

Special Class

MT 3000-2i Offset POWERFEEDER



Material Feeder:
Maximum Conveying Capacity 1,320 tons/h
Pivoting Conveyor
ErgoPlus Operating System
Continuous Rubber Tracks

 www.voegele.info



High-Tech for Greater Quality and Cost Efficiency



The **VÖGELE MT 3000-2i Offset** is a powerful, innovative material feeder whose outstanding feature is an uninterrupted, non-contacting material transfer, guaranteeing the maximum paving quality with the greatest possible cost efficiency.

This is, among others, due to the innovative material conveying concept. With a large receiving hopper, a huge total storage capacity (material feeder and paver) and a peak conveying performance of 1,320 tons/h (1,200 tonnes/h), this VÖGELE PowerFeeder can empty a full truckload in just 60 seconds.

The conveyor of the MT 3000-2i Offset can be pivoted to the left and right, opening up a wide range of possible applications. The ErgoPlus operating concept guarantees simple, reliable handling. Automatic distance control combined with anti-collision protection ensures that the material transfer runs smoothly.

That's why the MT 3000-2i Offset sets the standards for top quality and competitiveness in road construction.

Highlights of the MT 3000-2i Offset



Wide range of applications thanks to the pivoting and inclining conveyor

Continuous paving with a total storage capacity (material feeder and paver) of 39 tons (35 tonnes) and a conveying capacity of 1,320 tons/h (1,200 tonnes/h)

Non-contacting material transfer ensures maximum paving quality

Homogenized material in the receiving hopper of the material feeder from conical augers

Ease of operation based on automatic distance control and optional anti-collision protection

Excellent visibility from the convenient and practical ErgoPlus operating system

Perfect balance of power and fuel economy from the powerful Deutz diesel engine delivering 215 hp (160 kW) at 2,000 rpm

The undercarriage with its rubber tracks and high precision drive components provides excellent maneuverability, flotation and traction while enabling operating speeds of up to 250 fpm (76 m/min.)

Powerful and Versatile

The **MT 3000-2i Offset PowerFeeder** comes with a host of innovations. In particular, the pivoting conveyor is a major advantage. It allows the machine to be used in a wide range of applications, enabling high utilization:

Pavers can be fed with material from the side, e.g. when paving “hot to hot”. Backfilling trenches or filling cavities between safety barriers in motorway construction can be done quickly and easily. Paving on shoulders and other hard-to-reach areas is also made easy.

Working with the MT 3000-2i Offset PowerFeeder is not confined to bituminous mixes alone. The conveying concept has been designed so that other materials such as topsoil, base course material or recycled material can be conveyed in addition to asphalt.

All these possible utilizations make the MT 3000-2i Offset a technically and economically outstanding machine.



FILLING CAVITIES BETWEEN SAFETY BARRIERS



CONVENTIONAL FEEDING



FEEDING PAVERS WHEN WORKING “HOT TO HOT”



FEEDING FROM THE SIDE

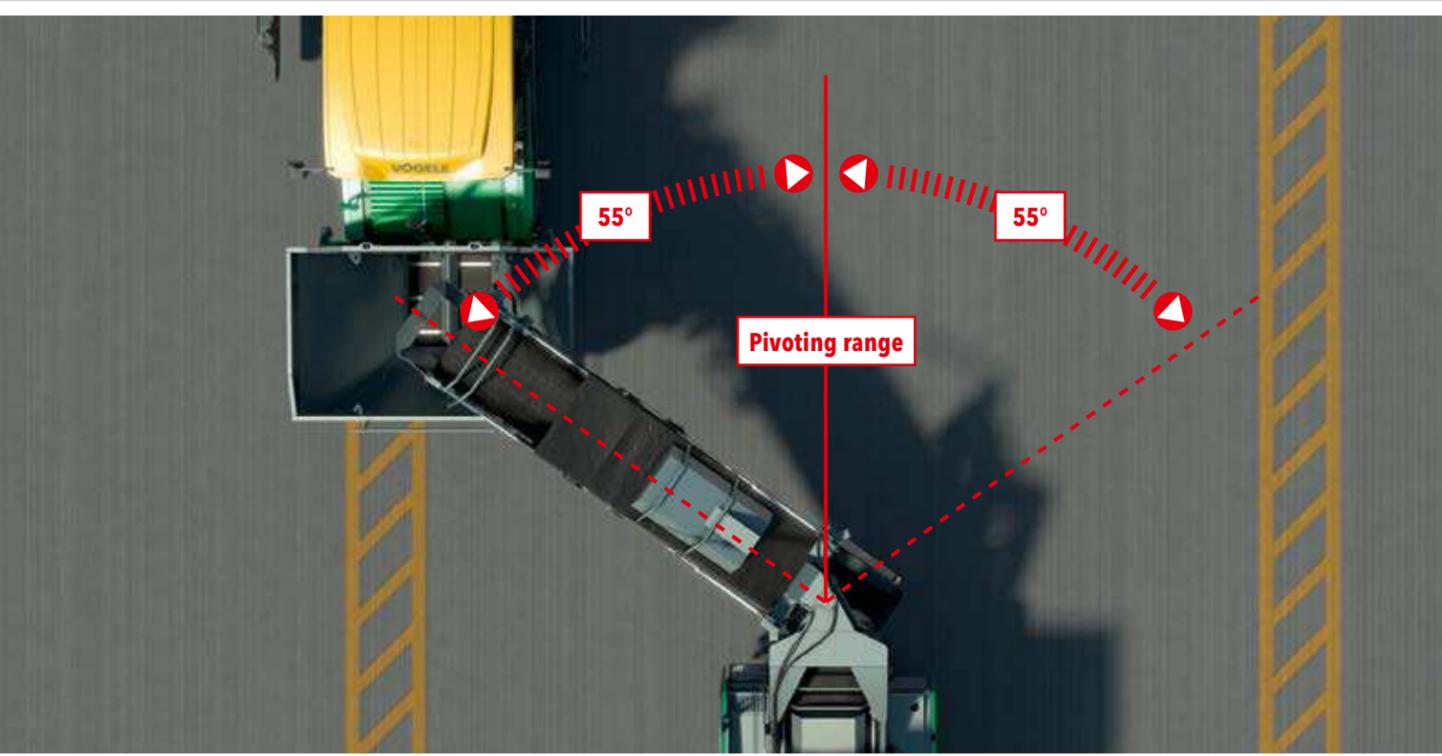


FEEDING PAVERS IN AN INLINE PAVE TRAIN

Pivoting and Inclining Conveyor for High Versatility

Pivoting 55 degrees to the left or right, the conveyor is a key factor behind the versatility of the MT 3000-2i Offset. The maximum distance from the outside edge of the material feeder to the center of the discharge point is 11 ft. 6 in. (3.5 m).

The conveyor can also be raised by up to 23 degrees from the horizontal to a discharge height of 12 ft. 9 in. (3.9 m).



Maximum Conveying Capacity for Non-Stop Paving



Non contact continuous material delivery is one of the keys to quality pavement. Consequently, a continuous supply of mix is one of the most decisive quality factors.

The powerful conveying concept of the VÖGELE MT 3000-2i Offset PowerFeeder transfers up to 1,320 tons (1,200 tonnes) of material per hour. That means a 27.5-ton truck (25 tonnes) can be emptied in just 60 seconds. The team of two, comprising material feeder and paver, features a material storage capacity of 39 tons (35 tonnes), equivalent to almost two complete truckloads.

That allows the team to work continuously and ensure maximum pavement evenness at all times, without interruption.

However, it is not just the quality that improves. Continuous paving is also a key requirement if high daily laydown rates of 4,400 tons (4,000 tonnes) and more are to be achieved and major road construction projects are to be completed quicker and more economically.

Large receiving hopper holds more than 15 tons (13.5 tonnes).

Specially designed conical augers in the material feeder's receiving hopper ensure optimal, homogeneous material flow without residues.

3 ft. 7 in. (1.1 m) wide conveyor capable of transferring up to 1,320 tons (1,200 tonnes) of material per hour.

The trough-shaped conveyor belt centers the material during transfer and provides a clean and uniform flow.

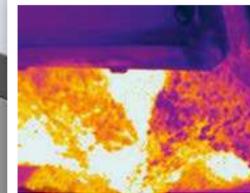
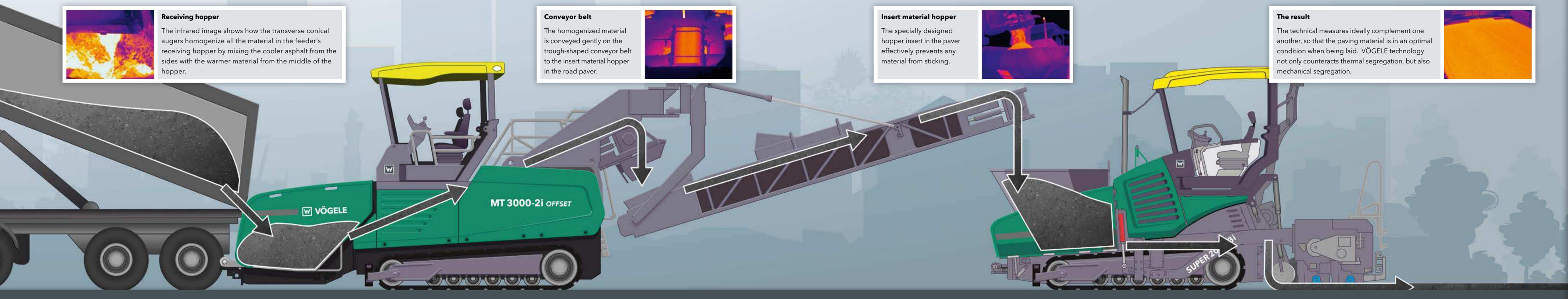
Tensioning cylinders guiding the rubber belt ensure center alignment of the belt. A smart automatic system accurately adjusts the belt tension as required.

Innovative diesel heating keeps the conveyor at a consistent temperature to prevent the material from sticking.

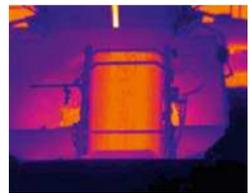
Material Management as a Success Factor



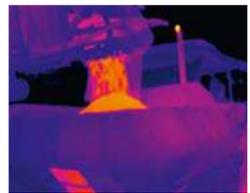
The VÖGELE Material Conveying Concept



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



Conveyor belt
The homogenized material is conveyed gently on the trough-shaped conveyor belt to the insert material hopper in the road paver.



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



The result
The technical measures ideally complement one another, so that the paving material is in an optimal condition when being laid. VÖGELE technology not only counteracts thermal segregation, but also mechanical segregation.



Conical augers
The conical shape prevents the formation of "tunnels" in the material and ensures that it is withdrawn evenly from all areas of the receiving hopper. And because fresh hot mix is constantly being fed in from the outside, it is thermally homogenized.



Trough-shaped conveyor belt
The trough-shaped conveyor belt provides a uniform material flow ensuring that the mix quality is maintained in every phase of the material transfer.



Innovative diesel heating
In order to ensure optimum material management, a specially developed diesel heating system with non-contact infra-red panels maintains the correct temperature of the conveyor belt. The path of the material is pre-heated before the transfer of material begins.



Insert material hopper in the paver
In order to optimize the flow of material, the insert hopper for the paver was designed without superfluous corners and edges. Smooth transitions and steep walls prevent the material from accumulating and blocking the flow of mix. The entire quantity of mix is thus continuously fed into the paving process without any of it being able to cool down.

Non-Contact Material Feed Process



MATERIAL MANAGEMENT

The non-contact transfer of material is one of the key criteria for high paving quality. Decoupling the feeding from the paving process prevents any jolts from the feed truck from being transmitted to the paver.

A non-contact distance control system ensures the correct space between paver and material feeder. Three laser sensors permanently measure the space 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 prevents the paver from colliding with the feeder. If the material feeder has to stop unexpectedly, the paver also stops automatically as soon as the distance between the two machines falls below the set minimum.



The distance control system of the MT 3000-2i Offset utilizes three single laser sensors to measure the distance between the paver and the material feeder at three different locations. Should one or even two sensors get obstructed, the remaining sensor(s) continue to perform the function.

The ErgoPlus Operating System



The ErgoPlus operating system comprises a well organized operator platform, a console for intuitive feeder operation and ergonomic driver seats. This design puts the machine operator at the heart of things, guaranteeing comfort, safety and excellent visibility at all times.

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



The Operator's **ErgoPlus** Console



ERGOPLUS

“Full Control for the Machine Operator”

The Operator's ErgoPlus Console

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. This is due to the "Touch and Work" principle.

As darkness falls, the feeder operator's console is back-lit automatically, which makes night-time work easy and relaxed. On the ErgoPlus console, all push-buttons are clearly identifiable by touch even when wearing work gloves.

Repositioning at the press of a button

The simple press of a button is all that's needed for the machine to turn almost on the spot, requiring just a minimum of space. Mounted on tracks, the VÖGELE PowerFeeders boast an extremely small turning circle. This is a great advantage in confined spaces in particular, and allows quick and safe repositioning of the machine from one work section of the job site to another.



Automatic distance control (option)

Automatic distance control adapts the material feeder's speed automatically to the paver's speed. As a result, a constant distance between the paver and the feeder is maintained at all times. The feeder operator can concentrate exclusively on the transfer of material. The laser-based distance control system allows two different distances to be stored.



Choice of operating modes

On the ErgoPlus console, 4 different operating modes for the feeder are available to select from. By pressing the arrow buttons, up or down, the operator changes modes in the following order: "Neutral", "Job Site Mode", "Positioning Mode" and "Material Transfer". An LED indicates the mode selected.



●●●●●	Module 1:	Traction
●●●●●	Module 2:	Material Conveyance
●●●●●	Module 3:	Receiving Hopper and Steering
●●●●●	Module 4:	Display for monitoring and adjustment of basic settings

Display panel of the feeder operator's console

The large, easy-to-read display panel shows vital information on menu level 1 such as the current operating speed and the level of mix in the paver's material hopper. Further parameters such as the feed rate and the distance from the paver can be easily set on the display panel. And the display gives access to machine-related information such as fuel consumption or service hours.

Steering with preselected steering angle

For long curves with a constant radius, the desired track position can be preselected using arrow keys. As long as the function is not deactivated, the curve material feeder automatically follows the curve without a need for operator intervention.

Choice of engine speed ranges

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

Automatic conveyance of mix

When pushing the "Material Transfer" button, all conveying systems are activated in automatic mode. The speeds of the transverse augers and the conveyor belts are optimally matched to one another. A sonic sensor monitors the quantity of material conveyed and automatically adapts the feed rate as required.

Ergonomics You Can Grasp



A joystick is used to pivot the proportionally controlled conveyor with the utmost precision and sensitivity through a maximum of 55° in both directions and to tilt it by up to 23°. Such high-precision maneuverability has many advantages.

These advantages include the safe and effortless feeding of pavers from the side, backfilling trenches or the cavities in safety barriers during motorway construction, as well as reconstruction measures on hard shoulders.

The pivoting conveyor is controlled via a joystick in the armrest of the operator's seat. The joystick is used to control with absolute accuracy the conveyor's pivoting movement to the left or right, its raising or lowering as well as the conveying capacity.

To raise or lower the conveyor, the operator pulls the joystick towards him or pushes it away from him. To move it laterally, he tilts the joystick to the left or right.

The Emergency Off button stops the material transfer process immediately should a problem occur.



Pressing on the white button increases the conveyor speed to the maximum, enabling a 27.5-ton feed truck (25 tonnes) to be completely emptied in just 60 seconds.

The ErgoPlus Operator's Stand



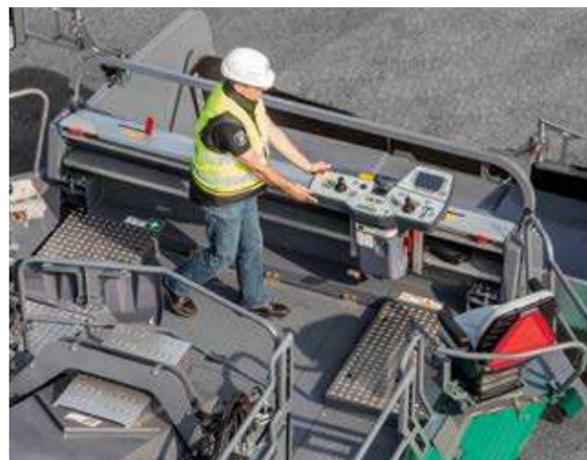
Excellent all-round visibility

The comfortable operator's stand gives an unobstructed view of all crucial areas on the feeder such as receiving hopper, steering guide or dumping point from the conveyor. This way, the material feeder can easily be operated by one person.



Two operator seats

In complex feeding tasks operation of the pivoting conveyor can be taken over by a second operator. The arrangement of the pivot-mounted seats provides for maximum all-round visibility. It allows the operators to conveniently monitor the mix supply from the feed trucks on the one hand and the dumping point from the conveyor on the other.



Working comfort

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



Weatherproof hardtop

The modern hardtop made of glass fiber reinforced polymer material shelters the operator whether rain or shine. It can be lowered effortlessly to the transport position by means of a manually operated hydraulic pump. Wide, easily extendable sunshades give the operator optimal protection even when his seat is moved out.



Clear structure

The operator's stand with its streamlined design is well organized, offering the feeder operator a professional workplace.

The operator's console can be protected by a shatter-proof cover to prevent wilful damage.

Plenty of storage space makes it easy to keep the machine tidy.



Access to all vital service points

Access to all vital service points on the machine has been designed to be extremely clear and ergonomic.

All hydraulic pumps are located on the splitter gearbox and provide maximum service-friendliness thanks to their clear arrangement and easy accessibility.

Service indicators and easily accessible measuring ports facilitate diagnosis and service.

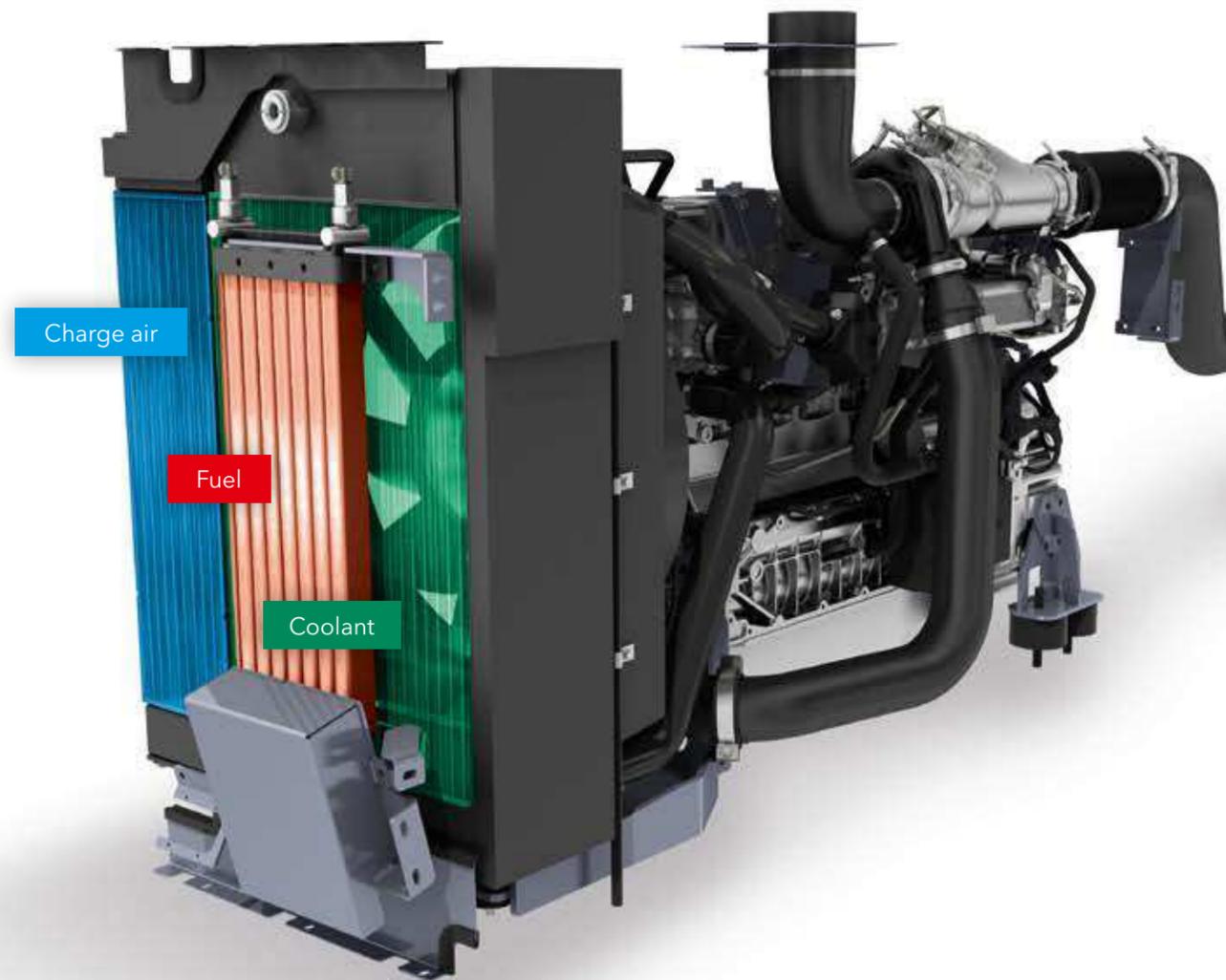
Powerful Drive Technology

Three main components define the power unit of a MT 3000-2i Offset: 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 VÖGELE is its Deutz diesel engine of type TCD 6.1 L6. This six-cylinder engine delivers 215 hp (160 kW) at 2,000 rpm. Yet the fuel-saving ECO mode is sufficient for many applications. And even then, the MT 3000-2i Offset still has a full 200 hp (150 kW) at its disposal. Moreover, the machine generates even less noise when running at just 1,800 rpm.

A large cooler assembly ensures that the power unit always delivers its full output. The temperatures of the diesel engine, charge air, fuel and hydraulic oil are always maintained within an optimal range, thus contributing substantially to the longevity of both the engine and the hydraulic oil. A further advantage is that the machine can operate without difficulty in all climate regions worldwide.

For current supply, the material feeder can be equipped with an electrical package. It comes with a 110 V plug socket, heating rods for the scrapers on the conveyor belts and two connectors for light balloons. A powerful generator (three-phase AC current) supplies the electrical energy needed.



An optimally designed cooling system comprising a large cooler assembly and a separately mounted hydraulic oil cooler provides excellent cooling, even during full-load operation.

» **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 standards of European exhaust emissions level 4 as well as Tier 4f of the US EPA standard.

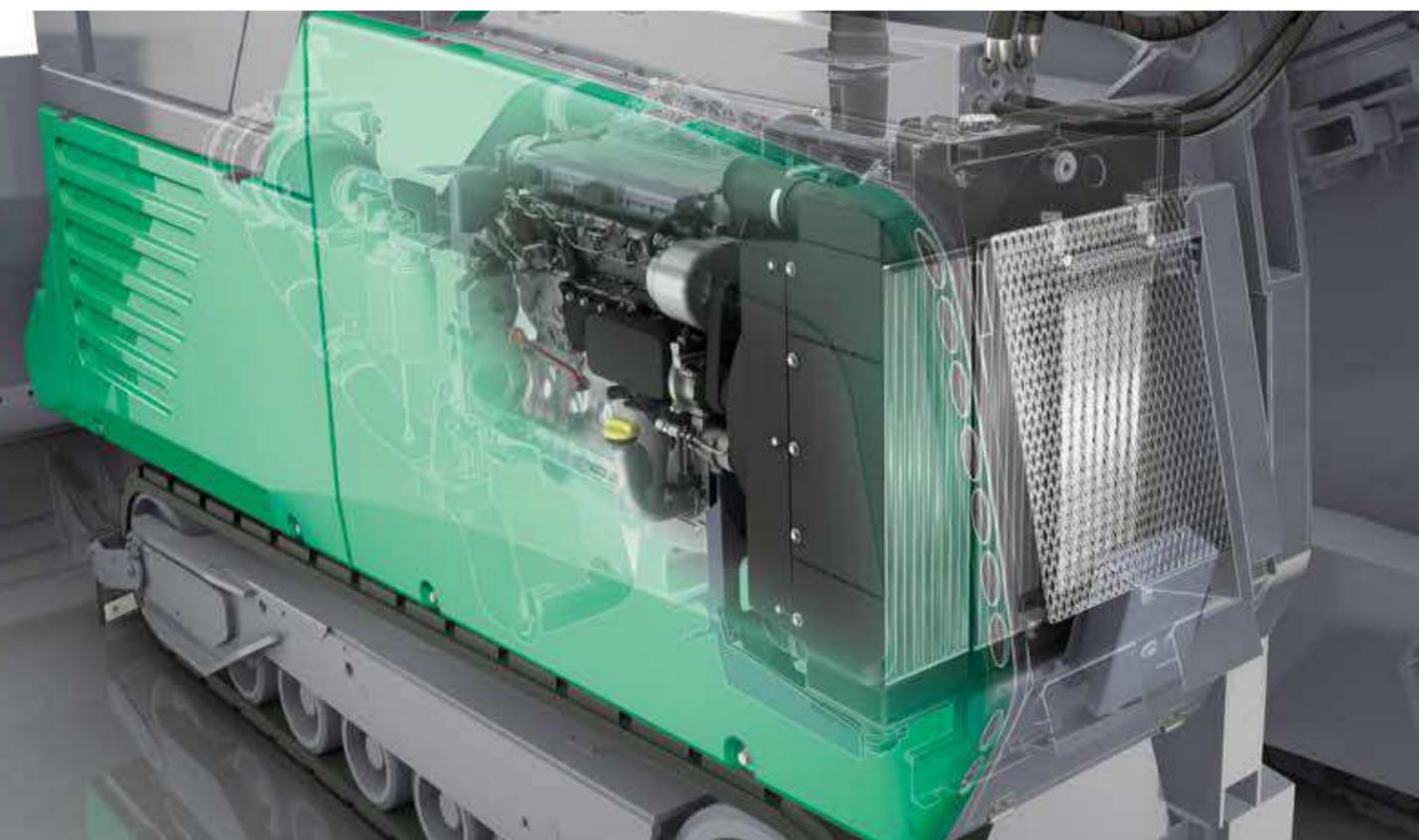
» **Powerful Deutz diesel engine** with an output of 215 hp (160 kW) at 2,000 rpm.

» **The large fuel tank** holds 119 gal. (US) (450 liters) for more than a day's work without a need for refueling.

» **Low average fuel consumption** of 3 gal. (US)/h* (12 liters/h*).

» **An ECO mode** (200 hp / 150 kW at 1,800 rpm) cuts operating costs and allows particularly quiet operation.

*The indicated consumption is based on an average daily laydown rate of 2,650 tons (2,400 tonnes) and may vary according to job site conditions.



Mobile in Every Way



A strong point of the VÖGELE MT 3000-2i Offset PowerFeeder are the continuous rubber tracks. Due to the large track width of 18 in. (457 mm), operating 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 wheels of the rubber tracks, meaning that engine output is transmitted without any loss of power. As a result, the PowerFeeder can push any feed truck with ease.

The MT 3000-2i Offset PowerFeeder also displays impressive maneuverability and high mobility. It can turn almost 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.

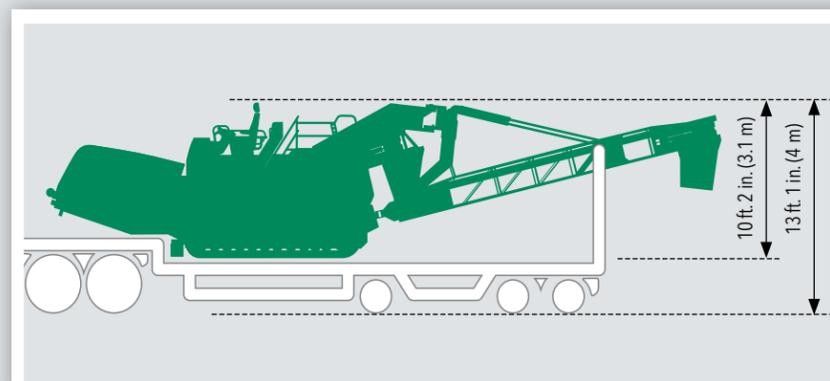
Easy Transport



Transporting a material feeder is a cost factor that should not be underestimated. The VÖGELE PowerFeeder was designed from scratch for optimum transport, and that has a positive impact on costs.

Due to the machine's low weight of 57,100 lbs. (25.9 tonnes), the machine is not too heavy for most roads, tunnels and bridges, and can reach its destination without special permits or time-consuming detours.

The transport height of 10 ft. 2 in. (3.1 m), the transport width of 9 ft. 10 in. (3 m) and the outer track gauge of 8 ft. 9 in. (2.66 m) are dimensioned so that the MT 3000-2i Offset can easily be transported on a conventional low-bed trailer.



With a height of 10 ft. 2 in. (3.1 m), the VÖGELE PowerFeeder can easily be transported on a conventional low-bed trailer.

VÖGELE Material Feeders Make Job Sites Safe



A construction machine is only truly excellent if it meets all occupational safety and health requirements. At VÖGELE, safety and accident prevention issues are given the highest priority in product development. As a result, we create machines that are designed to be operator-friendly. The design of the Human Machine Interface, i.e. the display and operating elements, is a key aspect for us.

However complex the processes in the supporting architecture of a VÖGELE PowerFeeder are, they should always be simple, reliable and intuitive for the operator. This is the only way to ensure the correct, fail-safe operation of the machine.

Each ergonomically optimized detail of the VÖGELE PowerFeeder makes it easier for the operator to manage the machine.

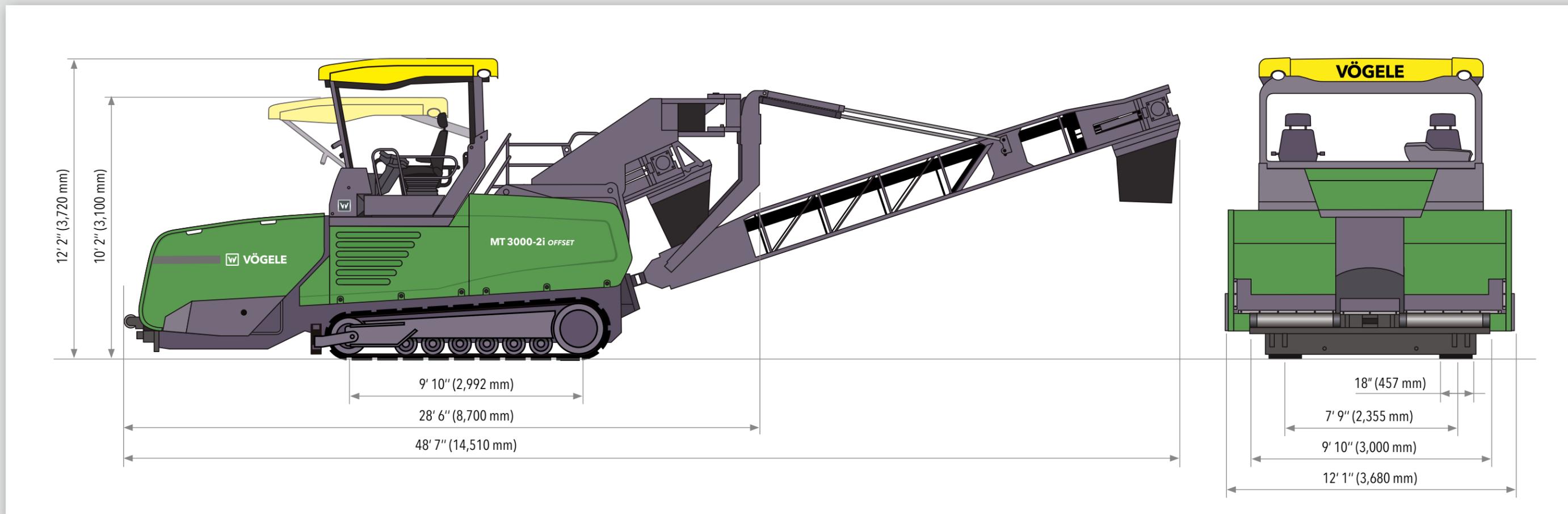
The design of the operator platform is uncluttered and clearly laid out. The two seats and the operating console can be adjusted and swiveled separately. The joysticks in the armrests of the seats permit intuitive control of the conveyor. The hardtop is fitted with shades to protect against rain and direct sunlight.

The automatic distance control and material level sensor ensure that the operator can concentrate and focus on the real tasks at hand, i.e. the material transfer process, the job site and the areas surrounding the PowerFeeder. And concentration is the best safety measure there is.

An overview of the essential safety features of the VÖGELE MT 3000-2i Offset PowerFeeder

- » **Safe and convenient access** to the operator's workstation.
- » **Intuitive operation** thanks to the ErgoPlus operating system.
- » **The operator's stand** is clearly laid out and offers excellent visibility of all areas.
- » **Precision control** of the pivoting conveyor via a joystick, with an additional lock to prevent the pivoting conveyor from being moved accidentally.
- » **The additional seat** allows crews to take up their individual working positions quickly.
- » **The automatic distance control** and automatic material level sensor make life much easier for the operator, leaving him free to concentrate fully on the feed truck and transfer of the material.
- » **All maintenance points** are accessible from ground level or at the level of the operator's stand without needing a ladder and are accessed directly through large hinged panels.

All the Facts at a Glance



Power Unit	
Engine	6-cylinder diesel engine, liquid-cooled
Manufacturer	Deutz
Type	TCD 6.1 L6
Exhaust Emissions	
Standard	US EPA Tier 4f
Exhaust after-treatment	DOC, DPF, SCR
Output	
Nominal	215 hp (160 kW) at 2,000 rpm
ECO mode	200 hp (150 kW) at 1,800 rpm
Fuel Tank	119 gal. (US) (450 liters)

Undercarriage	
Crawler Tracks	continuous rubber band
Ground Contact	9 ft. 10 in. x 18 in. (2,992 mm x 457 mm)
Traction Drive	separate hydraulic drive and electronic control provided for each crawler track
Speeds	
Operating	up to 250 fpm (76 m/min.), infinitely variable
Travel	up to 4.7 mph (7.5 km/h), infinitely variable
Steering	by alteration of track running speeds
Brake	multiple-disk brake locked on automatically without oil pressure
Material Conveying Systems	
Augers	2, installed in the receiving hopper
Standard	cylindrical augers
Diameter	16 in. (400 mm)
Option	conical augers for homogenization of the material

Material Conveying Systems	
Drive	separate hydraulic drive provided for each auger
Speed	79 rpm
Conveyors	
Drive	2 continuous rubber conveyor belts, separate hydraulic drive provided for each conveyor
Belt Width	3 ft. 7 in. (1,100 mm)
Heating	infrared heating panels, diesel-powered
Pivoting Conveyor	hydraulic pivoting
Pivoting Angle	± 55°
Lateral Offset Feeding	11 ft. 6 in. (3,500 mm)
(Distance from outer edge of feeder to dumping point)	
Transfer Height	12 ft. 9 in. (3,900 mm) (max)
Conveying Capacity	1,320 tons/h* (1,200 tonnes/h)* (max)

Receiving Hopper	
Holding Capacity	15 tons (13.5 tonnes)
Width	12 ft. 1 in. (3,680 mm) (hopper wings extended)
Dump Height	2 ft. (600 mm) (bottom of receiving hopper)
Insert Material Hopper	
Holding Capacity	up to 21 tons (19 tonnes) (to be placed into the material hopper of the paver)
Dimensions (Transport) and Weight	
Length	48 ft. 7 in. (14.82 m)
Width	9 ft. 10 in. (3 m)
Height	10 ft. 2 in. (3.1 m)
Weight	57,100 lbs. (25.9 tonnes)

Key: **DOC** = Diesel Oxidation Catalyst **DPF** = Diesel Particulate Filter **SCR** = Selective Catalytic Reduction

*dependent on type of material

Technical alterations reserved.



Your VÖGELE QR Code leads you directly to the "MT 3000-2i Offset" on our website.



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