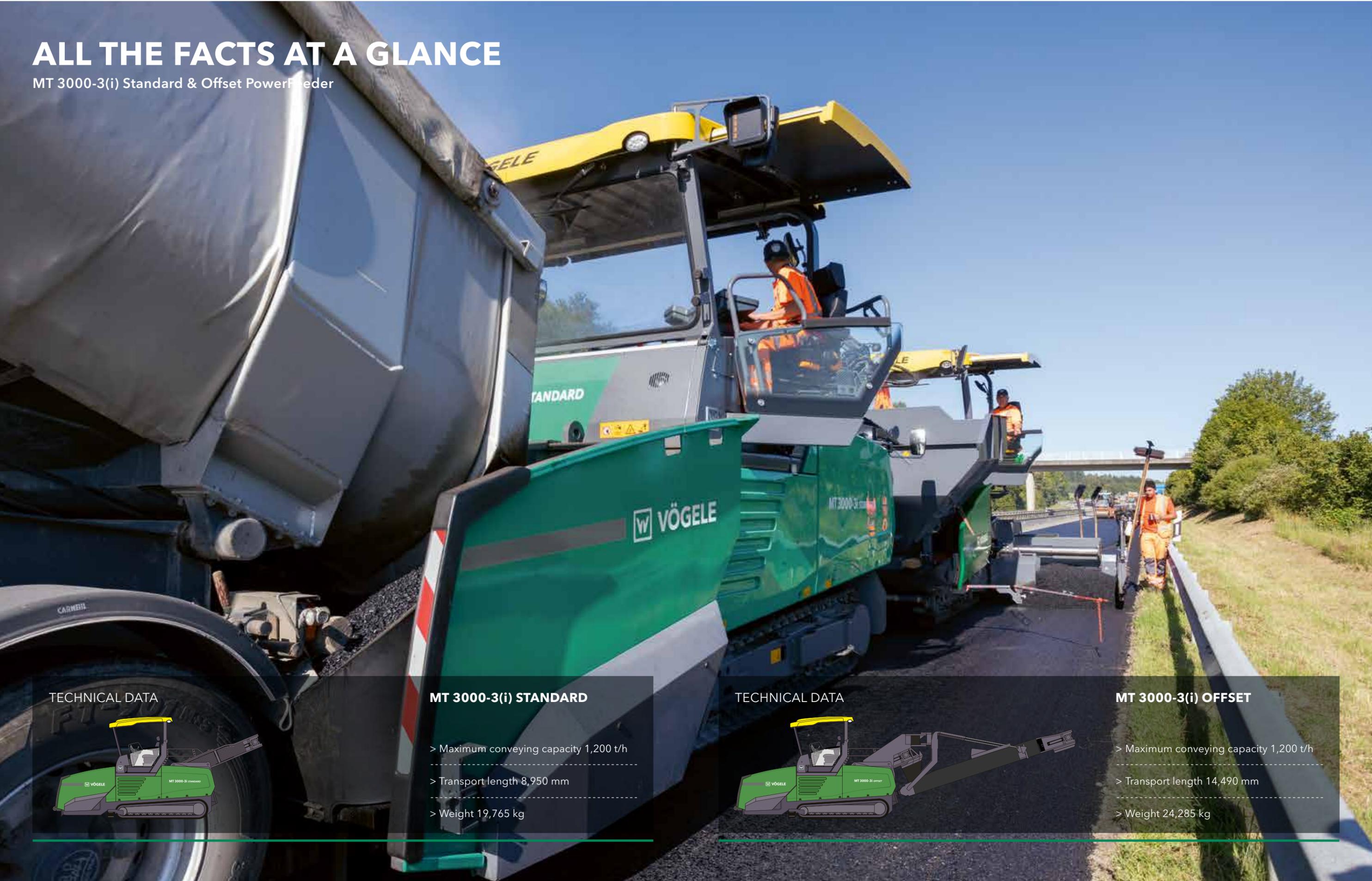
At the WIRTGEN GROUP, construction machinery involving leading-edge technology goes hand in hand with sophisticated telematics solutions. Intelligent monitoring systems such as WITOS or JD Link* not only make it easier for you to plan the maintenance of your machines, they also increase productivity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

MT 3000-3(i) Standard & Offset PowerFeeder



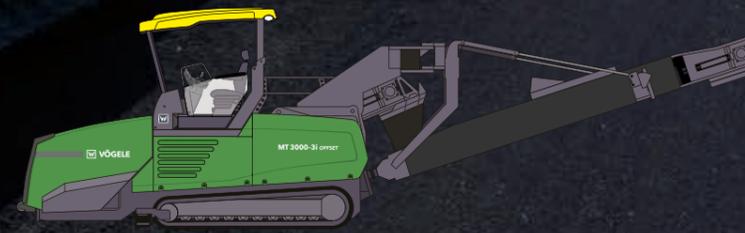
TECHNICAL DATA



MT 3000-3(i) STANDARD

- > Maximum conveying capacity 1,200 t/h
- > Transport length 8,950 mm
- > Weight 19,765 kg

TECHNICAL DATA



MT 3000-3(i) OFFSET

- > Maximum conveying capacity 1,200 t/h
- > Transport length 14,490 mm
- > Weight 24,285 kg



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