

# RoadNews

for new roads

The WIRTGEN GROUP User Magazine for North America // N° 01



WIRTGEN GROUP at Conexpo 2017

## Pioneering innovations



**VÖGELE**  
MATERIAL FEEDER APP  
Start exploring the **MT 3000-2i**  
Offset PowerFeeder!












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On the cover: New VÖGELE SUPER 1700-3i tracked paver in operation – more on page 32.

Dear Reader,

We are pleased to debut our WIRTGEN GROUP RoadNews at the Conexpo-Con/Agg 2017 event. Over the past decade, we have been publishing RoadNews North America as a VÖGELE magazine, but from now on, RoadNews will be our North American magazine for the entire WIRTGEN GROUP.

This issue naturally focuses on the latest innovations of our product brands WIRTGEN, VÖGELE, HAMM and KLEEMANN, because at Conexpo, the WIRTGEN GROUP is presenting a variety of pioneering technologies: More powerful machines and plants, new control and operating concepts, more efficient application methods.

Setting new standards – this is the goal of the WIRTGEN GROUP. We want to help our customers to get ahead, accelerate job site workflows, improve processes and increase cost-efficiency. Our machines don't just turn heads at trade shows. They excel in operation, too, as one of the job reports highlights: In California, the City of San José saved US\$ 1.5 million thanks to the efficient cold recycling process – developed by WIRTGEN.

We hope you enjoy reading this first issue of the WIRTGEN GROUP RoadNews!

Best wishes,



Jim McEvoy  
President & CEO  
WIRTGEN AMERICA, Inc.

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# Close to our customers

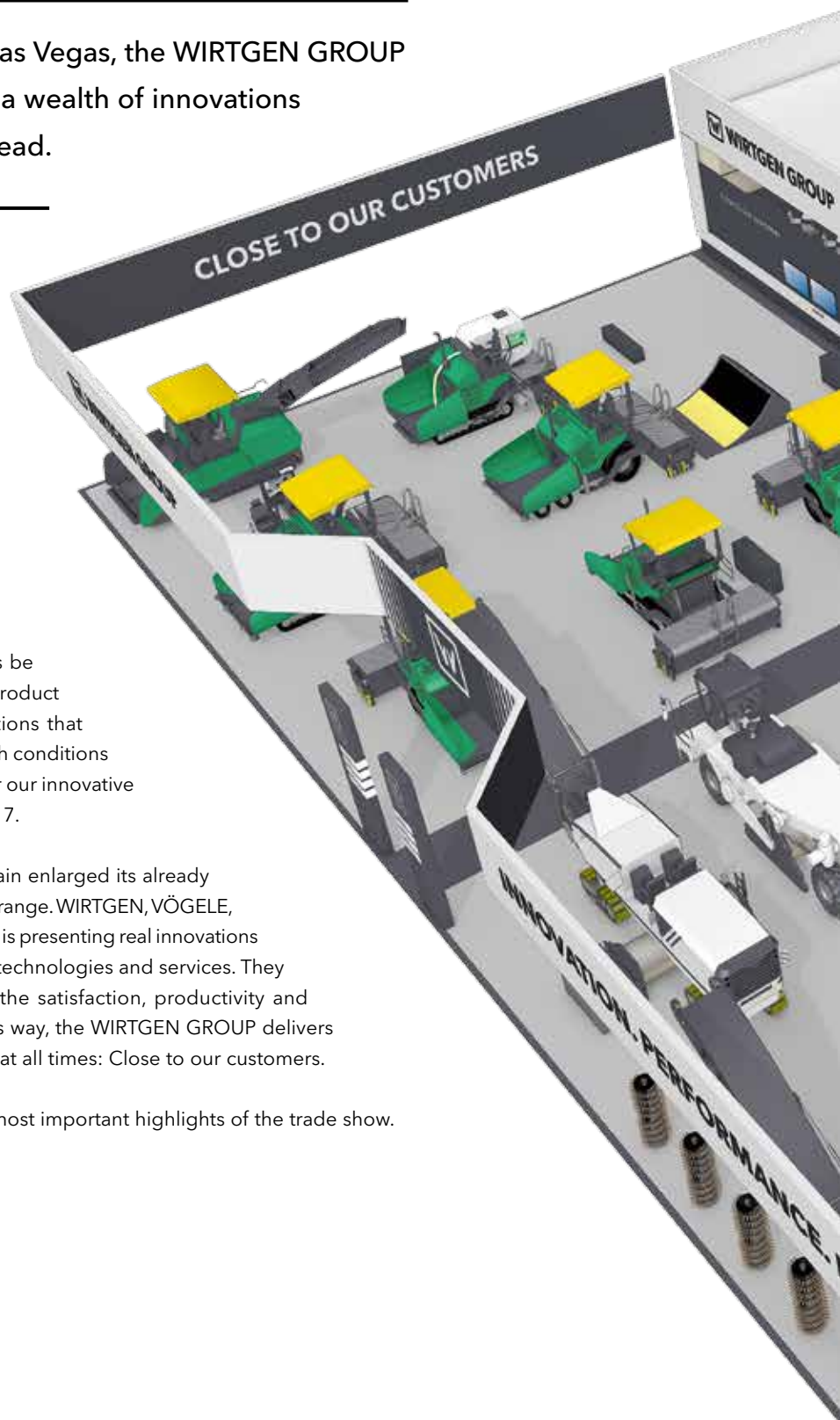
At Conexpo-Con/Agg 2017 in Las Vegas, the WIRTGEN GROUP will once again be showcasing a wealth of innovations that help our customers get ahead.

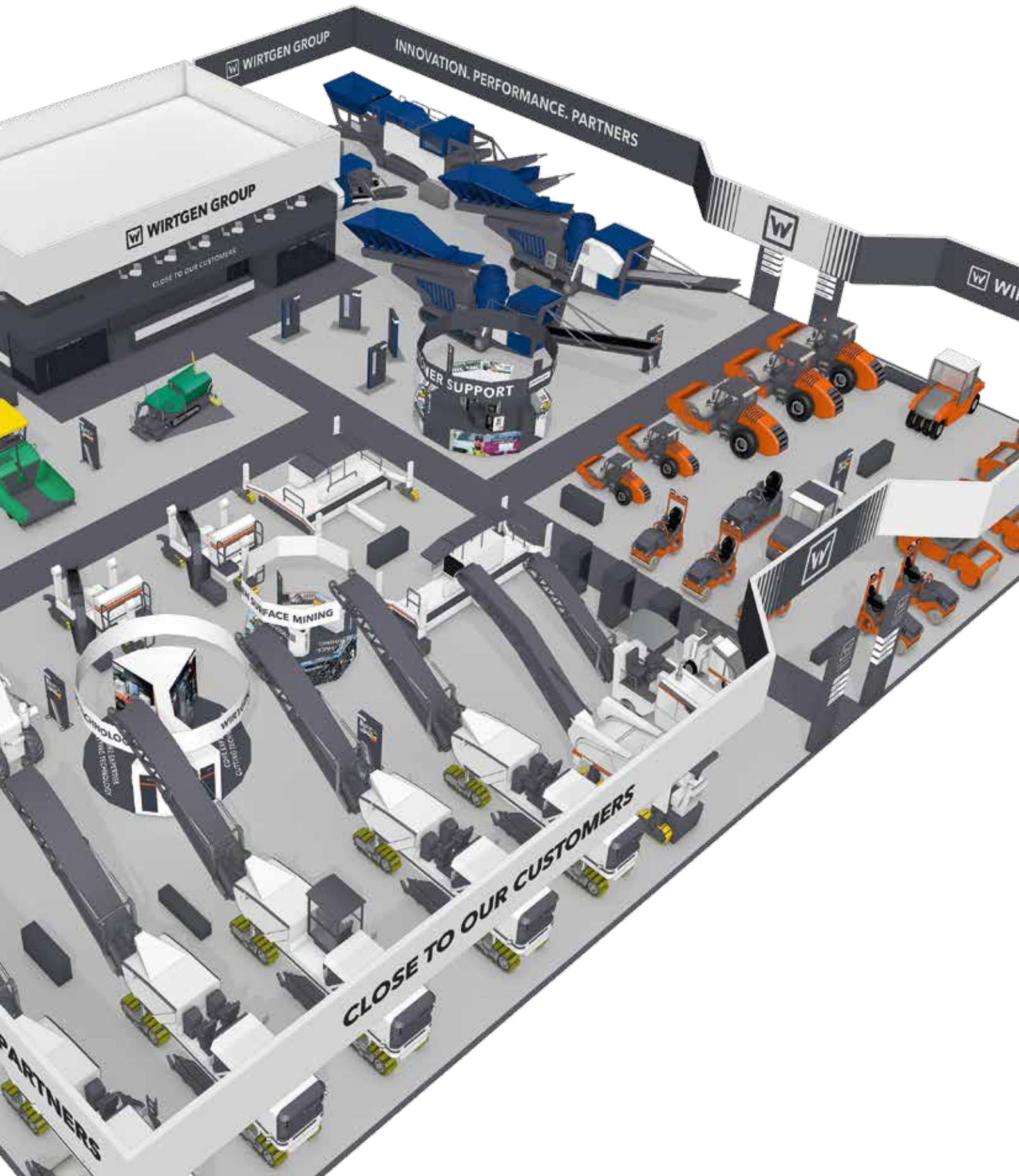


The WIRTGEN GROUP's mission is to always be close to customers. To fulfill it, each of our product brands works non-stop to turn out innovations that really make all the difference under the rough conditions of everyday practice. You can see just how far our innovative drive has taken us at Conexpo-Con/Agg 2017.

Our owner-run family business has once again enlarged its already exceedingly wide, high-performance product range. WIRTGEN, VÖGELE, HAMM and KLEEMANN – each product brand is presenting real innovations in Las Vegas – in the form of new machines, technologies and services. They are all pursuing one great common goal: the satisfaction, productivity and efficiency of our customers and users. In this way, the WIRTGEN GROUP delivers on its fundamental pledge, everywhere and at all times: Close to our customers.

This magazine presents an overview of the most important highlights of the trade show.







**The new SP 64i  
in action  
in Ohio, USA.**





# Economical and precise paving

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With its SP64i slipform paver and TCM 180i texture curing machine, WIRTGEN presents flexible solutions for high-quality concrete paving, be it inset or offset.

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## SP 60 series: Masters of inset and offset applications



### TCM 180i: The non-skid solution

Self-propelled texture curing machines like the new TCM 180i from WIRTGEN guarantee success in the professional curing of concrete pavements. As soon as it is paved by the slipform paver, concrete must quickly be protected from drying out so as to avoid tension and subsequent cracking.

The modular design of the TCM 180i supports working widths from 13 ft. 1 in. to 59 ft. 1 in. The new engine unit, which meets the latest exhaust emission standard, can be additionally equipped with a diesel particulate filter (DPF). The new operating concept makes operation intuitive, as on the WIRTGEN slipform pavers in the SP 90 and SP 60 series. What is more, the range of different surface textures that can be produced has been expanded, too.

The new SP 60 series, which is set to replace the SP 500 slipform paver, comprises the SP 64i, together with the SP 61i and SP 62i. The SP 64i can be optionally equipped with four, hydraulic, mobile swivel arms that make switching from transport to working mode much faster than it was with the SP 500. In combination with the optional Paving Plus package, the swivel arms can actively circumnavigate obstacles during the concrete paving process. Simple and flexible operation is made possible by a walkway that now extends across the full width of the machine for the first time, a central control system and four additional local control systems as a standard feature. For example, remote control units can be connected to each of the crawler tracks to simplify and speed up setup of the slipform paver, such as positioning and zeroing of the crawler tracks and swivel arms. The addition of further machine components to cater to complex, customer-specific job requirements is a simple process, enabling the SP 60 series to handle a wide variety of applications. Apart from the different mold





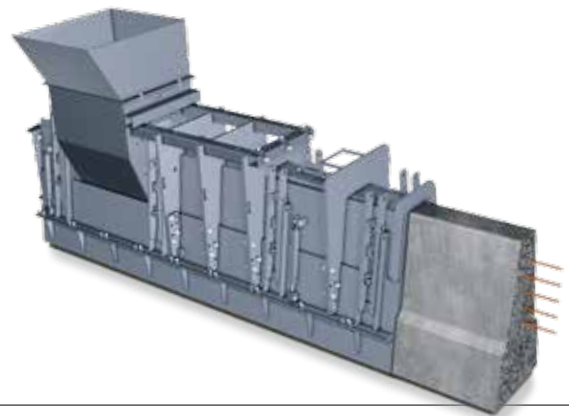
**Great variety and high quality - for both inset and offset. Thanks to advanced technologies, WIRTGEN slipform pavers can tackle almost any conceivable structural form, including special shapes.**

systems for inset paving, various offset molds with many typical offset options are also available, such as trimmers, and various conveyor belts and augers for feeding material to the offset mold.

### **Paving width up to 25 ft.**

The SP 64i (four crawlers on swivel arms) and SP 62i (track steering) can pave concrete pavements in widths of up to 20 ft. and a thickness of 18 in. in the standard version. Even widths up to 25 ft. are possible when the machine is equipped with electric vibrators (without DBI).

In offset mode, the three- or four-crawler version of the SP 61i from the SP 60 series can slipform small to large monolithic profiles. Whether standard or customized shapes are called for, contours of virtually any shape can be produced cost-efficiently and in a high quality.



### **Offset applications: The right slipform for every profile**

WIRTGEN offers a wide range of slipforms for paving monolithic profiles, e.g. for strong concrete safety barriers, roadway edging, water gulleys or narrow paths.









# Performance in tight spaces

WIRTGEN introduces its new  
W 60 Ri and W 150 CFi cold milling machines.

As the market leader, WIRTGEN offers the most extensive range of cold milling machines in the industry, with milling widths of 0.5 in. to 14 ft. Whether small, compact or large, the road rehabilitation specialist has the right machine for every application. Highlights among the 8 WIRTGEN cold milling machines on display at Conexpo include two US premieres: the W 60 Ri and W 150 CFi.

## W 60 Ri: A small milling machine that's big news

WIRTGEN presents the W 60 Ri, a model in its new generation of small milling machines. The brand-new models are equipped with the latest WIRTGEN control technology and have an identical operating concept, including the multifunctional armrest so popular among machine operators.

The countless auxiliary and automatic functions not only speed up work processes, but also significantly reduce the strain on the machine operator in day-to-day operations.

For example, WIRTGEN's brand new in-house development LEVEL PRO PLUS, which is fully integrated in the machine control system, supports high-quality, precision milling results thanks to intuitive, simple operation. The slimline chassis was designed specifically to provide an unobstructed view of the milling edge to the front as well as of the left and right side plates, while the compact suspension of the loading conveyor offers a clear view of the milled surface behind the machine.

Using the ergonomic multifunctional armrest, all important information can be shown in color on the control screen. Additionally, four "favorites" buttons can be programmed with any of 20 different functions.



### Highlights:

- › Most eco-friendly engine technology – exhaust emission standard US Tier 4f
- › Three different milling drum speeds
- › Optimum visibility for precise milling results
- › Simple operation supports the work process
- › High efficiency for traveling/steering and milling/loading



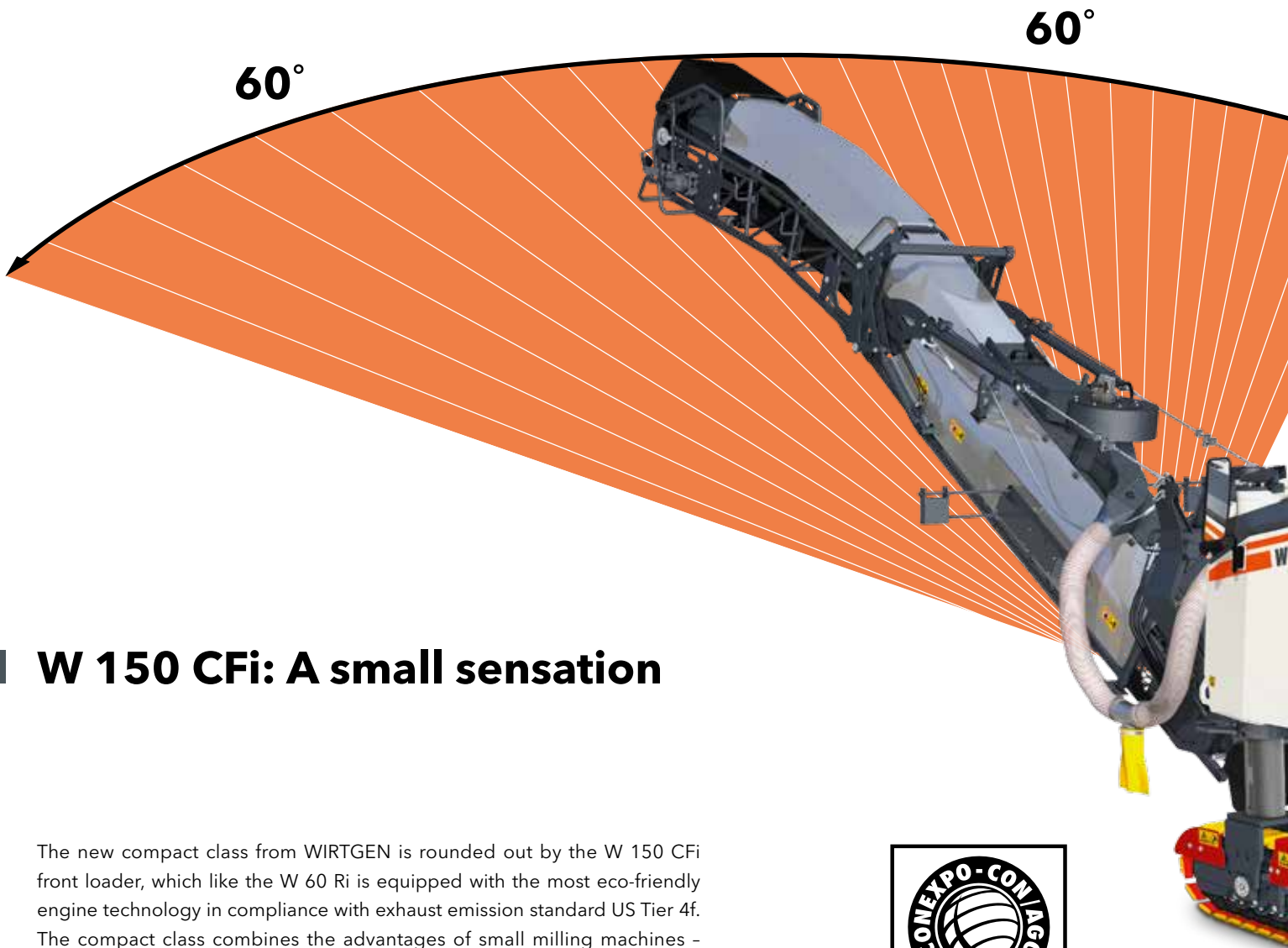


**LEVEL PRO PLUS:**  
The milling depth is precisely measured by durable displacement sensors in the hydraulic cylinders of the side plates, and displayed on the high-resolution control screen.



The machine operator can store up to three milling depths on each side (standard equipment) via the ergonomic multifunctional armrest.





## W 150 CFi: A small sensation

The new compact class from WIRTGEN is rounded out by the W 150 CFi front loader, which like the W 60 Ri is equipped with the most eco-friendly engine technology in compliance with exhaust emission standard US Tier 4f. The compact class combines the advantages of small milling machines – maneuverability, one-man operation and flexibility – with the front-loader principle and productivity of WIRTGEN's large milling machines. With working widths from 39 in. to 51 in. and milling depths up to 13 in., the entire series of machines, which includes not only the W 150 CFi, but also the W 130 CFi, W 120 CFi and W 100 CFi models, truly excels with its high performance and cost-efficiency.

### Strongest machine in its class

As the most powerful machine in the compact class, the W 150 CFi is the ideal machine for larger job sites with confined conditions, such as in downtown areas. In these places in particular, the advanced visibility concept in combination with the camera systems, assist the machine operator to maneuver the cold milling machine. Simple and intuitive operation is also standardized in the compact class, meaning that an operator can quickly feel at ease on every machine model. What is more, users need not compromise on optimum leveling results, because the LEVEL PRO PLUS system is also integrated in the compact milling machines. With an operating weight of 45,856 lbs., the W 150 CFi can usually be transported without any special permits – another important logistical advantage for both customers and milling service providers.





The large conveyor slewing angle of 60° to the left and right makes it possible to load material even in confined spaces, such as intersections or turning bays. Two different speeds provide added flexibility for swiveling the discharge conveyor.



### Highlights:

- › As maneuverable and flexible as a small milling machine
- › As productive as a large milling machine
- › Most eco-friendly engine technology - exhaust emission standard US Tier 4f
- › Simple, intuitive operation
- › Extremely large conveyor slewing angle of 60° to the right and left
- › Optimum adaptation to job site conditions thanks to three milling drum speeds

# The innovative operating concept Easy Drive

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User-friendly operation:

Identical for soil compactors and asphalt rollers from HAMM.



**Tandem roller HD+ series**



**Tandem roller DV+ series**



**Compactor H series**







At Conexpo-Con/Agg 2017, HAMM will be presenting its innovative, totally redeveloped Easy Drive operating concept. It can be experienced in three different model series: its DV+ and HD+ series tandem rollers, as well as in its H series compactors. With Easy Drive, HAMM is introducing a standardized operating logic for its soil and asphalt compaction machines that is adapted to the functions of each model series. As a result, construction companies can now very flexibly assign their machine operators to all types of rollers and compactors.

### **Developed in collaboration with scientists and machine operators**

Easy Drive is the result of a multi-year research and development project, for which HAMM pooled forces with universities, ergonomics specialists and machine operators from several countries. The objective: to further simplify compaction while increasing safety and quality by enhancing the operating system. HAMM did an outstanding job of achieving this goal, because Easy Drive supports fast, stress-free orientation and very safe and relaxed operation.

### **Few operating elements, smartly arranged**

All Easy Drive machines are controlled by a steering wheel located on a steering column in front of the seat. The operator finds access to the most important operating elements on the joystick and multifunction armrest. All other controls are secondary to the joystick, in accordance with a logical principle no roller manufacturer except HAMM has ever implemented: The more frequently an element is actuated, the closer it is to the joystick. Consequently, buttons used only rarely, status indicators and compaction parameter displays are located on the dashboard next to the steering wheel. Colors are used to assign all buttons and displays to function groups (water system, compaction, travel, chip spreader, etc.), a system which is used consistently across all roller model series.

### **Ergonomic and comfortable**

But rollers with Easy Drive offer even more, with such key attributes as outstanding ergonomics and further improvements in comfort. With wide steps up to the operator's platform or cabin, the operator can get in and out of the machine even more comfortably and safely than before. What is more, both the seat and steering column can be adjusted to ensure that any driver, no matter how tall, short, stout or slight, can find the optimum ergonomic sitting position. ///

### **Easy Drive: The innovative and intuitive operating concept**

- › Intuitive and therefore safe user guidance
- › Minimum learning and induction times
- › Identical operating logic on all types of rollers
- › Ergonomically optimized operator's platform that can be adapted to virtually any stature
- › Energy-saving operation to support sustained concentration

# The premium class in asphalt compaction

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The DV+ series of pivot-steered tandem rollers from HAMM fulfills the highest quality demands in the shortest amount of time.



Thanks to its large track offset, the working width of the DV+ 70i tandem rollers can be almost doubled in relation to the drum width of 59 in.





### **DV+: Tandem rollers for the highest quality in compaction**

- › High-precision pivot steering with large pivot angles, large track offset and four steering modes
- › Safe, intuitive operation and ergonomically optimized operator's platform
- › Intelligent water system for uniform weight distribution
- › Optimum view of the machine and the surrounding job site
- › Maximum productivity thanks to capacious fuel and water tanks

At Conexpo-Con/Agg 2017, HAMM is showcasing its DV+ series of tandem rollers for the first time in the USA. These powerful, pivot-steered compaction machines are highly productive and operators are impressed with their excellent visibility and easy-to-learn Easy Drive operating concept.

### **Be it a panoramic cabin or platform with ROPS roof: Visibility is always perfect**

The DV+ 70i can be equipped with a fully glazed panoramic cabin or an open platform with a ROPS roof. But one thing applies to both variations: Operators always have a clear view of the drum edges and all edge pressing and cutting equipment. In addition, glass viewing panes built into the floor of the cabin give operators an unobstructed view of the drums.

### **Uninterrupted compaction**

The innovative tandem rollers are geared to maximum productivity. High-volume diesel and water tanks support continuous compaction over long work intervals. And HAMM has found a very user-friendly solution to the problem of refueling: Diesel can be re-filled conveniently from the ground, while water can be supplied safely and rapidly via a pressurized refilling function as a standard feature on all tandem rollers.

### **Future-proof engine technology**

The DV+ 70i rollers are equipped with ultra-modern engines that meet EPA Tier 4 exhaust emission standards. HAMM further uses diesel particulate filters (DPF) that permit the machines to be deployed even on markets as restrictive as California.

### **High-quality asphalt surface courses**

Thanks to the smart machine design, the weight of the rollers is always evenly distributed – an essential prerequisite for high-quality compaction. Quality is further enhanced by the pivot steering, with which the DV+ series rollers can be steered precisely and flexibly in four different modes. On the rollers, all vibrating drums are split, and a convenient automatic reverse function permits soft braking, accelerating and reversing, the DV+ produces perfectly level asphalt surface courses without bumps or hollows even in bends in the road.

# Keep it simple

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HAMM's CompactLine tandem rollers  
and compactors are ideal machines  
for renting.

Simple operation, good service and reliability are what characterize HAMM rollers, and the same applies to the over 20 models in the CompactLine. Weighing in at 1.5-4.5 t for asphalt compaction (HD 8-HD 14i tandem rollers) and 5-7 t for soil compaction (H 5i-H 7i compactors), the compactly designed machines are equipped with proven, reliable technology, and are extremely versatile and easy to operate. This is just one of the features which make them ideal rental machines.

for rent





### **Compact dimensions, good handling, excellent climbing ability**

The machines in HAMM's CompactLine are of extremely compact design, and they impress job site crews with their outstanding handling. The reason: Their 3-point articulation delivers unrivaled travel stability and uniform weight distribution to both axles. When compacting asphalt, this results in level surfaces without bumps or hollows, and to high stability when moving through turns. In earth work applications, the advantages are evident in the good directional stability and the effective shock absorption.

The H 5i/H 7i compactors are also the machines of choice on steep terrain: They can easily handle grades of 60% and more, especially since they have a remarkable amount of ground clearance. Furthermore, the compactors are very short: The H 7i measures about 174 in., making it the shortest compactor in the world in its weight class.

### **Extremely simple operation**

Compactor operators can work efficiently and safely right away, without induction, thanks to clearly and logically arranged, language-neutral symbols that help to avoid operating errors. The compact rollers further have ergonomically optimized operator's platforms with outstanding visibility.

### **Special rental options**

The range of options is tremendous: From drum edge lights and chip spreaders for tandem rollers, to LED lighting for compactors, all bases have been covered. One highlight is the automatic engine-off function. It switches off the engine automatically if the machine stands idle for an extended period. That saves fuel, reduces the number of operating hours and increases resale value.

With all its rollers and compactors, HAMM also offers telematics solutions for efficient fleet and service management. As a result, rental companies can keep value, machine availability and performance at a high level for many years to come. >>>



**With over 20 models, the H and HD CompactLine series from HAMM offer a seamless range of compact machines for soil and asphalt compaction.**

### **Wide range of models with vibration and oscillation**

The CompactLine machines are available in several weight and size classes. They all run on efficient Kubota engines. The portfolio comprises tandem rollers, combination rollers and pneumatic tire rollers as well as compactors with smooth drums and padfoot drums. In addition, HAMM is the only manufacturer worldwide to offer small tandem rollers and compactors with oscillation.

### **Wide range of models with vibration and oscillation**

The tandem rollers in the HD CompactLine offer one practical feature: They are very easy to transport. The models with an operating weight of up to 3 t can be loaded using a central suspension point on the handrail – even onto small transport vehicles. This extremely simple solution also saves time.

### **Simple maintenance**

Another success factor of the compact machines is their ingenious maintenance concept: HAMM has minimized the number of maintenance points and made all points required for daily maintenance accessible on one side of the engine. All other service tasks only have to be carried out at very long intervals, giving the rollers and compactors extremely high availability.

In summary: The CompactLine rollers from HAMM are a safe investment for every rental business. They are reliable, have proven their worth for years in the market and are robust in operation – and that is exactly why customers value them so highly. ///

**for rent**  
 reliability  
 ergonomics transport  
 versatility operation  
 service



**The HAMM machine gives us a high-quality solution built to rental specifications, but most importantly backed by the best support offered in our marketplace. This support has been the driving force behind our investment in HAMM products and the cornerstone of our over 20-year relationship with HAMM.**

**Brad Coverdale, Director Fleet Sourcing & Support  
Sunbelt Rentals**



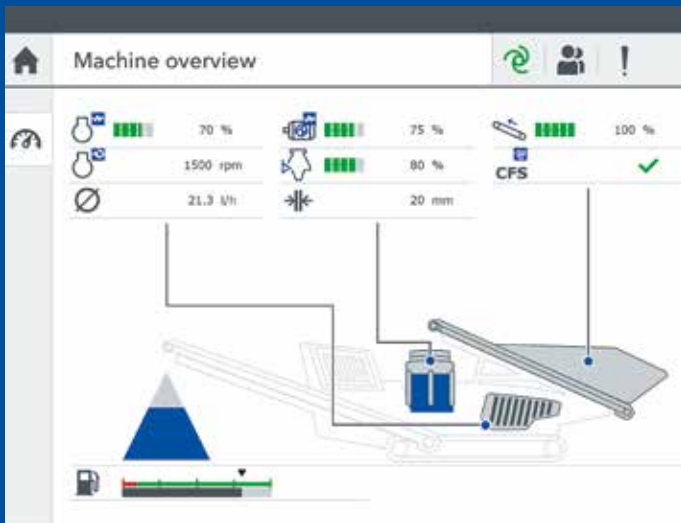
**Our developers designed the rollers and compactors in the CompactLine to be easy to use, service and maintain.**

**Reinhold Baisch, Board Member  
HAMM AG**

# Simple control with SPECTIVE

KLEEMANN introduces SPECTIVE, a new, intuitive control system for crushing plants.

See how simply SPECTIVE functions:



The information area continually displays all current data on production.



The SPECTIVE philosophy: The more comprehensible the design of a control concept, the more effectively it supports operators in their work.





As the demands imposed on modern crushing plants rise, so does the system complexity. At the same time, the technology must be as safe and simple as possible to control, without any drawn-out training. The answer to all these issues is provided by SPECTIVE. With its new control system, KLEEMANN takes intuitive and clear-cut operation to a new level.

The special feature of SPECTIVE is that it displays only those functions that are really necessary. Thanks to clear symbols, all plant functions are identifiable at a glance and can be set in just a few steps. Like on a smartphone, the operator is guided intuitively

through the control system – a major plus in practice, because it significantly reduces operating errors. Data on machine operation can additionally be accessed via the control system, meaning that the diesel fuel and lube oil fill levels, for example, can be checked right from the plant cockpit, where the information is also documented. Thanks to these combined advantages, the crushing plant can be operated particularly efficiently.

The first plants to be equipped with SPECTIVE are the MCO 11 PRO mobile cone crusher and the latest MOBIREX EVO2 line of impact crushers.



**A glance is all it takes to identify the selectable machine functions, thanks to clear symbols.**

- › Users are supported from the outset in operating the touch panel, and guided step-by-step through the start process.
- › On the start screen, the operator sees the entire plant at a glance along with the adjustable functions.
- › The operator selects the required function and is guided by clear instructions through all operating steps.
- › If a malfunction occurs, an error diagnosis appears on the display with localization of the problem and tips for its correction – this minimizes plant downtime.
- › The sturdy 12-inch touch panel can even be operated when wearing work gloves and is legible even in bright sunlight.





# Tough machine - Strong performance

KLEEMANN presents the new MOBICONE MCO 11 PRO for quarry applications.



The mobile MOBICONE MCO 11 PRO cone crusher is the latest development from KLEEMANN for use in quarries. The machine features high performance, a robust design and good transportability. It can withstand the rough demands of processing natural stone, as demonstrated by four different applications.





### **The MOBICONE MCO 11 PRO at a glance**

- › Maximum feed size: 9.4 in.
- › Crusher system size d: 44 in. in diameter
- › Drive concept: diesel-electric
- › Power rating (Tier 4f / Stage IV): 493 hp
- › Transport weight: 110,230 lbs (approx.)

### **Ideally equipped for quarry applications**

The machine design of the MOBICONE MCO 11 PRO has been fine-tuned down to the last detail. To achieve an optimum center of gravity in the plant, the power unit is installed underneath the feed unit. The improved balance reduces both noise and vibrations. All components requiring maintenance can be accessed conveniently and safely by the plant operator either from the ground or via work platforms. The MCO 11 PRO comes with a powerful diesel-electric drive unit. It boasts particularly low consumption and can also be operated with power supplied from an external source. The plant is equipped with a Continuous Feed System that ensures an optimum material flow and consistent utilization of machine capacity. The MCO 11 PRO has ideal transport dimensions and can be transported without disassembling any machine parts. Even when equipped with the full complement of options, the MCO 11 PRO is ready for use within 30 minutes, thanks to its hydraulic fold-up functions.





## Crushes even the hardest stone

Scandinavian stone is known for its hardness. But even in a granite application in Sweden, the MCO 11 PRO achieves an output of up to 518 t/h. The cone crusher works together here with a MC 120 Z jaw crusher to crush blasted granite of 0-26 in. to a grain size of 0-4 in. Because granite is very abrasive, wear is an issue. To protect the feed hopper even during heavy loading, the plant has been equipped with replaceable wear plates inside the hopper. Service Technician Robert Johansson of the WIRTGEN GROUP subsidiary in Sweden finds the optional camera system for monitoring the crusher level and feed hopper, with its display screen on the control cabinet, to be very practical: "You can monitor the crusher level from the ground at any time and don't have to climb up onto the plant." What is more, the camera monitoring system can be installed by radio signal in the excavator, so that the operator always has a good view of the plant and can maintain an optimum feed of material to it. >>>



# Granite

0-4 in.  
518 t/h





**Gravel**  
0-1 in.  
237 t/h

### Perfectly processed gravel for concrete production

The MCO 11 PRO can achieve a remarkable throughput even without a primary crusher, as shown by a gravel application in France. The pre-screened material with a grain size of 0-3 in. is fed by a wheel loader to the MCO 11 PRO. The cone crusher crushes the gravel to 0-1 in. achieving an average output per hour of 237 t. Because most of the material is needed for producing concrete, it is very important to obtain a high-quality, cubic end product. To do so, the MCO 11 PRO crushes the gravel in the next stage to a finer grain size of 0-0.5 in. The cone crusher is controlled by the innovative SPECTIVE control system, which enables intuitive operation of the plant thanks to its clear symbols (see page 24).

For Service Technician Frédéric Pihet from the WIRTGEN GROUP subsidiary in France, the new control system offers a lot of advantages: "The touch panel shows a very good overview and clear presentation of the plant functions and components. If an error occurs, I can see the source of it at a glance and correct it right away." SPECTIVE also displays key information on machine operation.





# Granite, basalt, gneiss

0-1 in.  
265 t/h

## Reliable performance with natural stone

An MCO 11 PRO is used in Germany to process highly abrasive granite. The blasted rock of 0-28 in. is first charged to the MC 125 Z mobile jaw crusher. In the second crushing stage, the MCO 11 PRO crushes the rock from 0-8 in. to 0-2 in. This plant combination delivers 375 t/h. The MCO 11 PRO likewise is used in the second crushing stage in Norway. The mix of granite, basalt and gneiss is pre-crushed by a mobile jaw crusher. The 0-6 in. material is then fed to the MCO 11 PRO to obtain the final product of 0-1 in. An average output of 265 t/h is achieved in the process. ///

0-2 in.  
375 t/h  
**Granite**

# The new benchmark in 8-foot pavers

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Introducing the all-new, cutting-edge  
Universal Class pavers -  
The SUPER 1700-3i and SUPER 1703-3i.

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**Immediately recognizable by the yellow hardtop:**  
The new 8-foot SUPER pavers from VÖGELE are the successors  
to the previous VISION 5100-2i and VISION 5103-2i.





The 8-foot paver segment is of central importance to many road construction companies, because with these machines they can cover a wide range of applications, from small municipal job sites to highway construction and rehabilitation. With their strong performance and a uniquely compact design, the new SUPER 1700-3i and SUPER 1703-3i pavers put VÖGELE at the forefront of technology in this field. They also integrate the practical features that make the "Dash 3" generation of SUPER pavers synonymous worldwide with modern road pavers – most notably the intuitive and ergonomic ErgoPlus 3 operating system. >>>

# Compact design: Ideal for every kind of job site

Pavers in the 8-foot class are road construction machines that are designed to achieve maximum performance both in confined conditions and on highway job sites. What may sound like conflicting objectives has led VÖGELE's design engineers to an impressive and future-oriented solution. The result is the new SUPER 1700-3i tracked paver and new SUPER 1703-3i wheeled paver, ultra-modern machines that are compact but powerful, and thus meet the highest demands.

## Maximum ease of operation with the intuitive ErgoPlus 3 operating system

For VÖGELE, however, design means much more than just meeting the demands of construction companies and customers. Every VÖGELE development focuses above all on the user, as evidenced by the ErgoPlus 3 operating concept. It encompasses an ergonomic paver operator's platform with numerous intelligent details, such as a hardtop with an extendable sunshade and comfortable seats that swing out to the side. The heart of the ErgoPlus 3 system is the operating consoles for the driver and screed operator. All functions are arranged here in logical groups, push-buttons support reliable operation even when wearing work gloves, and the backlit color displays make it easy to clearly read current settings, even at night or in bright sunlight. >>>

### Design highlights of the SUPER 1700-3i and SUPER 1703-3i

- › Compact machine design supports impressive maneuverability even in confined spaces
- › Intuitive ErgoPlus 3 operating system establishes a high standard of ergonomics and comfort
- › Incorporates the innovations of the ultra-modern "Dash 3" machine generation
- › Unmistakable yellow hardtop with adjustable sunshades protects against rain and hot sun



To find out more about VÖGELE's  
new 8-foot paver, watch the video at:  
[www.voegel.info/8ft](http://www.voegel.info/8ft)







**Totally ergonomic: The ErgoPlus 3 operating system with practical remote control units for the screed operators.**





## Strong performance: Ready to give their all.

A paver that has to master a variety of construction projects must be designed for the maximum required level of performance. For the new 8-foot pavers, combined with the VÖGELE screed with front-mounted extending units and bolt-on extensions, the maximum performance in terms of paving width is 19 ft. 6 in. The high power, even when operating at this maximum paving width, is provided by a liquid-cooled 4-cylinder Cummins diesel engine, which even functions reliably under extreme climate conditions. The engine has an output of 173 hp at 2,000 rpm. When working in ECO mode, which is sufficient for most applications, the engine runs at a maximum of 1,700 rpm, further reducing noise emissions and fuel consumption.

### Laydown rates of up to 770 t/h

The entire material handling system of the SUPER 1700-3i and SUPER 1703-3i is also designed for high laydown rates, starting with the extra-large material hopper with a capacity of 14.3 tons, which allows easy and rapid transfer of material from the trucks. Even a truck hitch is available. Powerful, separate hydraulic drives for conveyors and augers provide for an optimum head of mix in front of the screed in every paving situation: They support laydown rates of up to 770 t/h. To transfer this performance onto the road, both pavers feature outstanding traction. For the SUPER 1703-3i wheeled paver, customers have a choice between a 6x4 and 6x6 drive. >>>

**Clean technology:**  
Thanks to a sophisticated exhaust aftertreatment system, machines with the suffix "i" for "intelligent emissions control" meet the strict regulations of the US EPA Tier 4i and 4f standards.

#### Performance highlights SUPER 1700-3i and SUPER 1703-3i

- › Powerful, latest-generation Cummins diesel engine delivers 173 hp
- › Maximum paving width of 19 ft 6 in. and high laydown rate of 770 t/h
- › Intelligent engine management with ECO mode further reduces the already moderate fuel consumption
- › Fast-running crawler unit or wheeled undercarriage increases productivity



## Outstanding quality: Modern features of the "Dash 3" pavers on board



**Ensures a perfect surface texture: Electric screed heating from VÖGELE. It effectively heats the screed plates and, thanks to intelligent generator management, reaches full output in a short amount of time.**

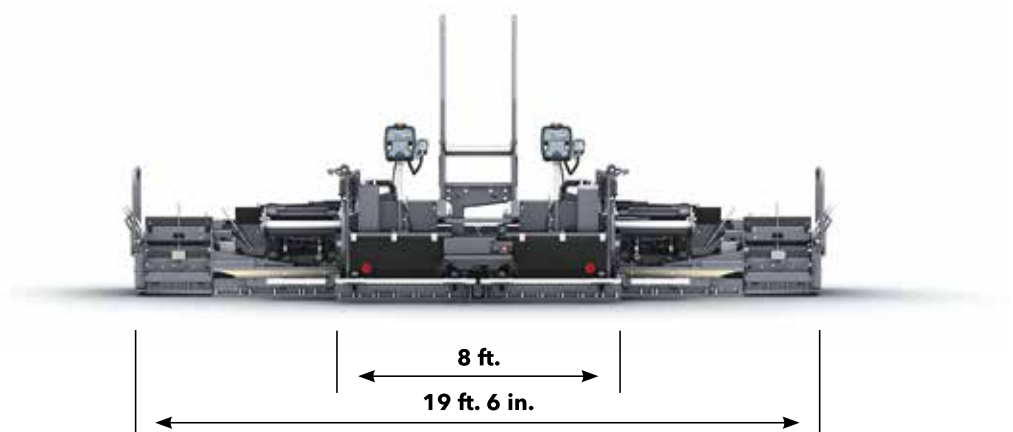
At VÖGELE, quality is always priority number one. And that applies to the durable, reliable and maintenance-friendly technology just as much as to the paving results these machines can achieve. The SUPER 1700-3i and SUPER 1703-3i further integrate many advantages that pay off under tough operating

conditions. For example, the material handling system that effectively counteracts thermal and mechanical segregation by such means as its cleverly designed material hopper, ascending conveyors and augers which are hydraulically height-adjustable by 6 in.



### **Stability combined with variability: VÖGELE VF 500 Extending Screed**

As the technology and world market leader, VÖGELE views the paver and screed as a single system, and closely coordinates the two during development. This is evident in the combination of the SUPER 1700-3i and SUPER 1703-3i with the front-mounted VF 500 Extending Screed. It features extremely high stability for maximum evenness and great variability. From the ErgoPlus 3 screed console, the screed width is rapidly and infinitely variable in a range from 8 ft. to 15 ft. 6 in. With bolt-on extensions, the screed builds up to 19 ft. 6 in. ///



**VF 500 V with 24 in. bolt-on extensions**

#### **Quality highlights of the SUPER 1700-3i and SUPER 1703-3i**

- › Outstanding paving results thanks to effective material management without segregation
- › Easy-to-fill and generously dimensioned material hopper supports uninterrupted paving
- › Clever details, such as hydraulically adjustable augers and a Power Tunnel ensure an optimum head of mix in front of the screed
- › VÖGELE front-mounted VF 500 Extending Screed with ErgoPlus 3 operating console for top-rated results

# **"We were impressed with this tracked paver."**



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A heavily traveled road winding through an idyllic landscape: The SUPER 1700-3i tracked paver resurfaces State Highway 74 in West Virginia.

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### **Pennsboro // West Virginia**

Heavy goods vehicle traffic is on the rise worldwide, increasing the strain on roads. One example of a road with heavy truck traffic is State Highway 74 in West Virginia. In the town of Pennsboro, the lanes had to be resurfaced for this reason along a 10-mile stretch. This was the perfect job for the new VÖGELE SUPER 1700-3i tracked paver from Kelly Paving, Inc., a subsidiary of Shelly & Sands, Inc., thanks chiefly to the high-traction, 14 in.-wide, rubber crawler tracks and electronically controlled separate drives. As a result, the 8-foot paver achieves paving speeds of up to 250 fpm and an impressive level of maneuverability and mobility. The ergonomic ErgoPlus 3 operating concept makes life a great deal easier for the paving crew. And that was a tremendous help for the team working in Pennsboro. >>>







**Job site details**

Resurfacing of a section of State Highway 74 in  
Pennsboro, West Virginia

Length of section: 10 mi.

**Working parameters**

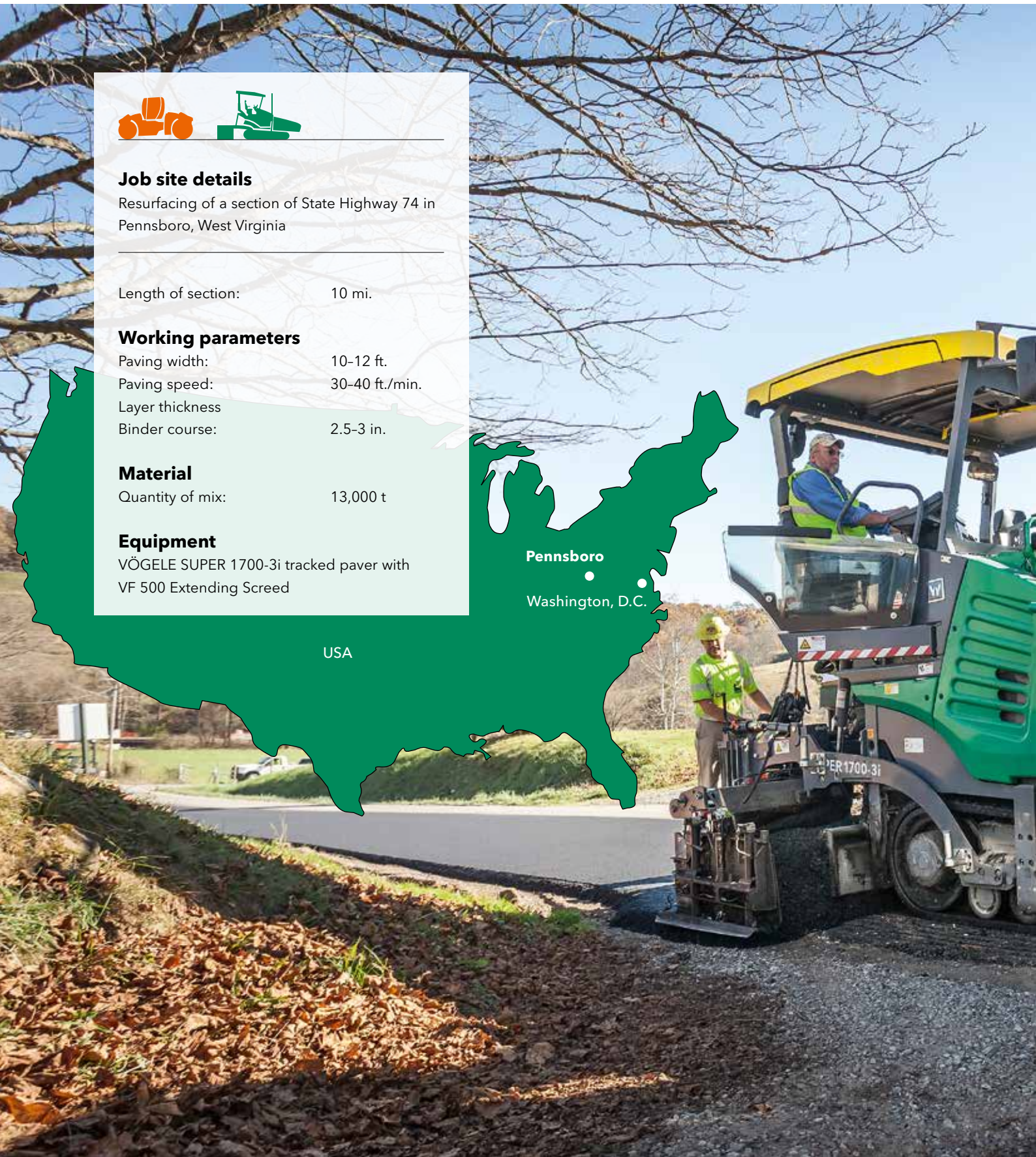
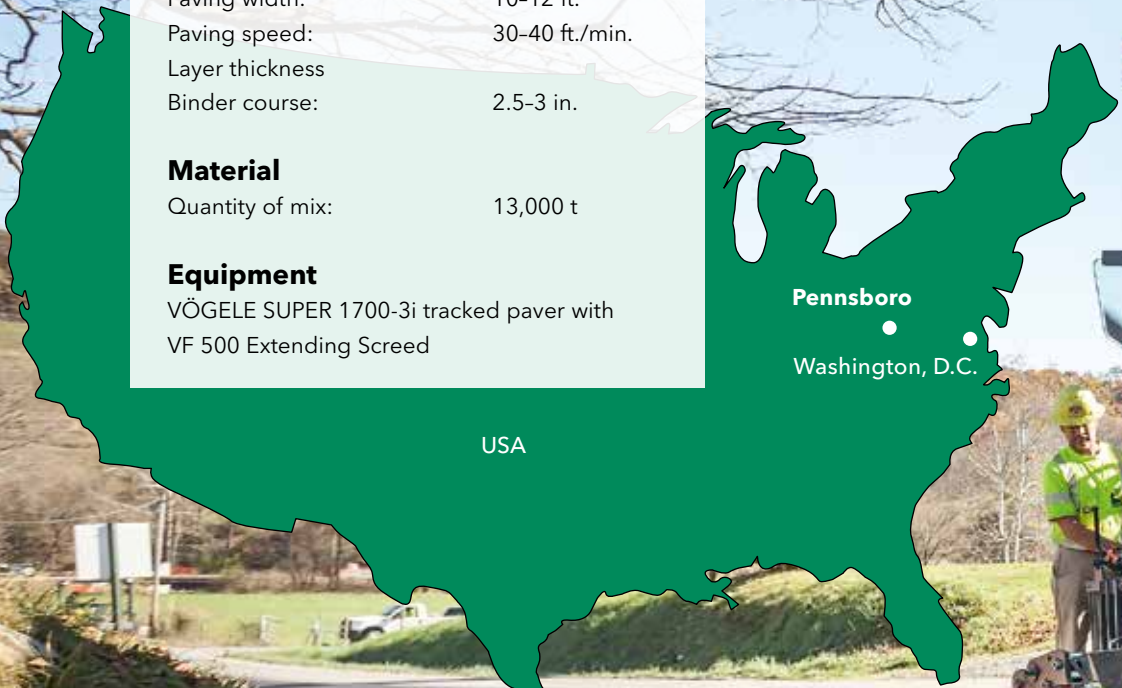
Paving width: 10-12 ft.  
Paving speed: 30-40 ft./min.  
Layer thickness  
Binder course: 2.5-3 in.

**Material**

Quantity of mix: 13,000 t

**Equipment**

VÖGELE SUPER 1700-3i tracked paver with  
VF 500 Extending Screed







Paves the highest quality roads:  
the VÖGELE VF 500 Extending Screed,  
with its sturdy single-tube telescoping system  
and infinitely variable paving width from  
8 ft. to 19 ft. 6 in. (with bolt-on extensions).

“

**ErgoPlus 3  
makes life easy!  
I thought the  
paver operator's  
console, which  
can be re-  
positioned even  
during paving,  
was really very  
practical.**

**Russel Matics, Paver Operator  
Kelly Paving, Inc.**

”



“  
**With the outstanding  
support of the  
WIRTGEN GROUP,  
it's super easy  
finding solutions.**

Steve Schlosser, Equipment Manager  
Shelly & Sands, Inc.

”







## Maintenance and service made easy

The SUPER 1700-3i scores with high productivity. One reason is the high machine availability made possible not least by the user-friendly maintenance and service concept, as confirmed by Steve Schlosser, Equipment Manager at Shelly & Sands: "The engine cowling is very wide, just like the service panels. That speeds up the maintenance process tremendously." What is more, sturdy and durable components made of wear-resistant materials minimize downtime. In critical cases, a VÖGELE service engineer can arrive on site in next to no time to advise and support paving crews. ///

### Highlights of the SUPER 1700-3i crawler tracks

- › Continuous rubber tracks, 14 in. wide, with self-aligning front idlers provide for optimal steering under any conditions
- › Powerful track drives and high engine output for maximum torque with no loss of power
- › Large footprint ensures maximum tractive effort and high flotation
- › The most advanced steering control in the industry provides precise straight-line tracking and smooth, accurate turns





USA

Washington, D.C. •

Millen •

**Greg Hendrix, Foreman and Paver Operator, in his element: Thanks to the excellent maneuverability of the new VÖGELE 8-foot wheeled paver, he can handle the machine with ease.**



# **"The high maneuverability is unbelievable."**



Mobile without a low-bed trailer: The new SUPER 1703-3i wheeled paver works on two job sites in Millen, Georgia, without a need for site-to-site transport.

Millen // Georgia

One of the many advantages of the VÖGELE SUPER 1703-3i 8-foot wheeled paver is its mobility. In Millen, Georgia, Ellis Wood Contracting, Inc. was able to complete two back-to-back construction projects without losing time, because it was not necessary to transport the paver on a low-bed trailer from the first job site to the second: Thanks to its wheeled undercarriage and permit for traveling on public roads, the SUPER 1703-3i can move fast at up to 12 mph. For residents of this residential and commercial area, that meant fewer backups, less stress, less noise.



Job site details

Resurfacing of two sections of a municipal road in Millen, Georgia

Length of section:	
Section 1:	450 ft.
Section 2:	1,200 ft.

Working parameters

Paving width:	8-12 ft.
Paving speed:	24 ft./min.
Layer thickness	
Binder course:	3-3.1 in.

Material

Quantity of mix:	7,000 t
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Equipment

VÖGELE SUPER 1703-3i wheeled paver  
with VF 500 Extending Screed  
HAMM HD+ 12 VV tandem roller



Screed operation with ErgoPlus 3: With the remote control units on the sides of the machine, users Anthony Hilton (left) and Dennis Butler (right) are mobile and can move ergonomically.





“ The new features  
make this Universal  
Class machine a truly  
SUPER paver. ”

**Anthony Hilton, Screed Operator**  
**Ellis Wood Contracting, Inc.**

### **Freedom of movement for users, thanks to ErgoPlus 3**

The SUPER 1703-3i also gives screed operators the freedom they need to move around. This freedom is due to two remote control units for the VÖGELE VF 500 Extending Screed, which form part of the ErgoPlus 3 operating system. With these remote control units, users can change vital functions, such as the paving width, even when standing next to the paver, thereby optimizing the precision of the results. Screed Operator Dennis Butler was thrilled with the feature: “The remote controls give the operator a large radius of movement so that he can always find the most effective working position in any paving situation.” >>>





After completing the first project, the SUPER 1703-3i travels at 12 mph under its own power to the second job site.

### Highlights of the SUPER 1703-3i wheeled undercarriage

- › Maximum power transmission thanks to separate, hydraulic drives
- › Drive options: 6x4 and 6x6
- › Electronic traction management ensures optimum tractive effort and protects the engine against overload
- › Permanent ground contact due to front wheels with proven, statically defined three-point support

### Pivot Steer for an extremely small turning radius

The new VÖGELE SUPER 1703-3i wheeled paver is highly mobile and not just on the road. Thanks to its outside turning radius of 21 ft. 4 in., it also displays excellent maneuverability on job sites, too. The Pivot Steer steering brake makes the VÖGELE wheeled paver even more agile: With this optional feature, the SUPER 1703-3i needs almost 50% less space to turn, namely only 11 ft. 6 in. This is a tremendous advantage, particularly on confined job sites, such as in downtown areas. ///



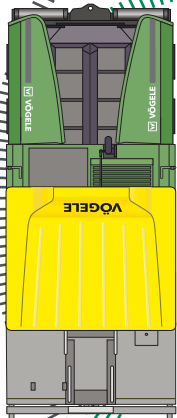


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**The new wheeled paver is also characterized by high precision in paving, and can travel under its own power.**

**Greg Hendrix, Foreman and Paver Driver  
Ellis Wood Contracting, Inc.**

”



**11 ft. 6 in.**

**Even masters tight turns:  
The outside turning radius of the  
SUPER 1703-3i wheeled paver  
is reduced to a space-saving  
11 ft. 6 in. with the Pivot Steer  
steering brake.**



**Learn more about the operating  
principle of Pivot Steer at:**  
[www.voegele.info/pivotsteer\\_en](http://www.voegele.info/pivotsteer_en)

# 100 miles day and night

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In San José, in-situ cold recycling with a WIRTGEN 3800 CR recycler proves to be the most economical solution.

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**ROAD  
WORK  
AHEAD**



One special challenge was that the job sites were spread over the entire downtown area of this highly-populated city.



## USA // San José

Time is money, especially in road construction. When it comes to cost efficiency, being able to put all equipment to maximum use is a critical factor. Consequently, it is a major advantage when a machine can be used flexibly, like the 3800 CR recycler from WIRTGEN, which can use the up-cut and down-cut cold recycling processes or operate as a high-output milling machine. Thanks to its diverse application options, the recycler fulfills unique construction specifications as required by an application or invitation to tender.

In California, the Golden State, the 950 HP powerhouse is recycling 100 miles of San José's main traffic arteries in-situ, together with a VÖGELE Vision 5200-2i tracked paver and HAMM GRW 280 Pneumatic Roller. With this in-situ method the 3800 CR works in the downcut mode, recycling the existing pavement while simultaneously injecting binder and transferring the recycled material by means of rear conveyor directly into the paver hopper.

## Down-cut method increases paving quality

The contractor, MCK Services Inc., elected to use the process for this job to achieve a particularly high level of paving quality. In the down-cut process developed by WIRTGEN, the milling drum rotates in the direction of travel, not against it as in the up-cut process. As a result, particle size can be precisely controlled when processing the material, especially on very brittle, thin, old asphalt roads.

## New load-bearing capacity for the streets of San José

One illustrative example is W. Campbell Avenue, a main road in San José, the heart of Silicon Valley. The WIRTGEN cold recycler first milled 4 in. of the damaged asphalt layer across a width of 12 ft. 6 in. in a single pass and granulated it. Two tank trucks propelled by the 3800 CR supplied it with the required binder







Washington, D.C.

USA

via hose lines. A microprocessor-controlled injection unit injected precise amounts of the hot bitumen, supplied in the form of foamed bitumen (2.5%), 1% cement and water into the mixing chamber. Ejectors positioned on the rotor then transferred the mix to the 3800 CR's conveyor.

Meanwhile, traffic in front of the Starbright Theater, at the corner of Fulton Street, continued to flow by the recycling train apparently undisturbed, thanks to the fact that pavement rehabilitation is completed in a single pass, without the trucks having to weave in and out of the lane. This increases safety and is a tremendous relief to the traffic system. >>>



### Job site details

Rehabilitation of main and secondary downtown roads in San José, California

Costs:	US\$ 13.7 million
Length of section:	100 mi.
Area of section:	2.4 million sq ft.

### Working parameters

Width of section:	12.5-16 ft.
Layer thickness:	4 in.

### Material

Quantity of mix:	55,599.5 US t asphalt
Percentage of foamed bitumen:	2.5%
Percentage of cement:	1%
Optimum moisture content:	5-7%

### Equipment

WIRTGEN 3800 CR cold recycling machine  
VÖGELE VISION 5200-2i paver  
HAMM HD+ 110 VV HF tandem roller  
HAMM GRW 280i-20 pneumatic tire roller



### Recycling train with the 3800 CR in rear-load mode (down-cut)

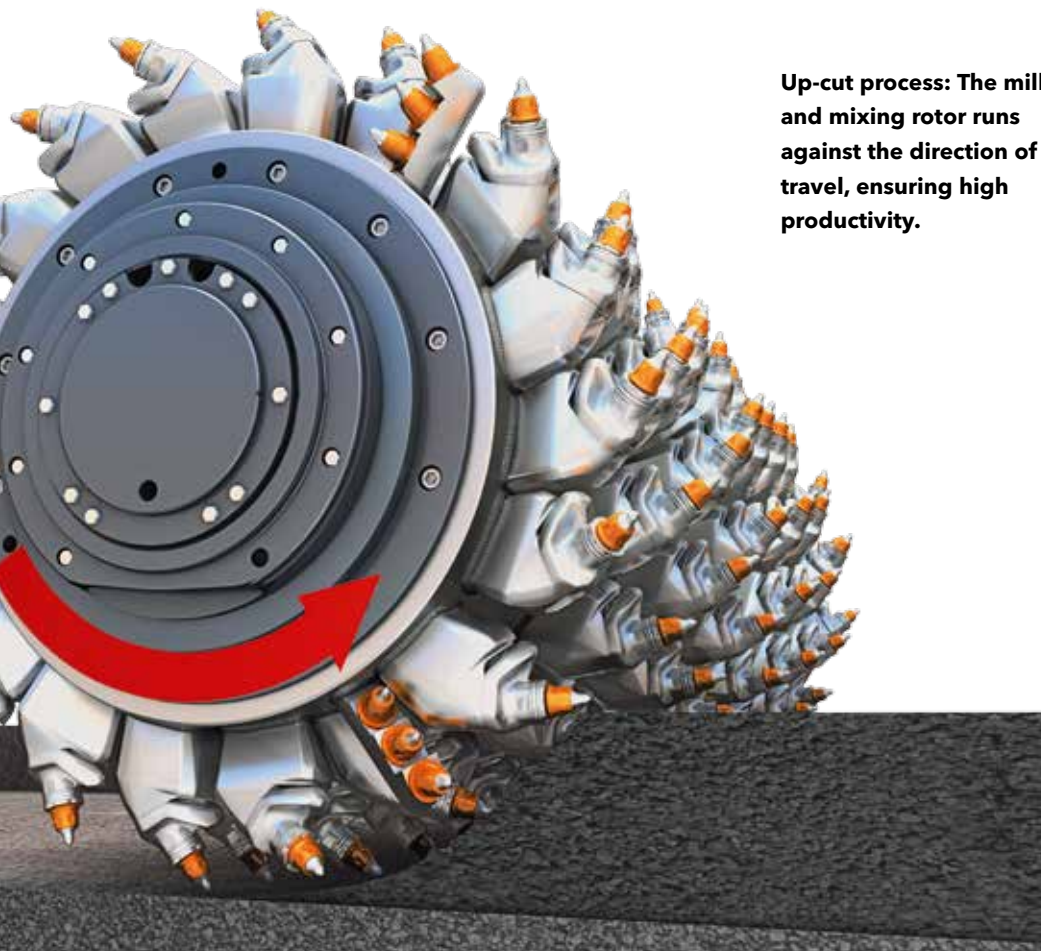
If necessary, a binder spreader first pre-spreads cement, followed by water and binder tank trucks. The milling and mixing rotor on the WIRTGEN cold recycler granulates the asphalt layers down to a dept of 7 in. At the same time, the cement is mixed in and the water and bitumen emulsion or foamed bitumen are injected into the mixing chamber by injection bars. The prepared material is fed directly from the discharge conveyor to the material hopper of the VÖGELE paver, which paves it true to line and level. HAMM rollers then take over compaction.

**” Cold recycling in-situ fulfills exacting quality requirements, is extremely economical, environmentally-friendly, and has the least impact on the public.**

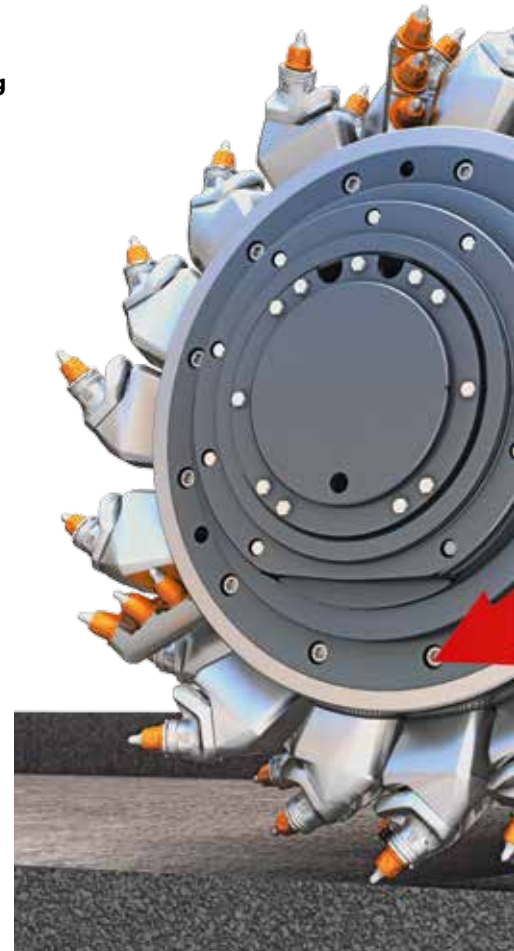
Frank Farshidi,  
Project Manager for the City of San José

**”**

Up-cut process: The milling and mixing rotor runs against the direction of travel, ensuring high productivity.



Working direction >>>



Working direction >>>



## Recycling train with the 3800 CR using the up-cut process

If necessary, a binder spreader first pre-spreads cement, followed by water and binder tank trucks. The milling and mixing rotor granulates the asphalt layers down to a depth of 6 in. At the same time, the cement is mixed in and the water and bitumen emulsion or foamed bitumen are injected into the mixing chamber by injection bars. After an auger spreads the prepared material across the entire

paving width, the VÖGELE extending screed paves it true to line and level. HAMM rollers then take over compaction.

When fitted with an extending screed, the 3800 CR can handle not only recycling in the conventional up-cut process, but also the down-cut process developed by WIRTGEN.



**Down-cut process: The milling and mixing rotor rotates in the direction of travel. This prevents large chunks of pavement from breaking off.**

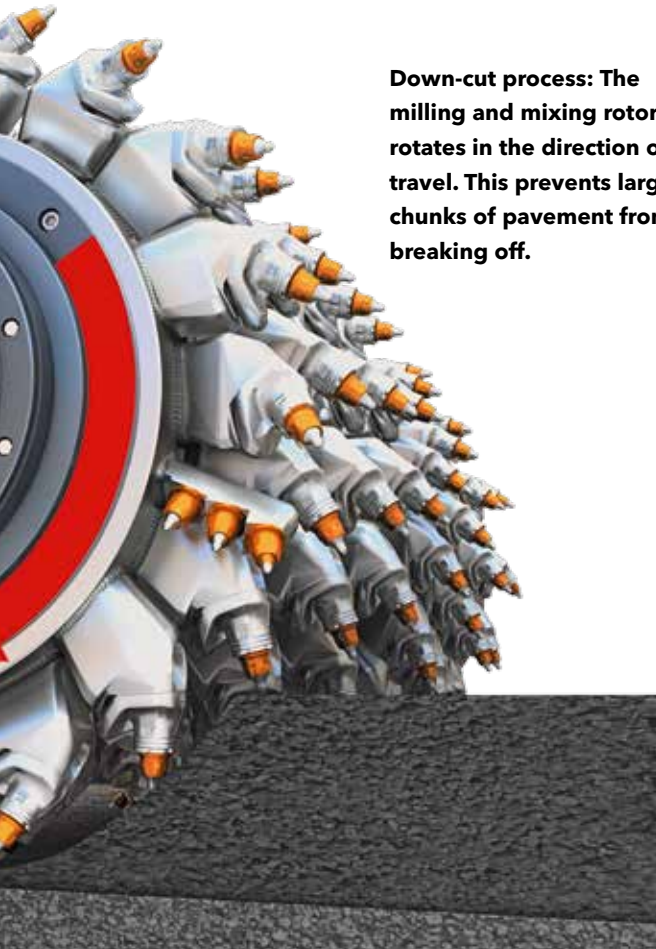


The WIRTGEN 3800 CR machine concept is geared to maximum output so that rehabilitation projects can be completed quickly. With this in mind, the conveyor system also has an extremely high conveying capacity. The slewing and height-adjustable conveyor rapidly transfers material to the material hopper on the tracked paver, which then places a 4-in. layer and precompacts the surface. The HD+ 110 VVHF tandem roller and GRW 280i pneumatic tire roller from HAMM perform final compaction, giving the road a closed, smooth surface texture.

## Cost-efficient and eco-friendly

After 100 miles and - thanks to in-situ cold recycling - a short construction time, Bob Garrigan, Superintendent at MCK Services, is pleased: "Thanks to the WIRTGEN 3800 CR, we were able to fully comply with the traffic and budget requirements stipulated by the City of San José."

In the end, the results speak for themselves: Some 9,600 fewer truck hours significantly reduced CO<sub>2</sub> emissions, fuel consumption and construction traffic on streets that receive between 12,000 and 35,000 vehicles daily. In total, the city saved some US\$1.5 million. ///



**Stark beauty: Road through the Valley of Fire State Park, Nevada, USA.**

