

FORUM

52

The **WIRTGEN GROUP**

Magazine

www.wirtgen-group.com

02/2016



Truly close to our
customers

The WIRTGEN GROUP - your reliable partner.

WIRTGEN / VÖGELE / HAMM / KLEEMANN / BENNINGHOVEN



“Our customers’ successful projects validate our efforts to continue concentrating on the development of innovative technologies, keeping our sights firmly fixed on our customers’ requirements in practical applications.”

Dear customers, staff and friends,

It has been an eventful and successful year. Together, we managed to grow sales by as much as 12%, generating a consolidated total sales volume of €2.53 billion – and setting another new record in the history of the Wirtgen Group. This result is the joint achievement of our strong, highly effective team, which is set to grow by the end of the year to include 7,500 employees.

Strong in Road and Mineral Technologies

In the last year, we not only grew sales, but also further expanded our market share worldwide with tailored product solutions, attaining world leadership in all five divisions of our Road Technologies business sector for the very first time. Our premium product brands Wirtgen, Vögele and Hamm focus entirely on their respective core competences. This strategy has enabled us to attain the top position in cold milling, cold recycling, concrete paving, asphalt paving and asphalt compaction.

In our Mineral Technologies business sector, too, we achieved systematic further development and were also able to further expand our market shares. We are purposefully working towards the high growth targets we have set for our Kleemann and Benninghoven product brands. We will further increase our efforts and focus our strategy on the goal of doubling our sales in the Mineral Technologies business segment in the medium term.

Innovative technologies and a wide range of services

Our excellent results make us all the more determined to continue giving our full commitment to further developing our innovative, leading-edge product range. Collaborating with our customers in a spirit of partnership forms the basis of our success. Feedback from the field and open exchanges are an intrinsic part of the further development process for our products, technologies and services. It is this which has enabled us to expand our range of products and services so systematically in recent years.

Collaborating with customers in a spirit of partnership

The key pillars of our worldwide service activities include reliable support and a seamless supply of spare parts, as well as intensive consulting – also on special applications – and the high specialist competence of our staff. The job reports in this issue of FORUM demonstrate that, despite the large size our corporate Group has now attained, we still retain the flexibility and passion to develop special solutions in collaboration with our customers.

We are and we remain a partner to the construction industry. All around the world, our customers can rely on our specialists to support them as partners with any matters concerning

our machines and their economical operation. Closeness to our customers is always our top priority.

Sustainable investment strategy

In order to increase our efficiency around the world, we are continuing our enduring investment strategy. This is why we are currently enlarging our organization consequently with an investment of some €250 million. We are investing into our German brand headquarters, the expansion of our factory for crushing and screening plants in Göppingen and the construction of a new state-of-the-art factory for asphalt mixing plants in Wittlich. Additionally, we continue to push ahead with the extension of our worldwide sales and service network by means of new projects so that we will be able to support our customers on-site even better. With targeted recruitment and special vocational and advanced training measures, we ensure that our customers can rely on the professional support of a competent contact whenever, wherever. Flip to page 56 to find out how we help our own young talents shape up at our German brand headquarters.

These measures will combine to secure our future. A future that we will be embarking on with a highly professional team: with our employees around the world, who do their best, showing passion and determination, day in, day out.

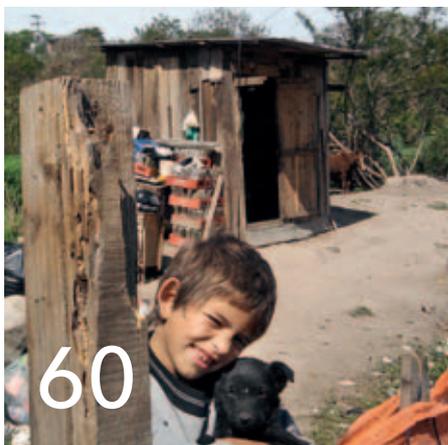
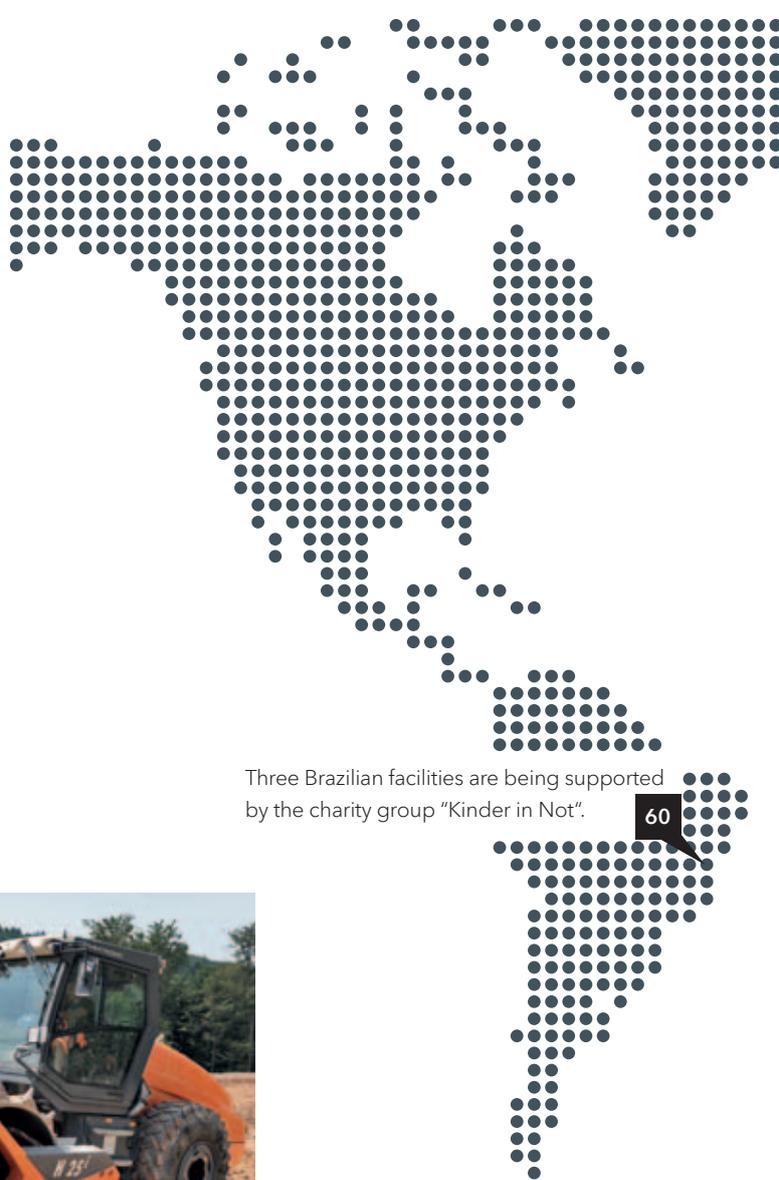
Truly close to customers

The Wirtgen Group is growing and evolving purposefully. But we continue to hold fast to our values and our virtues. Our pledge, “Close to our customers”, will remain with us as we move into the future. As always, you will be able to count on our leading-edge products and our excellent service. We will remain your reliable partner in our Road and Mineral Technologies business sectors. We would like to thank our customers for the confidence they have shown us in the past 12 months and look forward to continuing our cooperation in a spirit of partnership.

Our warmest wishes,

Stefan Wirtgen

Jürgen Wirtgen



TRADE FAIRS + EVENTS

- 40 **Bauma China 2016**
50 exhibits for maximum customer benefit.



FORUM 52 focuses on true closeness to our customers. Working together with its customers, the Wirtgen Group develops solutions that make all the difference in practice.

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Working on the basis of an open, partnership-based dialogue with its customers, the Wirtgen Group develops technologies which have a key impact on road construction.

The Wirtgen Group attended bauma China with all five product brands for the first time.

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PUBLISHING DETAILS

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"The Hamm machines are extremely reliable."

Jeffrey van der Putten, Construction Manager of BAM Infra bv

"With the InLine Pave train, we have wonder of versatility in our fleet."

Bernd Malcharek, Managing Director of Rask Brandenburg GmbH

"Opting for Benninghoven was an easy decision for us in view of the high level of quality."

Wolfgang Steiner, Head of the Civil Engineering Division at Hitthaller+Trixl



WIRTGEN GROUP JOINT DEVELOPMENT OF INNOVATIVE TECHNOLOGIES

Strong partners

Being truly close to our customers is a top priority in the Wirtgen Group. With customers as their partners, the experts in the corporate group develop solutions that make a real difference in practical applications.

"We have been relying for years on Kleemann plants."

Christoph Stingel,
Managing Director
of SBR Stingel
Baustoffrecycling
GmbH

"I know that I can rely fully on Wirtgen's solution competence."

**Kay Petersen, Man-
aging Director of
VSB infra GmbH &
Co. KG**



WIRTGEN: PARTNERSHIP WITH VSB INFRA

Competence in concrete

Special solutions are standard for concrete paving projects. Wirtgen slipform pavers are therefore planned by a team in collaboration with the customer, and then manufactured according to the customer's specifications.



“Quality is decisive for me and this is what Wirtgen delivers. A good relationship is founded on trust - in both business and at home.”
Kay Petersen,
CEO of VsB infra GmbH & Co. KG



From 80, 60, 50 and 30 to 15. What sounds like a number sequence from math classes is actually a combined offset mold that Wirtgen developed for VSB infra GmbH & Co. KG. As usual, CEO Kay Petersen initially approached Martin Datzert, Sales Advisor at the Wirtgen Group sales and service company, Wirtgen Windhagen. "We've known each other for 17 years now. This has created a basis of trust. I know that I can rely fully on Wirtgen's solution competence."

Supporting partners

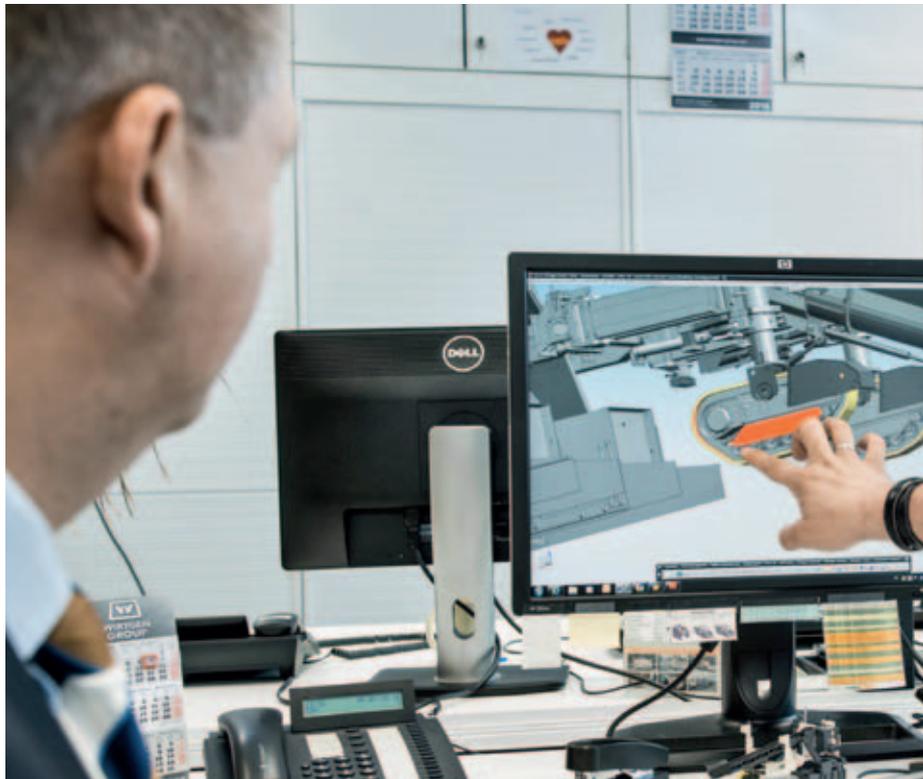
To be able to react quickly to construction projects and their varying requirements, Petersen was looking for a way to use his 1.10m-wide offset mold in a flexible manner. "We used to have around six weeks from the time the order was placed to the start of construction work, but now our slipform pavers have to be on the job site in the space of two weeks," comments Petersen, pointing out the increasing demands when it comes to response times. The Wirtgen solution: inlays with different widths. "With these inlays, our customers can quickly and simply reconfigure their offset molds with a modular insertion concept to suit requirements," Datzert explains. Though this custom design initially involved additional costs, Petersen did not hesitate for a second: "The special solution is in constant use and has long since paid off."

In addition to the specialist expertise, he also commends the way that Wirtgen develops solutions. "The projects are closely coordinated with us and **we are regularly informed about their progress,**" the CEO adds, describing cooperation with the construction machine manufacturer. He appreciates the way that Wirtgen's track-proven process chain is immediately triggered at the brand headquarters when an enquiry is received.

Creating solutions

The first step is for the product manager to gain an overview of the framework conditions. "It's important to know each piece of the puzzle - from the application requirements through to transport specifications - and to meticulously document all information. Only then can we offer a suitable solution," says Martin Datzert.

Before this is possible, the Wirtgen designers have to investigate the feasibility of various ap-



The Wirtgen design department is the hotbed from which innumerable special solutions have sprung. What starts with a theory and a CAD drawing on the PC (1) is then put into practice by the manufacturing specialists in production (2).





25

MACHINE MODELS

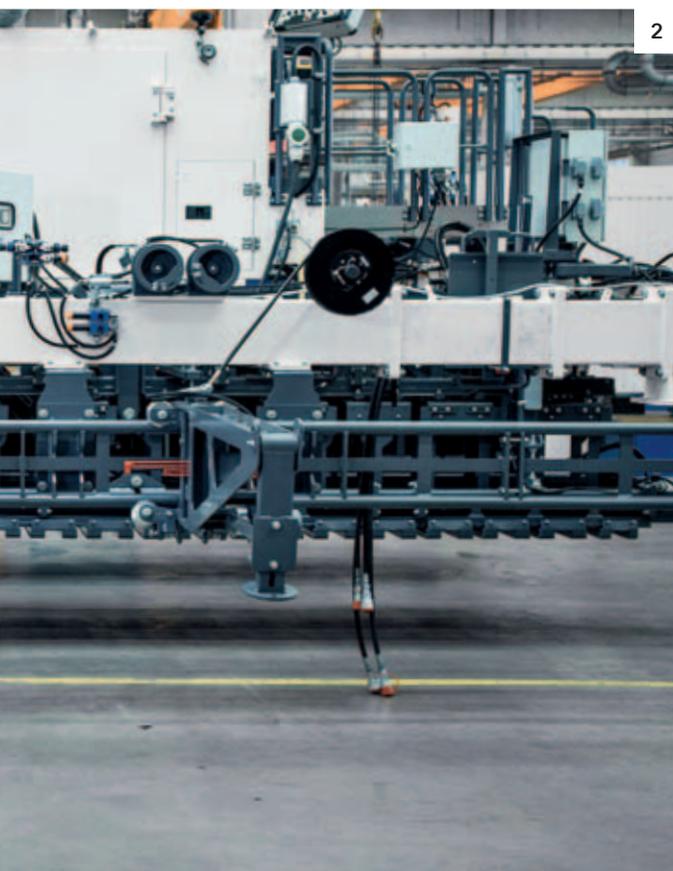
are included in the Wirtgen concrete paving portfolio – not including special designs.

16,000

MILLIMETER-wide road surfaces are an easy job for the slipform pavers in inset mode.

2,200

MILLIMETER-high monolithic profiles can be paved by Wirtgen concrete pavers in offset mode.



proaches. Markus Zimmermann, Development and Engineering Design department: “We have a great deal of experience in developing special solutions for slipform pavers” – experience we acquired while tackling the wide range of demands that concrete paving involves.” Be this as it may, finding ways to fulfil new customer wishes presents the applications specialists with a never-ending series of exciting challenges. Quite often the customer’s ideas are so precise that they even bring their own sketches with them. Kay Petersen also had a drawing in his briefcase at the time. “Our partners know what they want. Ultimately, clear specifications of any kind help us to achieve ideal results with the best level of quality.” This is something Zimmermann and Datzert agree on.

Safeguarding quality

In another special project, the task was to design for the customer a slipform paver that was able to lay down two concrete tracks for a rail track bed in a tunnel. This was not possible with a standard slipform paver. Wirtgen came up with three possible solutions. The customer finally opted for the version that featured a SP 25i as the basic machine, since it can be used flexibly as a small inset/offset paver and because its compact dimensions gave it the necessary maneuverability for tunnel work.

However, to be able to pave both concrete tracks in one pass, it was necessary to completely reconfigure the standard slipform paver in a number of places.

These modifications were required as the SP 25i was to pave the first track in inset mode, which means between the crawler units; the second track was to be laid down in offset mode, which involves mounting the mold outside the crawler tracks. The material is fed by a truck that unloads the fresh concrete into the conveyor auger located at the front of the concrete paver. To enable simultaneous loading of both molds, the Wirtgen engineers developed a special design in which a curved loading chute was mounted on the side beam of the SP 25i. This evenly distributes the concrete transported by the conveyor auger to the chute among the two molds. “One major challenge was to maintain the flow of material to the molds in the bends, even on very steep slopes, as concrete only flows at angle of more than 60°,” Zimmermann explains. The design engineers were able to satisfy these 



Our partners know what they want. Ultimately, clear specifications of any kind help us to achieve ideal results with the best level of quality.”
Martin Datzert,
Sales Advisor,
Wirtgen Windhagen

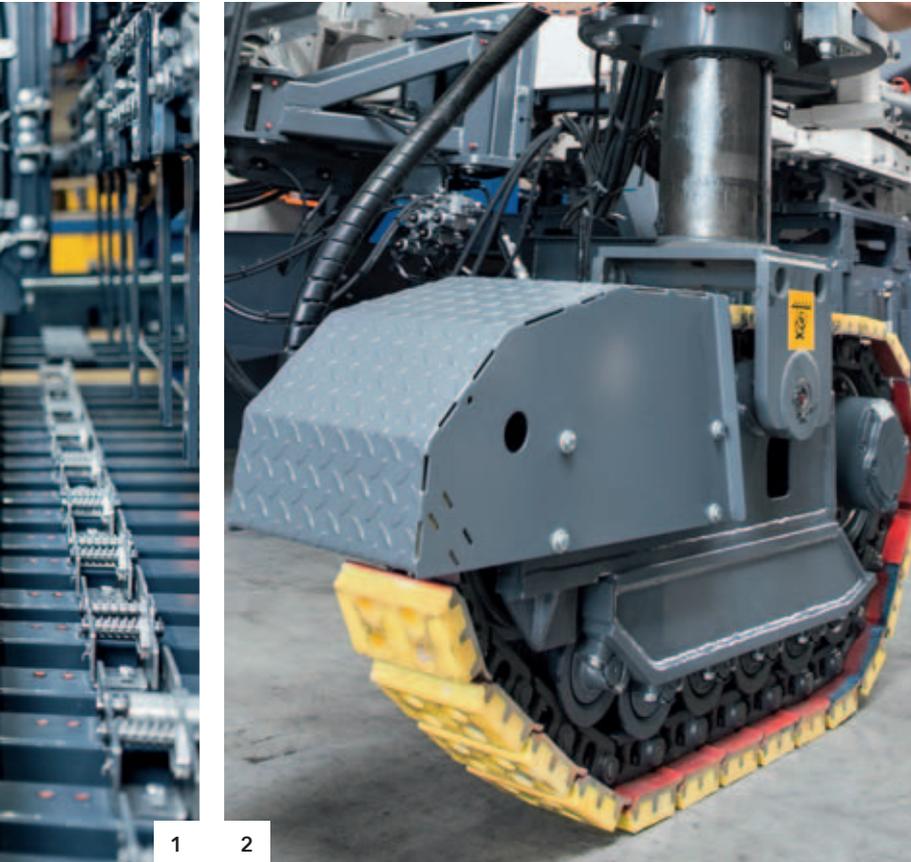


Kay Petersen (r.) talking shop with Master Craftsman Thomas Buchholz and discussing the Wirtgen concrete paver’s operating concept during his visit (1). On the SP 25i special solution, the crawler units are 160 mm higher than on the standard version (2).



Our team is made up of specialists who know all about special solutions.”
Thomas Buchholz,
Wirtgen Master
Craftsman for
Slipform Pavers





Special solutions such as the SP 25i with a double mold and higher crawler units are also of interest to CEO Petersen. "I can turn to Wirtgen at any time and be sure to find the right solution." (3/4)

customer demands, too, with suitable modifications to the curved loading chute.

The inset mold was also modified to adapt it to the inside of the track due to the slope requirement. As platforms for the rail network already exist at regular intervals, the offset molds have a flatter design than the standard molds. This enables the slipform paver to reach under the concrete profile for the platforms with the offset mold. In addition, modifications to the crawler units were necessary to meet the requirements of this application. The advance motor protection on the outside of the standard version of the SP 25i had to be mounted between the crawler units due to the confined conditions in the tunnel. Each of the crawler units are now 160 mm higher to prevent the advance motor protection from protruding into the concrete profile.

From professionals for professionals

As soon as the customer gives the green light for production of a special solution, the professionals in production take over. In this case, the SP 25i was rolled into the production hall for special machines. Thomas Buchholz, Master Craftsman for Slipform Pavers, can rely unconditionally on his production team: "We have an experienced team that has built countless slipform pavers. For us, special solutions are all in a day's work. Every move is fast and accurate."

VSB infra has also executed various rail projects. CEO Petersen was therefore particularly interested in taking a closer look at the special SP 25i solutions during his visit to the Windhagen works. "The demands involved in concrete paving present construction companies and machine manufacturers with a constant stream of new challenges. This is why I am really glad to have the support of such a strong and reliable partner as Wirtgen. Until now we have met all challenges together." □

➤ www.wirtgen.de/slipform-pavers



“Thanks to the exemplary support and implementation of the investment, we had absolutely no difficulties at any time.”

Bernd Malcharek,
President,
Rask Brandenburg
GmbH

VÖGELE: CUSTOM SOLUTION FOR RASK

Team. Works!

Vögele fulfills the wishes of its customer, Rask Brandenburg GmbH, for maximum flexibility by combining its leading InLine Pave and SprayJet technologies.

Innovative, leading technology at work: Rehabilitating the lanes on Highway A 113 in Berlin with the Vögele InLine Pave train; in the middle is the new SUPER 2100-3i IP paver for placing binder course.



Partnership shows its real worth when both sides have to pull together to master challenges, especially in cases where the road to arriving at a solution is long and arduous. The customer inquiry that came in for an InLine Pave train incorporating the SUPER 1800-3i SprayJet as the surface course paver was just such a challenge. Together with the customer, Rask Brandenburg, and the Wirtgen Group office in Zwickau, Joseph Vögele AG engineered a solution that can justifiably be called a wonder of versatility, because by investing in the special InLine Pave train - comprising an MT 3000-2i Offset PowerFeeder, a SUPER 2100-3i IP paver for placing binder course with the AB 600 TP2 Plus screed, and a SUPER 1800-3i SprayJet as the surface course paver - Rask Brandenburg combines Vögele's leading innovative technologies in one system. The advantages are unbeatable: With this machine technology, the construction company **can place compact asphalt pavements in a hot on hot process, or pave thin overlay on spray seal, hot on hot** - two rehabilitation methods that are gaining ground worldwide.

In shape for the future

In many countries, construction companies are hired to rehabilitate existing roads much more frequently than to build new ones. In addition to the conventional process of milling off and replacing the asphalt pavement, compact asphalt pavements and thin overlay are two other methods made possible by Vögele and its specially developed machine technologies. **Vögele combined these two innovations into one** for Rask Brandenburg. "Our company specializes in unconventional road construction projects. We had gotten together to brainstorm and think of a way to increase our flexibility based on our machine technology, and to position ourselves strategically for the future. In other words: How could we manage all kinds of jobs, from compact asphalt pavements to spray applications, by means of a single investment?" explains Bernd Malcharek. "We then took our concerns to the team headed by Ray Löffler, Managing Director of the Wirtgen Group in Zwickau. Under the guidance of Vögele's Engineering department we worked out a really great solution."

"The inquiry created quite a buzz among my team in the Engineering Office," adds Steffen Fick-

InLine Pave technology

Paving the binder and surface courses hot on hot in a single pass accelerates the paving process, reduces costs and improves road service life.

SprayJet technology

With the SUPER 1800-3i SprayJet spray and standard paver from Vögele, bitumen emulsion can be pre-sprayed and overlaid with a thin asphalt surface course, all in one pass.

eisen, Project Manager in Development & Engineering at Vögele. "The idea is the perfect solution when you need maximum flexibility." The greatest challenge on the project was integrating a water spray system and wider crawler tracks into the already complex technology of the SUPER 1800-3i SprayJet spray and standard paver. Both systems are required if the machine is to be used as a surface course paver in the InLine Pave train: The water prevents mix from sticking when traveling over the freshly placed binder course, while the wider undercarriage prevents the machine from sinking into it. "Developing solutions that help customers to advance and be successful are totally enriching to our work," Fickeisen says.

Just a few weeks after shipment, the SUPER 1800-3i SprayJet **had already clocked 600 operating hours**, - all of them spent on spray paver jobs, i.e. hot on hot jobs using InLine Pave technology. "The future belongs to this process. Construction projects can be completed quickly, and that benefits traffic flows. They are cost-efficient, in part because the step of pre-spraying emulsion is entirely eliminated. And the results are high-quality, because the bond between layers is outstanding," summarizes Roland Schug, Head of Marketing at Vögele.

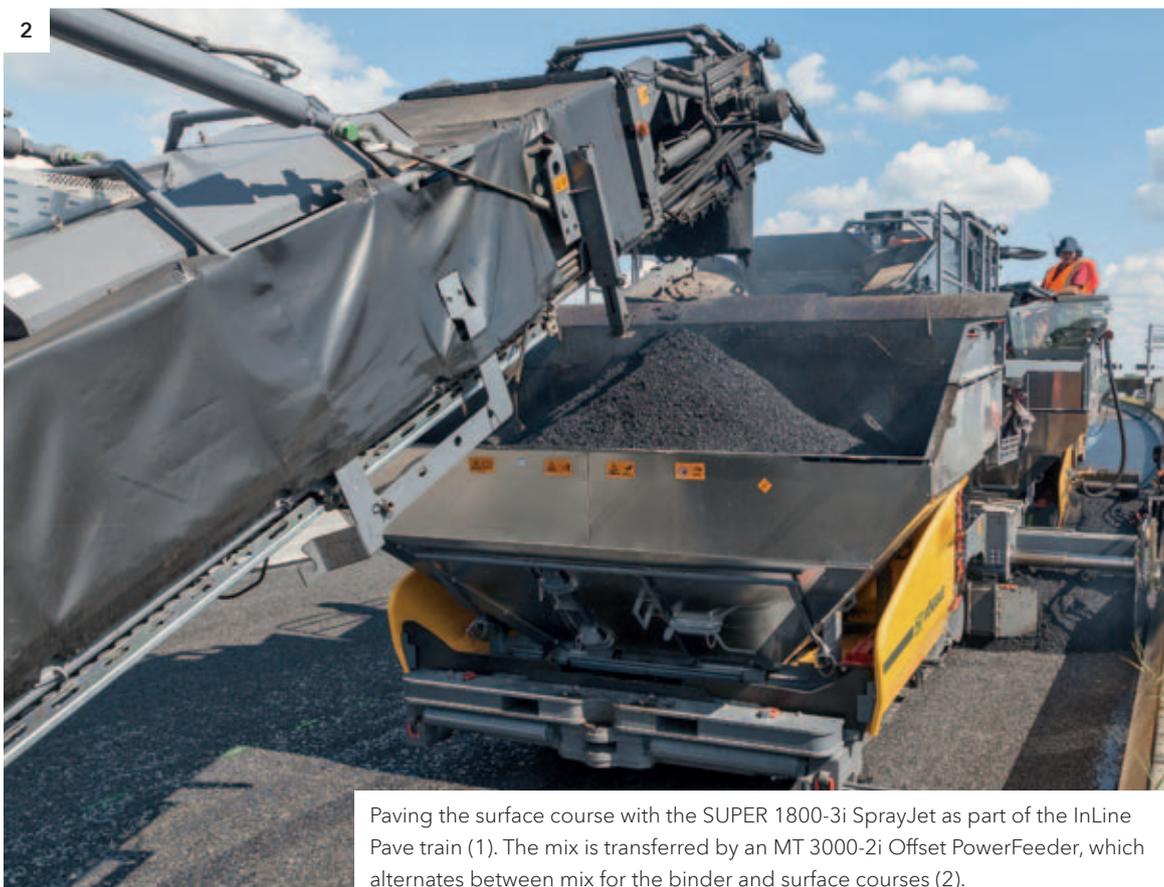
InLine Pave is on the way up

In the InLine Pave process, the binder and surface courses are paved hot on hot in a single pass. In other words, the two Vögele pavers work "in line," with just a few meters between them, so that one lane can remain open to traffic. A Vögele MT 3000-2i Offset PowerFeeder with pivoting conveyor and automatic distance control ensures a continuous supply of material. The paver operators can therefore concentrate entirely on paving.

The central technological component of the InLine Pave process is the SUPER 2100-3i IP paver for placing binder course. Apart from the innovations of the latest "Dash 3" paver generation, this advanced machine has an entirely redesigned transfer module whose heated conveyor system has been extended by 1 m. It transfers the mix for the surface course to the downstream paver. At a defined point, the new transfer module can easily be removed, a feature that boosts the machine's capacity utilization. Furthermore, two operator's platforms and an insulated receiving hopper are now standard features. →



1



2

Paving the surface course with the SUPER 1800-3i SprayJet as part of the InLine Pave train (1). The mix is transferred by an MT 3000-2i Offset PowerFeeder, which alternates between mix for the binder and surface courses (2).

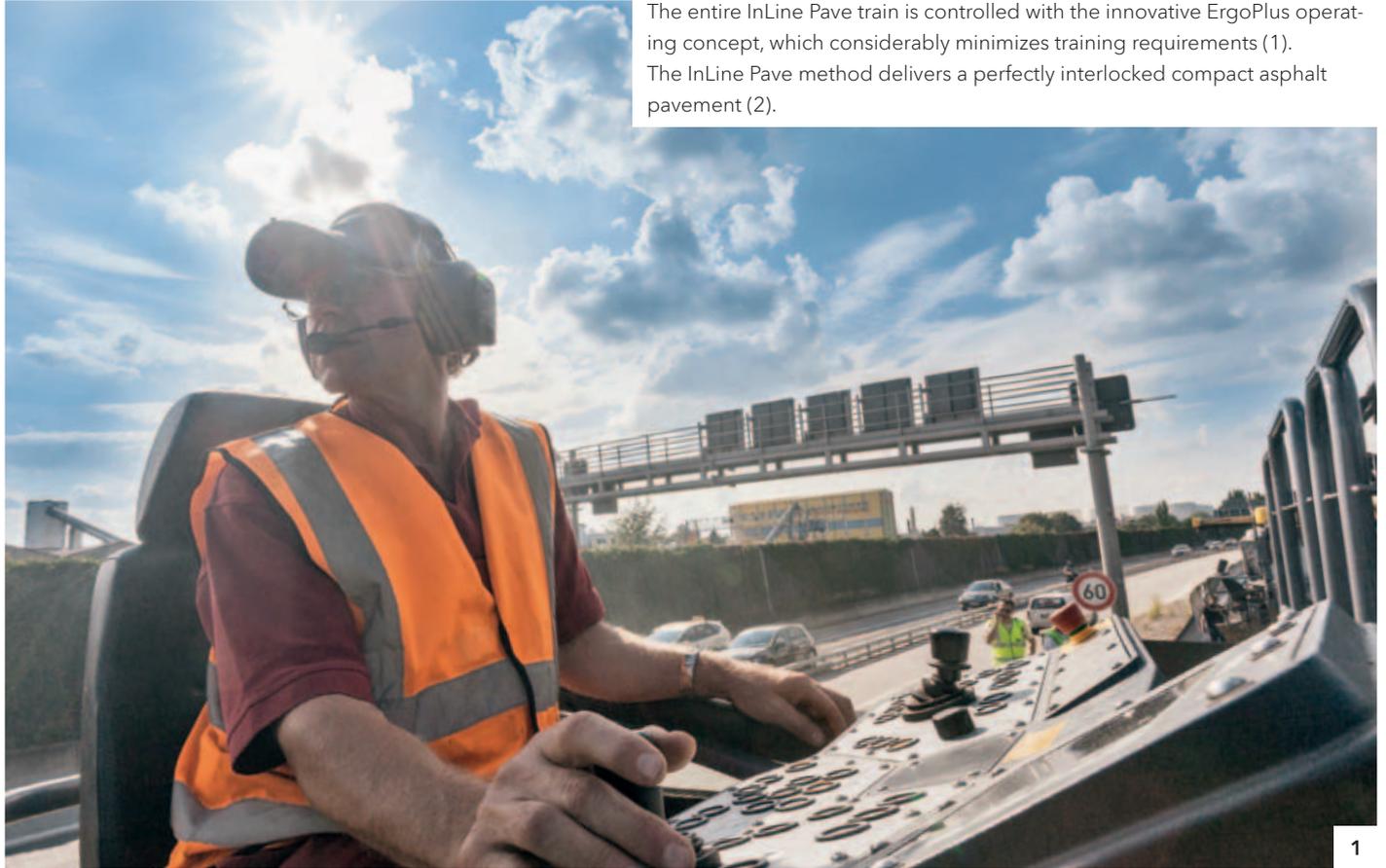


“The flexibility that results from combining these two leading technologies couldn’t be greater.”
Steffen Fickeisen,
 Project Manager,
 Development &
 Engineering, Joseph
 Vögele AG

600

OPERATING HOURS

just a few weeks
 after shipment
 – clocked by the
 SUPER 1800-3i
 SprayJet .



The entire InLine Pave train is controlled with the innovative ErgoPlus operating concept, which considerably minimizes training requirements (1). The InLine Pave method delivers a perfectly interlocked compact asphalt pavement (2).



“Advancements like this are one of the main reasons why more and more companies are choosing InLine Pave,” explains Ray Löffler, Managing Director of Wirtgen Zwickau, who is responsible for Rask Brandenburg GmbH. “The InLine Pave process is fully developed and increasingly winning over the market.”

Equipped with an AB 600 TP2 Plus screed, the SUPER 2100-3i IP paves such a highly compacted binder course that the surface course paver can travel over it without prior rolling. This is made possible by another core innovation: **High-compaction technology with Vögele’s unique pulsed-flow hydraulics.** In this step, the asphalt is pre-compacted during paving by a tamper and two pressure bars.

Winning advantages

For Rask Brandenburg, Vögele adapted the technology on the SUPER 1800-3i SprayJet in such a way that the machine can take over the job of paving the surface course in the InLine Pave train. The machine operates here in the conventional manner, i.e. not in spray mode. This is because the hot on hot method achieves a perfect bond between layers and strong interlocking, even without spraying bitumen emulsion. For spray applications, the paver is equipped with a removable SprayJet module, which enables it to simultaneously pave and spray the emulsion **without the formation of spray mist.**

After the surface course is paved (by the SUPER 1800-3i SprayJet in the case of Rask), rollers are used as usual to achieve final compaction. A demonstration on Highway A113 in Berlin proved just how well the high-tech machine systems from Vögele work together: The paving train rehabilitated several sections totaling 2 km in length, which were opened to traffic on time for the end of the summer school vacation on 3 September. A start to finish victory, thanks to outstanding teamwork. ■



“Only suppliers who are close to their customers can deliver tailored solutions. That’s exactly what makes the Wirtgen Group stand out: We are real challenge managers.”

Ray Löffler, Managing Director of the Wirtgen Group in Zwickau



AT A GLANCE

Leading innovative technologies from Vögele

SMART TECHNOLOGY

The InLine Pave train with the SUPER 1800-3i SprayJet for the surface course:

- Feeder MT 3000-2i Offset
- SUPER 2100-3i IP paver for placing binder course
- AB 600-2 TP2 Plus High-Compaction Screed
- SUPER 1800-3i with SprayJet surface course paver

www.voegele.info

HAMM: INNOVATION PARTNERSHIP WITH BAM INFRA BV

Hamm flying high

For the Eindhoven airport project, BAM Infra is placing its confidence exclusively in Hamm technologies. In addition to the rollers, support from the Wirtgen Group as well as direct contact to the brand headquarters clinched the deal.



"The Vögele and Hamm machines are extremely reliable, and the service of Wirtgen Nederland is fast and professional."

Jeffrey van der Putten, Construction Manager of BAM Infra bv

At Eindhoven Airport, the Dutch construction company BAM Infra bv compacted the surface course of the 3 km-long and 45 m-wide runway with 25 Hamm rollers. Impressed with the technically mature solutions, outstanding customer support from the subsidiary and active contact with the brand headquarters, BAM Infra works exclusively with pavers and rollers from the Wirtgen Group. The company was therefore able to compact the surface extremely homogeneously with ten state-of-the-art, pivot-steered Hamm tandem rollers of the DV+ series, equipped with an oscillating drum and HCQ Navigator, as well as fifteen HW 90B static rollers.

Paving an asphalt surface with a thickness of 4 cm over an area of 135,000 m² without joints in one pass is not an everyday task. However, this was exactly the job involved in the project to rehabilitate the central runway of Eindhoven Airport, the second largest in the country. The runway is used for both civilian and military purposes. With this in mind, the Ministry of Defense commissioned the project, placing very high demands in terms of quality.

10,500 tons of asphalt in one pass

The technical and organizational highlight of the project was paving the surface course: Using nine Vögele pavers of the “Dash 3i” generation, BAM Infra laid down a total of 10,500 t of asphalt “hot to hot” in one pass. Hamm rollers were used for compaction: 10 tandem rollers (5 x DV+ 70i VO-S, 5 x DV+ 90i VO-S) with the HCQ Navigator, the Hamm measurement and documentation system, as well as 15 HW 90B static three-wheeled rollers.

BAM Infra nowadays only uses pavers and rollers supplied by the Wirtgen Group for asphalt paving: “Our fleet used to contain machines from a number of manufacturers. In 2014, we decided to focus on one brand. Our aim was to bring the best available technology to the job sites and to optimize service, maintenance and repairs. As part of this drive, we also asked our workforce which brand they preferred. The answer was unanimous: Vögele and Hamm. We also know that the machines are extremely reliable, service is fast and professional and that working with Wirtgen Nederland is extremely straightforward,” comments BAM Project Manager Mark van Duuren while his machines are busily rehabilitating the runway in Eindhoven. When selecting the Hamm tandem rollers, BAM Infra focused on the pivot-steered models with oscillation, the DV+ 70i VO-S (7 t) and DV+ 90i VO-S (9 t). **The latest generation of pivot-steered rollers is equipped with the prize-winning Easy Drive operating concept and the intelligent Hammtronic machine management system.** BAM Infra has been using the HCQ Navigator since the beginning of 2016. The satellite-controlled system records all the main compaction parameters and the compac-



“In 2014, we decided to focus on one brand. Our aim was to bring the best available technology to the job sites.”

Mark van Duuren, BAM Project Manager

tion progress of the rollers, while showing the operators exactly where compaction is sufficient and where it is still required with live feed on a panel PC. If several rollers are linked by WiFi, all operators can see how far the entire team of machines has already compacted. This prevents over-compaction and under-compaction, the surface is compacted very homogeneously and a large number of passes are eliminated.

The system also records all data. This is then available for subsequent analysis and documentation. “When we applied for the Eindhoven project, we had to explain how we would guarantee the quality. The HCQ Navigator impressed the customer as a quality management system. For us, it is also suitable for documenting the projects,” explains Project Manager Jeffrey van der Putten, underlining two important aspects of the HCQ Navigator.

Training as a key to success

Handling the HCQ Navigator is now already an everyday job for the BAM roller operators, as they regularly use the system. In-depth training and induction was the responsibility of Wirtgen Nederland. Sales Manager Roel Vissers comments: “At the beginning of this year when the new DV+ rollers had been supplied to BAM Infra, we held a training course to show all roller operators how to work with the new rollers. Installation, programming and use of the HCQ Navigator were included. At the beginning of the season, we also accompanied all seven BAM Infra paving teams on the job site for one day. On site, we were able to answer the kind of questions that only arise when the operators are working with the devices. The HCQ Navigator has a modular design, which offers a great deal of flexibility. Accompanied by Hamm application technicians, BAM Infra →

therefore put the HCO Navigator through intensive tests in the summer of 2015. The results were evidently impressive, as the company subsequently ordered all new rollers ex works, with preliminary set-up for the HCO Navigator. It permits activation of the system in each roller in a few simple steps. The company initially ordered five HCO systems.

For the project in Eindhoven, BAM Infra then leased five additional systems through Wirtgen Nederland. **The Dutch company was hence the first to use ten rollers with the HCO Navigator on a single job site - another world first.** "As professionals, the BAM Infra planners took the safe route in Eindhoven and allocated the rollers to two different WiFi systems. This worked out really well," commented Mark van Haafden, Service Technician at Wirtgen Nederland. He oversaw the project on the site and added: "As expected, the ten-roller system came through its baptism of fire and operated perfectly."

Innovation dialog with the customer

BAM Infra is one of the most innovative construction companies in Europe and continually optimizes equipment, technologies and processes to enhance their efficiency, sustainability and environmental friendliness. In addition to spotting new developments, this also means daring to try something new. To stay on the ball in asphalt paving, the Dutch company maintains regular contact with the Hamm Product Management. They compare notes on alternative technologies, discuss new trends, the requirements of innovative paving methods on the machines and also the future of road construction.

"A joint workshop is planned for next year which will focus on the further development of the HCO Navigator," reports Product Manager and engineer Jens Ruprecht from the Hamm brand headquarters in Tirschenreuth. Wirtgen Nederland is thrilled with the tremendous innovative force this will generate and is organizing these meetings: "We support this productive dialog that opens up new paths for further development to everyone involved," comments CEO Ben van Uden.

The use of oscillation will be among the fruitful topics of this dialog. Supported by Hamm and Wirtgen Nederland, BAM Infra took a close look at this compaction technology in 2014. The result: They now only use oscillating rollers. Project Manager Mark van Duuren explains why: "We compacted dif-

45

meters wide is the runway. 25 Hamm rollers were used over the 3 km.



"The BAM Infra planners allocated the rollers to two different WiFi systems. This worked perfectly. The ten-roller system came through its baptism of fire with great success."

Mark van Haafden,
Service Technician
at Wirtgen Nederland

135,000

A jointless 135,000-m² asphalt surface course with a thickness of 4 cm was required for the project in Eindhoven.



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The V-shaped configuration of the Vögele pavers ensured a great deal of flexibility for the Hamm rollers during reversing maneuvers (1). Operators have everything under control in the DV+ 70i and DV+ 90i with the HCQ Navigator (2/3).



ferent asphalt mixes that we often use, including low-temperature asphalt, with and without oscillation. Analyses by our laboratory teams have shown that we can achieve the required compaction faster and more efficiently with oscillation, and the technology also offers a number of further advantages.”

As expected, with this equipment BAM Infra fully met the high quality requirements in Eindhoven. This was all down to excellent organization, a highly trained, well-prepared and motivated team at BAM Infra - and intelligent compaction technology from Hamm. ■

➤ www.hamm.eu

3





"Our customers expect punctuality, flexibility and quality. And that's why we have been relying for years on Kleemann plants."

Christoph Stingel,
CEO of SBR Stingel
Baustoffrecycling
GmbH



KLEEMANN: IN COOPERATION WITH SBR STINGEL BAUSTOFFRECYCLING GMBH

Partners on equal footing

SBR Stingel Baustoffrecycling GmbH for years has been an enthusiastic user of Kleemann's mobile screens and crushers. Along the way, the two companies have maintained an intense exchange that paves the way to success.

Trust, security and reliability are the characteristics that make a good relationship. The same holds true for the long-term partnership between the companies Kleemann and SBR Stingel Baustoffrecycling GmbH (SBR), based in Schwenningen, Germany. A specialist in recycling rubble, SBR has been using Kleemann systems exclusively since 1983. "Our customers expect punctuality, flexibility and good end-product quality from us," explains Christoph Stingel, CEO of SBR Stingel Baustoffrecycling GmbH. "That's why we have relied for years on Kleemann systems and the service provided by Wirtgen Augsburg."

As one of Kleemann's oldest customers, Stingel experienced the entire process of Kleemann's integration into the Wirtgen Group. "Even back then, the expansion of the Wirtgen Group of companies was a clear advantage for our sister company Friedrich Stingel GmbH," emphasizes Christoph Stingel. "For asphalt paving, we use machines from Vögele and Hamm, meaning we get all technologies from a single source." While the company Kleemann und Reiner used to fabricate custom plants, Kleemann's entry into the Wirtgen Group marked **the start of serially produced screens and crushers in 2006.** Stingel also noticed the difference in that the system documentation became more detailed and the use of spare parts more standardized.

Today, SBR has 17 mobile screens and crushers from Kleemann at work, which generate more than 3 million tons of reclaimed building materials every year. To process them, Stingel mainly uses systems from the MOBIREX EVO line. When the company first tested the MOBIREX MR 130 Z EVO impact crusher, Stingel Machine Operator Christian Huber was immediately thrilled: "Even during the test run, I said to my boss: Buy this system for me!" We are still using it today and are still totally satisfied with its output and easy maintenance."

Compact and fast

Two years ago, Stingel GmbH expanded its fleet of machines to include a MOBIREX MR 130 Z EVO2. "While using the MR 130 Z EVO, we noticed possibilities for improvement, which we passed on to Kleemann," explains Christoph Stingel. "When we later started up the MR 130 Z EVO2, we saw that those very improvements had been implemented. I think it's great that Kleemann attaches such importance to feedback from practitioners." No wonder Stingel put another MR 130 Z EVO2 into operation just a few weeks ago. Thanks to their compact design, the EVO machines are easy to transport and can be quickly set up and taken down at a job site. For example, the increased ground clearance of the MR 130 Z EVO2 allows for easy loading. What is more, the machines are versatile and can be flexibly adapted to the respective requirements of a contract, depending on the type of building materials being pro-

cessed. Before the systems are transported to a customer, Stingel tests them and makes preliminary settings. Only then is a crusher ready for a recycling job and can be transported to the customer. "Customers keep our machines for an average of two weeks. Sometimes we have to respond to very urgent inquiries requiring us to be on site within just a few days," adds Tony Winter, Division Manager and person in charge for SBR Stingel Baustoffrecycling GmbH. "In these cases, we have to make sure our Kleemann crushers and screens are always in good condition and operational."

Top service

With the right care and maintenance, Kleemann systems are very long-lived and reliable. SBR has a large spare parts store at its headquarters in Schwenningen. In addition, a container with a dedicated workshop and the right spare parts is delivered to every job site. This way, a Stingel machine operator can make repairs himself on site to keep downtime to a minimum.

If difficulties ever do arise, they can usually be solved with the aid of the telephone support provided by the Wirtgen subsidiary in Augsburg. "We used to have direct contact to Kleemann. We had to get used to having Wirtgen Augsburg handle customer support," remarks Machine Operator Huber. But today, the company has a good relationship with the subsidiary: "We feel safe and secure with the Wirtgen Group service and together we quickly find solutions to problems." As is usual between good partners! ■

➤ www.kleemann.info



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“Customers keep our machines for an average of two weeks. Sometimes we have to respond to very urgent inquiries requiring us to be on site within just a few days.”

**Tony Winter, SBR
Division Manager**



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“We feel safe and secure with the Wirtgen Group service and together we quickly find solutions to problems.”

**Christian Huber, SBR
Machine Operator**



Today, SBR Stingel Baustoffrecycling GmbH has 17 mobile crushers from Kleemann at work across Germany.

BENNINGHOVEN: PROJECT WITH HITTHALLER+TRIXL

Sharing success

In its almost 110-year history, Hitthaller+Trixl Bauges. mbH in Leoben has developed into a specialist in civil engineering and road construction, now recommending itself as a strong partner for supra-regional construction projects.





"The three loading silos and the possibility of direct loading mean that our logistics are fast and efficient."

Johannes Gmeiner,
Managing Partner
of Hitthaller+Trixl



When master mason Johann Hitthaller founded the company in 1907, he could not have foreseen that it would develop over the decades to become a proficient and versatile construction service provider. Today, Hitthaller+Trixl is valued by customers and partners alike as an independent, success-driven company that is absolutely trustworthy and financially resilient. Alongside the headquarters in Leoben, it has branch offices in Graz, Kapfenberg, Linz, Trumau, Wels and Zirl. Peter Hitthaller, an engineer, master builder and, until 2012, the 3rd generation of the family to be a managing partner, now chairs the supervisory board of the company, where he maintains a promising balance between tradition and modernity along with the some 640-strong workforce.

The company took a major step on the way to expanding its civil engineering expertise when, in 2004, it established an efficient asphalt and road construction department headed up by Josef Ulbing, an expert with a long track record in the industry. An existing asphalt mixing plant was acquired, to ensure that the company's own high quality standards were consistently maintained along the entire process chain.

The new line of business performed well, and, over the course of time, the vision of expanding the road construction business segment developed into the idea of erecting one of the most modern asphalt mixing plants in Austria. After three years in the pipeline, the project finally received the green light in August 2015 and was delivered within a few months in partnership with the experts from Benninghoven. Wolfgang Steiner, Head of the Civil Engineering division at Hitthaller+Trixl says: "Opting for Benninghoven was an easy decision for us, not just because of the quality of support but also in view of the quality of the plant components. The bottom line was that this package offered us the best possible price-performance ratio. We have of course been in contact with Wirtgen Austria for some time through the Vögele and Hamm brands, and we know the professional way in which the team goes about its work."

Complete project support from A–Z

In December 2015, work started on dismantling those parts of the old plant that were to be rebuilt by Benninghoven. What remained were the cold feed system, a bitumen tank and the storage silo. These components were integrated into the concept of the new plant. The new plant then came on stream as early as mid-April 2016. Josef Ulbing, Construction Manager for the Asphalt and Road Construction group at Hitthaller has this to say: "The inclusion of the existing components made the planning process rather complicated. But we were ably supported by Benninghoven all the way from submission of the bid through completion, and the collaboration was consistently constructive." To ensure the highest quality standards, Hitthaller invested in the

very latest technologies, not least because they also wanted to take environmental concerns into account in all areas. Klaus Kohl, Head of Sales for Benninghoven at Wirtgen Österreich GmbH says: "The new asphalt mixing plant is a TBA 2000 from Benninghoven. Like Hitthaller+Trixl Baugesellschaft mbH, Benninghoven - founded in 1909 - can also look back on a long and rich tradition, having achieved technology leadership in the field of asphalt mixing plants over many decades. The TBA 2000 is configured with a 2-t mixer and a dual-fuel burner with bitumen-vapor afterburning. This technology is just as good for the environment as a particularly high-grade filtration unit. The possibility of adding RAP from Hitthaller's own road reclamation projects is another key aspect, with cold feeding making up as much as 30% of the plant's output." Proudly he adds that the new asphalt mixing plant reduces emission by more than 50 % while simultaneously increasing output.

Johannes Gmeiner, Managing Partner of Hitthaller+Trixl, emphasizes the importance of this to the efficiency of the company: "This extensive investment in the very latest production technology now enables us to produce asphalt mix of every required quality, even for high-ranking road construction projects. Special thanks are to due Wolfgang Steiner and Josef Ulbing in this context. Together with Mr. Kohl of Benninghoven, they did a truly outstanding job of designing the plant right down to the tiniest detail and bringing it to completion without any major complications. For us, road construction is a market of the future, so this investment represents an important step in safeguarding the continued independence of the company."

The asphalt mix from the new plant is largely used for the company's own projects. However, its possible uses go beyond pure road construction, since Hitthaller+Trixl Baugesellschaft mbH can now also make optimum use of the synergies within the company. These extend from the design of their civil engineering, general contractor and property development projects through the routing of power and telecommunications cables to digging and installation work in municipal water and district heating pipeline construction. ■

The Hitthaller+Trixl team is proud of its new Benninghoven plant: Wolfgang Steiner, Johannes Gmeiner and Josef Ullinger together with Klaus Kohl (2nd from right) of Wirtgen Austria.



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BENNINGHOVEN: GROUND-BREAKING CEREMONY FOR NEW PLANT

Visionary plant

The Wirtgen Group is investing €130 million in the construction of a modern brand headquarters, which will centralize Benninghoven's production as of 2018.

After a planning phase of less than a year, Benninghoven started construction of its new brand headquarters in Wittlich-Wengerohr in August 2016. The specialist in the manufacture of asphalt mixing plants aims to launch production in early 2018. "At over €130 million, the new Benninghoven plant is the largest, single investment in the history of the Wirtgen Group and a clear sign of our commitment to Germany as a production site. The new plant is the logical and necessary next step in **sharpening our competitive edge worldwide.** We can no longer meet rising demand long-term with our current production capacity," explains Jürgen Wirtgen, Managing Partner of the Wirtgen Group.

Growth is on the cards

The step-by-step integration of the Benninghoven product brand into the Wirtgen Group's sales and service network has been completed in Europe and Australia, and intensive efforts to successively integrate it into other international markets are underway.

Benninghoven currently produces mobile, transportable and stationary asphalt mixing plants, mastic asphalt mixers and granulators at two production sites in Mülheim an der Mosel and Wittlich, Germany. The new plant combines the activities of these two sites. "Concentrating all production activities at a single site, from prefabrication to final assembly, guarantees optimized production processes," explains Dr. Martin Kühn, Managing Director of Benninghoven GmbH & Co. KG.

Conditions at the existing sites offered no possibility for an expansion of this magnitude. The main factor when choosing a location was its proximity to the existing plants, because we wanted our entire, highly-qualified workforce to move with us to the new plant. The move is set to create new jobs, meaning that the workforce will grow to 1,000 employees in the medium to long term.

A whole 330,000 square meters of plant space

A state-of-the-art plant is being built, with modern production systems based on the lean management system and **Industry 4.0 technologies,** which will ensure high workplace quality and optimum production conditions. A production facility with 46,000 m² of space and a 5-story administration building with 12,000 m² are to be built on the grounds. The new plant is generously sized to suit the dimensions of the various product components, which can be up to 50 m high. For the growth-oriented company, the plans already include options for potential future expansion. Construction is to begin in early 2017. Production of the first asphalt mixing plants is scheduled to begin in spring 2018. ■



"The new plant is the logical and necessary next step in sharpening our competitive edge worldwide."

Jürgen Wirtgen, Managing Partner of the Wirtgen Group



FACTS AND FIGURES

Future brand headquarters in Wittlich-Wengerohr



Total investment	€130,000,000
Scheduled start of production	Spring 2018
Total area of site	330,000 m ²
Production space	46,000 m ²
Administration space	12,000 m ²
Soil excavated for construction	400,000 m ³

www.benninghoven.com

Ground-breaking ceremony for new Benninghoven brand headquarters in Wittlich-Wengerohr. Project details were presented at the press conference.



All new!

The Wirtgen Group is not only introducing its new CI worldwide - a lot of other things happened throughout 2016 as well. The company expanded its global network by opening new locations, and garnered plenty of notice and recognition along the way.



Outstanding brand

Malaysia. Wirtgen Malaysia received the Best Brand Award in the category “Best Brands in Industrial Road Construction Solutions” from the Asia Pacific Brands Foundation. Pok Sum Loong, Managing Director of Wirtgen Malaysia, accepted the award on behalf of the entire team.



Langfang has a new look

China. Like the Wirtgen Group brand headquarters in Germany, our plant in Langfang has now been entirely rebranded. For more information, go to:

► www.wirtgen-group.com/china



More Service

Our Lithuanian colleagues are delighted with their new subsidiary which was ceremonially opened in September and provides more space for Customer Support.

250

MILLION euros is how much the Wirtgen Group will be investing in the expansion of its brand headquarters in Germany and its sales and services organization worldwide through 2017.

Expansion

Tirschenreuth. Hamm's brand headquarters are getting a new spare parts store, located between its assembly and drum fabrication buildings (see photo). With over 12,000m² of space, the logistics center will also expand in the vertical with high-bay storage. A fully automated small parts store will support short access times. In the future, "tugger trains" will transport supplies to Production.





Plant size x 2

The Kleemann factory is also expanded considerably. After completion, twice the former size will be available for the production of crushing and screening plants.

7,500

The overall trend of growth within the Wirtgen Group also includes staff. By now, some 7,500 employees are working for the Wirtgen Group worldwide.



Key switches owners

Thailand. Big opening celebration in Southeast Asia. At the official opening ceremony for the new Wirtgen Thailand site, Stefan Wirtgen symbolically handed over the key to Managing Director Sarun Veangsong in the presence of numerous customers and invited guests.

➤ www.wirtgen-group.com/thailand



Opening!

Malaysia. Together with YBhg Dato' Sri Zohari Haji Akob, Secretary-General of the Malaysian Ministry of Labor, and Stefan Wirtgen, Pok Sum Loong opened the new Wirtgen Malaysia subsidiary in Shah Alam. As many as 250 invited guests came to tour the 3,000m² grounds. With live demonstrations, a machine exhibition and typical Malaysian performances, the opening event was an auspicious start for the new subsidiary.

➤ www.wirtgen-group.com/malaysia



Ready to move in

South Africa. New building for South African subsidiary: Jürgen Wirtgen hands over the key to Heinrich Schulenburg, Managing Director of Wirtgen South Africa, at an opening celebration attended by 200 guests. The 20,000 m² facility offers enough space for the administrative offices, workshop, training rooms and spare parts store.

➤ www.wirtgen-group.com/southafrica



Congratulation

Wirtgen India has been acclaimed by the German Indian Chamber of Commerce as the fastest growing company. Ramesh Palagiri, CEO Wirtgen India, accepted the award from Alexander Dobrindt, German Federal Minister for Transport and Digital Infrastructure.



PARTS AND MORE

For Spare Parts, please see:
www.partsandmore.net

Welcome

Our dynamically growing, family-owned company still has some positions open for the future. Come on board! For more information and job openings, go to:
www.wirtgen-group.com/vocational-training



BAUMA CHINA 2016

Close to our customers⁵

This year, the Wirtgen Group also attended bauma China with all five product brands for the first time. Fifty exhibits were on show, demonstrating the Group's outstanding quality, its innovative spirit and a high level of practical orientation for maximum customer benefits.

The Wirtgen Group demonstrated its close links with Chinese customers at bauma China. Experts from the Wirtgen Group provided specialist visitors with details on the features of the premium, market-driven construction machines with their very high quality standards, innovative technologies and application processes.

This was the first time that the market leader had attended the show in Shanghai with all five brands, exhibiting its customized solutions for the Asian market. Eighteen of the approximately 50 exhibits were produced at the local facility in Langfang.

With this representative **cross-section of the high-performance Wirtgen Group product range**, Wirtgen, Vögele, Hamm, Kleemann and Benninghoven presented more exhibits than ever before in Shanghai. They were not only developed specifically to meet local requirements, but also demonstrate German-Chinese engineering ingenuity and the perfect collaboration between the German brand headquarters and the production facility in Langfang.

FACTS AND FIGURES

Production facility in China

Langfang



The Wirtgen Group has set up a base not far from the Chinese capital Beijing which accommodates not only an assembly plant, but also a sales and service center complete with workshop and spare parts store. Located at the gates to Beijing, the facility's local production program includes a selection of Wirtgen cold milling machines, Vögele pavers and Hamm rollers.

- More than ten sales and service centers around the country
- Excellent customer support and high spare parts availability.

➤ www.wirtgen-group.com/china

"All the machines from Wirtgen, Vögele, Hamm and Kleemann, be they new or already established on the local market, meet the specific requirements of the Asian market. We offer our customers premium products of the very highest quality that enable them to carry out their assignments **not only professionally, but also highly economically**" explains Ulrich Reichert, CEO of Wirtgen China.

Innovations from the premium product brands

While Wirtgen unveiled the brand-new 2-m large milling machine W 215 and the small milling machine W 55 H as well as two cold recyclers and soil stabilizers, the WR 200 and the WR 240 in China, Vögele brought along new market-driven products from the "Dash 3" generation - including the SUPER 1603-3 asphalt paver with the AB 480 Extending Screed and the SUPER 1880-3 L. Hamm presented new compaction solutions with the HD 14 TT static rubber-wheeled roller and the HD O 138 tandem roller with vibration and oscillation.

Kleemann also celebrated a debut in China, unveiling its new MOBISCREEN MS 953 EVO mobile screening plant. Benninghoven informed visitors about its burner technology, one of its core competencies, as well as important components, for example for the retrofitting business. The Group's display was rounded off with presentations informing visitors about the GKL Silent mastic asphalt mixer and the recycling granulator.

The machine exhibits were flanked by exciting special presentations about various services and application technologies that underlined the comprehensive range of solutions of the Wirtgen Group. Once again, Wirtgen, Vögele, Hamm, Kleemann and Benninghoven specialists from the German brand headquarters as well as Wirtgen China were on hand to provide competent advice and answer questions on applications. ■

➤ www.wirtgen-group.com/bauma-china



Wirtgen's large milling machine W 215 is the new Asian flagship in the cold milling machine product division (1). The Hamm compactors: More than just compaction (2). Benninghoven's mobile granulator - new in China: ideal introduction to asphalt recycling (3).



Vögele presented two new pavers in the Universal Class: the SUPER 1880 L multifunctional paver and the asphalt specialist, the SUPER 1880-3 L (4). Kleemann has added innovative, track-mounted screening plants to its range of EVO systems (5).



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LOOK AHEAD TO THE 1ST HALF OF 2017

Note these dates!

The Wirtgen Group will once more be presenting its machines around the world in 2017. The most important exhibitions and trade fairs are summarized here.

January

Las Vegas, USA
World of Concrete 2017
Jan 17-20, 2017



February

Lucerne, Switzerland
BAUMAG 2017
Feb 2-5, 2017



Verona, Italy
SAMOTER ASPHALTICA 2017
Feb 22-25, 2017



March

Las Vegas, USA
CONEXPO 2017
Mar 7-11, 2017



April

Karlsruhe, Germany
recycling aktiv/TiefbauLive 2017
Apr 27-29, 2017



May

Moscow, Russia
CTT 2017
May 30-Jun 3, 2017





WIRTGEN GROUP AND BETEK: SYSTEM PARTNERS FOR CUSTOMIZED SOLUTIONS

Forging innovation

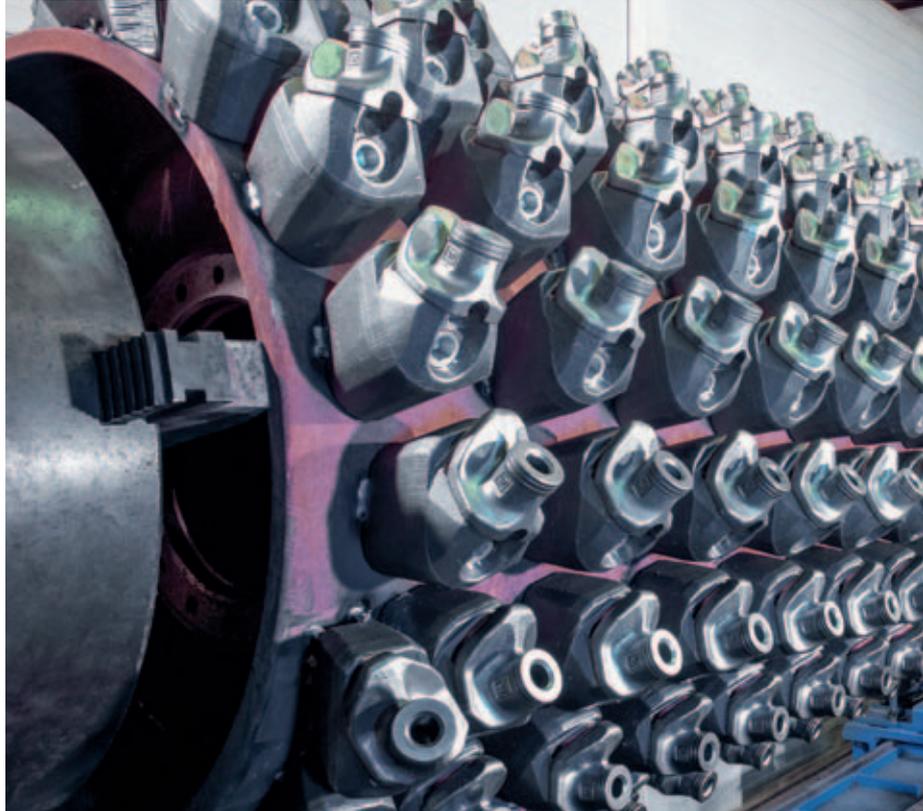
Wirtgen GmbH became a Betek customer 35 years ago. This relationship has since developed into a system partnership that is without parallel and now extends to the entire Wirtgen Group.

All the manufacturers involved systematically pool their specialist knowledge and contribute their expertise. Development, design, production, quality assurance and sales go hand in hand - the common goal being to ensure maximum customer satisfaction. A high advance rate plus a minimal tool replacement rate equals a maximum daily production rate. For this equation to add up to lower operating costs, powerful machines fitted with high-quality tools are a must.

Only cutting tools of the very highest quality that are precisely tailored to the machine and application will guarantee a long tool life and optimum rotation. "In the course of their enduring system partnership, Wirtgen and Betek have consistently pursued the goal of constant improvement based on shared on-site experience," explains Thomas Lehnert, Team Leader Development and Design at Wirtgen. Indeed, new applications frequently prompt the optimization or even new development of the cutting tools, resulting in even greater efficiency. "Rising sales figures bear out our concept, which is geared first and foremost to customer satisfaction," adds a delighted Benjamin Grüber, Product Manager Cutting Technology at Wirtgen, speaking about the successful system partnership with Betek.

Made-to-measure solution in surface mining

The key role that special solutions play in the joint development process - alongside series products - is impressively demonstrated by a mining project in Finland, where various stockpile sections in a copper mine need to be transferred. When the soft yet highly abrasive material proved too much for the machinery previously used, the customer turned to heavy equipment in the form of a Wirtgen Surface Miner 2200 SM 3.8. The wear on the cutting tools presented a further challenge, however. A special solution was required. This was where the customer reaped the benefits of the tried-and-tested cooperation between the system partners, who responded by purposefully reinforcing both the toolholder and the cutting tool itself. "Not only did we specially develop a new carbide geometry, but also a new manufacturing process for armoring the steel body, which was exposed to abrasive wear," reports Thomas Allgaier, Head of the Surface Technologies division at Betek,



The toolholders are welded on by hand or by robot to an accuracy of 0.5 mm (1). During the milling process, point-attack cutting tools loosen the surface and granulate it into fine, reusable material (2).

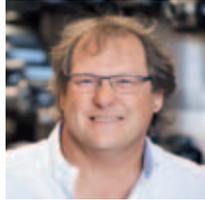




1



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"The mutual trust between the system partners encourages the focused development of solutions."

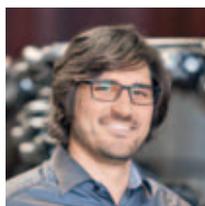
Thomas Allgaier,
Head of Surface
Technologies Market
Segment at Betek



describing the implementation. Ultimately, the solution specially developed for this application provided greater protection against wear for the toolholders, cutters and cutting drum. Thanks to the longer tool life and the resultant increase in machine availability, the customer was able to more than double its daily output and achieve a significant financial benefit. The customer's great satisfaction with the solution is also evident in its decision to acquire a third Wirtgen Surface Miner of type 2200 SM 3.8, which has now commenced work in the mine.

Cutting drums

Hamm is also profiting from this experience in cutting technology. Compactors with a crusher drum have been developed in close cooperation. The core component of the compactor is the VC drum. VC stands for vibration crusher and that sums up the main function of the machine: it crushes or loosens rock, stone and concrete with a vibrating drum which is fitted with tools. However, the VC compactors can do even more, because their specially developed quick-change toolholders can accommodate a range of very different tools. That means the drum can be used not only for the preliminary crushing and loosening of rocky ground, but also - with the right attachments - as a padfoot drum.



"Our cutting technology portfolio enables us to offer our customers the optimum solution for every application."

Benjamin Grüber,
Product Manager
Cutting Technology
at Wirtgen



Kleemann in Göppingen is likewise collaborating with Betek. "At the moment, we're working with Betek on the development of a new carbide-tipped rotor ledge. It's currently undergoing prototype trials," explains Benjamin Kazmaier, an engineer in the Design & Development department at Kleemann GmbH. The aim is to achieve a longer service life. "Since the edge is carbide-tipped, it stays sharp for longer, which gives us an even more effective crushing capacity and optimum quality of the crushed material throughout the service life. The distance between the ledge and the impact plates remains constant, so there is no irregular wear," says Bernhard Moosmann, Product Manager Crushing and Mixing at Betek, extolling the benefits of the new development. Another positive effect is that the carbide-tipped interchangeable inserts weigh just a fraction of a complete rotor ledge, making replacement considerably simpler since heavy equipment is no longer required.

A wide array of carbide components are needed for asphalt mixing plants. With this in mind, ➔

the development teams at Betek and Benninghoven are putting their heads together. The question they are pondering is this: Where do carbide twin-shaft mixers and screens or the carbide-tipped cutting teeth of Benninghoven granulators - the granulator carefully breaks reclaimed asphalt down into its original constituents so that almost 100% of it can be recycled into new asphalt - offer potential for cost-efficient advancements? The answer to this will also be found - and the system partnership with the Wirtgen Group is set to continue.

Maximum customer satisfaction

The successful 35-year partnership between the Wirtgen Group and Betek has borne fruit in the form of coordinated system components which offer high potential savings for the user. Betek tools are sold and distributed through the Wirtgen Group and its 55 sales and service companies. The on-site service is also provided directly by the proven service network of the Wirtgen Group, supplying the customer with coordinated solutions from a single source. "Despite the very high demands on the engineers, we are able to ensure that products are developed and ready for series production in a short space of time. That's proof of a smooth cooperation which benefits the customer," says Dr. Günter Hähn, CEO of Wirtgen GmbH, praising the effective and collaborative partnership of the highly motivated development teams. ■

1982

Wirtgen becomes a Betek customer: The first products to be ordered were point-attack cutting tools for road milling machines.

1994

The HT2 quick-change toolholder system was replaced with the new HT3.

2013

Launch of the GENERATION X cutter series and the new HT22 quick-change toolholder system for cold milling machines.

2016

Launch of the GENERATION Z point-attack cutting tool series and the HT22 quick-change toolholder system for cold recycling and soil stabilization.



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Rock and stone can be crushed and compacted with VC compactors from Hamm (1). Teamwork: Thomas Lehnert (right), Thomas Allgaier and Benjamin Grüber in the Wirtgen brand headquarters (2).



“Requirements from the field have a key impact on the further development of our cutting tools.”

Thomas Lehnert, Team Leader Design and Development at Wirtgen

i THE COMPANY

THE CARBIDE SPECIALISTS

Based in Aichhalden in the Black Forest, Betek has been developing and producing carbide-tipped wearing tools, tool systems and wear protection solutions for more than 30 years. These are used in road construction, mining, mineral extraction and the recycling industry, among other applications. Numerous patents safeguard the company's technical leadership on the global market. A member of the SIMON group of companies, the mid-sized company draws on the know-how of its some 250 employees.

> www.betek.de

SYSTEM PARTNER: STREUMASTER

A firm foundation

Streumaster manufactures high-quality binding agent spreaders exclusively for Wirtgen. These machines for spreading lime and cement are the ideal complement to Wirtgen's range of soil stabilizers and cold recyclers.





Streumaster's plant in Egglkofen has 5,500 m² of production space. The design of the plant is optimally configured for the manufacture of the extensive product range. Short routes and the very latest equipment ensure efficient production to a high standard of quality. Almost 1,000 m² in size, the spare parts warehouse has plenty of space for the 13,000 different articles that go into both production and spare parts sales. The administrative building boasts cutting-edge training and conference facilities and, extending over 700 m² on two floors, offers ample room for the strong Streumaster team.

Unbeatable in soil improvement

The two family-owned businesses have been working closely together for years: Based in Egglkofen, Bavaria, Streumaster has been building spreaders for agriculture and the construction industry since 1967. "The system partnership puts us in the happy situation of being able to respond fully to our customers' requirements for an integrated stabilization and cold recycling solution. **Streumaster manufactures a mature range of binding agent spreaders for us,"** says Martin Diekmann, Product Manager Recycling and Soil Stabilization at Wirtgen, describing the collaboration with Streumaster. Countless joint projects by the two

system partners demonstrate that everything dovetails seamlessly when innovative technologies and perfectly coordinated products are used.

One example of this is a stabilization job on an area extending over 50,000 m². The contractor was faced with the choice of either having the insufficiently cohesive soil transported away and replaced, or stabilizing it in layers. The second option was clearly preferable in terms of time and money. And so it was that a Wirtgen soil stabilizer WR 200i, teamed with two Hamm compactors and the latest development from Streumaster, the SW 16 MC binding agent spreader, took the lead. "Mounted on a three-axle truck, the module unit has a binding agent container capacity of 16 m³. Its high performance and simple loading system using a quick-change coupling allows up to ten silo loads of binding agent to be handled each day," says Jan-Christoph Hoffmann, Head of Sales, Marketing & Service at Streumaster, describing the benefits of the SW 16 MC. Once the large-capacity binding agent spreader had spread a total of 6,000t of fine ground quicklime precisely and without generating dust, the Wirtgen WR 200i mixed the soil with the binding agent to produce a homogeneous mixture before two Hamm type H20i rollers ensured optimum compaction. By the end, the tried-and-tested trio of brand products had performed earthwork on some 100,000 m³ of material, working just like clockwork.

IN SUMMARY

Soil stabilization with lime



The Streumaster binding agent spreader spreads lime as the binder. Behind it, the powerful milling and mixing rotor of the Wirtgen WR mixes the soil thoroughly with the pre-spread binder to produce a homogeneous mix. After pre-compaction with a Hamm compactor and subsequent profiling with a motor grader, the rollers compact the soil again.

► www.wirtgen.de/soil-stabilization

Integrated one-stop solutions

With soil stabilizers from Wirtgen, compaction technology from Hamm and binding agent spreaders from Streumaster, the Wirtgen Group offers a full range of products for soil improvement and compaction. **The products are sold through the Wirtgen Group** and its 55 proprietary sales and service companies as well as more than 150 selected dealers. The on-site service is also provided directly by the service network of the Wirtgen Group, which means customers get tailored solutions for all their requirements from one source. "We benefit enormously from the worldwide sales and service organization of the Wirtgen Group. It means that we, too, are close to our customers around the world. At the same time, we can focus entirely on the manufacture and advancement of the spreaders, enabling us to supply our customers with products of the very best quality," Hoffmann continues. ■



1



“We combine our synergies to offer our customers perfectly tailored package solutions.”

Jan-Christoph Hoffmann, Head of Sales, Marketing & Service, Streumaster



2

A tried-and-tested trio in earthworks: system partners Streumaster and Wirtgen with Hamm (1). Wirtgen Group customers have a single point of contact for all their soil stabilization needs (2).

1,000

SQUARE METERS - that's the size of Streumaster's spare parts warehouse. It contains more than 13,000 articles.

10

YEARS - that's how long the partnership between the Wirtgen Group and Streumaster has been in existence.



SYSTEM PARTNER: DEUTSCHE LEASING

Top financing

The Wirtgen Group and Deutsche Leasing have been cooperating for almost 15 years. This enduring relationship ensures that customers are given ideal financing solutions for their premium machines, giving them both flexibility and security.

As a long-standing partner of the Wirtgen Group, we are wise to the challenges of the industry and the tremendous competitive pressure in the road and mineral technologies sector. We offer customers of the Wirtgen Group individual solutions for their specific financing needs - quickly, simply and unbureaucratically," explains Alexander Klare, Global Vendor Manager at Deutsche Leasing, who takes care of the customers of the Wirtgen Group. The advantage for customers is clear. They can obtain the Wirtgen Group machines and plants plus the financing, insurance and guarantees as a convenient package from a single source. This leaves construction companies free to focus entirely on their core business without having to spend precious time negotiating loans or fighting their way through contracts which are often comprehensible only to experts.

"We can pass on our customers to our partners at Deutsche Leasing with great confidence. The conditions and finance products are good and offer maximum planning security. The unbureaucratic provision of financing means that our customers can take our machines into operation in a very short time," explains Rainer Otto, Managing Director of Wirtgen Group Holding GmbH.

Milestone in collaboration

As part of its internationalization strategy, Deutsche Leasing expanded its operations beyond its most important export markets in Europe and has been represented in Asia since 2005 and in the United States since 2007. The Chinese Ministry of Commerce's 2005 decision to grant Deutsche Leasing a license to offer leasing services throughout China was prompted, not least, by Wirtgen Group's commitment to the Chinese market. Deutsche Leasing (China) Co., Ltd. actually signed its first leasing contract in China with the Wirtgen Group in Shanghai. "The Chinese model, as well as other examples from different countries with a high level of financing, clearly demonstrates that the right financing tools can have a positive impact on sales," Rainer Otto happily adds, commenting on the effective system partnership with Deutsche Leasing.

Alexander Klare regards the collaboration in China as a milestone in cooperation with the Wirtgen Group: "It has evolved to become the backbone of the collaboration, as a not inconsiderable share of new global business is generated here," Klare explains. The machine sales volume has increased continuously in line with the level of financing. The high financing ratio shows that the solutions have hit the mark with customers. Different contract wordings allow the use of the machines and the payments to be adapted to individual order situations. "We're highly responsive to the customer's individual circumstances and also have a great team on the ground. We are currently

represented in five Chinese regions - by the Wirtgen Group subsidiary in Langfang, the Deutsche Leasing subsidiary in Shanghai and by additional DL employees at dealers in Guangzhou, Xian, and Xuzhou. With our network, we are able to provide financing solutions throughout the country. This brings us closer to dealers and customers so that we can offer more targeted tailored finance options."

Top financing: Large milling machine package hits the mark

A project with Guangzhou Oujian Equipment Service Co. Ltd. involving the sale of 20 large milling machines shows how important it is to put together a tailored package of machines and financing. The customer took six machines into operation immediately and the others will be following successively over the next few months. Selecting a financing product with the right lease term, interest rate and financing structure means that project-based use of the machine can be handled much more economically, as Klare confirms: "The overall package for the 20 Wirtgen high-performance milling machines leaves the customer further scope for future investments." ■



Successful system partnership in China: Alexander Klare (l.), Global Vendor Manager at Deutsche Leasing, and Ulrich Reichert, CEO Wirtgen China.



WIRTGEN GROUP TRAINEE TECHNOLOGY DAYS 2016

Strength in numbers

The 65 second-year trainees faced a mammoth task: As part of the Wirtgen Group Trainee Technology Days, the group had to resurface a 330-meter stretch of a two-lane federal highway.



Vocational training is a high priority within the Wirtgen Group. "On projects like this, trainees learn how important the close collaboration between our Group companies is, and how Wirtgen Group technologies optimally complement one another at work on job sites. Experiencing the machines live in action gives them an authentic impression of what the daily work of our customers is like," explains Christoph Niehaus, Head of Vocational Training at Vögele. After all, being truly close to customers is ingrained in the Wirtgen Group's corporate DNA.

The Trainee Technology Days are held once a year at one of Wirtgen Group's brand headquarters in Germany. The owner-operated company is proud that one-third of its workforce was trained in-house in recognized vocations. "In this process, it's important to us that our trainees experience how teamwork leads to success and what makes the Wirtgen Group so strong," adds Helmut Hecking, Head of Vocational Training at Wirtgen.

Remove, pave, compact - Done!

While the trainees rehabilitated a section of the old Kleemann plant grounds in Göppingen last year, their job this time around was to renew an asphalt surface course that was showing signs of age. The special feature of the project: The road in question, the B 44 federal road in Ludwigshafen, is heavily trafficked and could only be closed for a brief window of time. This meant high demands on the results and tremendous time pressure on the trainees.

In the first step, they removed the 4 cm-thick surface course along a stretch of 330 m. The trainees had a chance here to show what they and their W 100 CFi can do! "Precisely maneuvering machines we only otherwise see in the factory was a great experience for us," said Melina Lohner, electronics trainee at Wirtgen. In Step 2, the Vögele trainee team used their SUPER 1900-3i to pave the 4 cm-thick surface course. "To pave across the entire width, we skillfully fitted the road paver with bolt-on screed extensions ahead of time," explains trainee Simon Wolter, who is studying at Vögele to become a mechatronics specialist. At the Vögele brand headquarters in Ludwigshafen, the program also included interesting workshops for the team, in which they gained more in-depth insight into various technical fields. The schedule included industry topics such as WITOS PAVING.



Sixty-five of the 310 highly motivated Wirtgen Group trainees mastered the road construction project as a team (3). An innovative operating concept and good visibility support easy and intuitive operation of the Wirtgen compact milling machine (4).

Concentrating on the job: The trainees from Hamm saw to the professional compaction of the freshly paved asphalt surface course (1). The W 100 CFI milling along the curb under skilled supervision (2).



Final compaction was handled by the specialists from Hamm. With their two DV 65 tandem rollers, they “put the pressure on” the paved asphalt. They followed behind the Vögele paver as long as necessary to compact the warm mix, until it displayed the specified thickness of 4 cm. After compaction of the surface course was completed, the trainees finally had to pack up the job site. “We are very pleased with the results. Our trainees were a super team and they tackled this job site together,” said Helmut Hecking.

In just two days, they not only completed the construction project, they also made new friends, learned new skills and gained valuable experience. ■

➤ www.wirtgen-group.com/vocational-training



3

4



BRAZIL: RIO DE JANEIRO, SÃO PAULO, PORTO ALEGRE

Prospects for the future

In three facilities for children in need and their families, the charity group "Kinder in Not" offers loving care, free meals, medical treatment, and teaching.



KINDER IN NOT E.V.

Brazil

3

facilities for children and juveniles financed by the charity group "Kinder in Not" e.V. in the most highly populated country in South America.



Since 2004, the facility has been offering children from the favelas in Brazil an all-round care program:

- In Rio de Janeiro, preschool children from a poor district are prepared for elementary school.
- In São Paulo, the charity group supports young persons aged between 6 months and 18 years from HIV-positive families.
- In Porto Alegre, boys and girls from a socially deprived region are offered a safe haven.

➤ www.kinder-in-not.de





In Brazil, the largest and most populous country in South America, "Kinder in Not" finances three facilities for children and youths in need and their families. Apart from monthly cash accounting and reports to keep an eye on the assistance we provide, we consider it essential to check up on the lasting effect of our work on the spot through regular visits. In order to gain a personal impression of our aid projects without burdening the finances of "Kinder in Not," our staff travel at their own expense.

On this year's trip to Brazil, we visited three daycare centers for children from HIV-positive families in São Paulo, the care center for boys and girls from the slums of Porto Alegre, and the Creche Bom Samaration in Rio de Janeiro.

Beneath the Olympic whitewash

As the Olympic Games were about to take place, Rio de Janeiro had spruced up the city for this great event. It was hard to miss the refurbishing, renovation, and rebuilding that was going on everywhere. One classic example is the new Porto Marvilha waterside district. The long-neglected area has been turned into an urban paradise. But the "moros" or hills, home to the "favelas" or slums, are also a part of Rio. Life in this region is mired in violence, drugs, abuse, and utter hopelessness.

It is the children who bear the brunt. They roam around aimlessly in their torn and dirty clothes, begging on the streets or collecting trash. As a result, these boys and girls quickly come into conflict with the law, consume alcohol and drugs, or resort to prostitution. They have no prospects and you can see the hopelessness in their eyes. In our daycare centers, these children often experience a protected environment for the first time in their lives. They can relax, eat nourishing meals, and obtain med-

ical care. There are people who ensure that they attend school regularly. They are given targeted assistance with specific school subjects and can also pursue vocational opportunities. Cultural, sporting, and artistic activities help the boys and girls to develop their personalities and to take responsibility for their lives.

One serious problem faced by our young charges is the growing brutality in the slums. A violent skirmish erupted recently in the favela as the two- to six-year-old children in our daycare center were on their way home. The boys and girls had left the center at 5 p.m. but only arrived home four hours later because of the fighting. Two-year-old Victor Hugo asked the next day if he could stay permanently in the center. "People are always firing guns at home," he explained. But the center itself is not spared either. A couple of weeks earlier, the carers and their charges had a deeply harrowing experience when a gun battle in the slum spread as far as the area across the street from the center. The panic-stricken children and employees endured a traumatic situation that continued for several hours. Local circumstances have been made worse by spiraling inflation, causing a surge in rents and a four-fold or more spike in some food prices in the last few months. A kilo of beans - an absolute staple - now costs €4.60 instead of €0.95. This also poses a major problem for our facilities, which have to pay much more for the children's daily meals.

An inspiring success story

We were pleased to hear of a success story at our center Casa Criança Querida. On our visit, we met Laura, a new member of the team. She had arrived at Casa Criança Querida as an 11-year-old. Her father was unemployed, and her mother was struggling to feed the family by taking cleaning jobs. No one at home en-



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The association

was founded in 1983 on the initiative of Gisela Wirtgen, is a non-profit organization helping children in need to help themselves,

is non-political and non-confessional, maintains aid projects in the Philippines, India and Brazil

Further information

www.kinder-in-not.de



couraged the girl to attend school regularly or ensured that she had regular warm meals. The tireless efforts of our two daycare center directors turned her life around. Laura is now in her first year as an education student. She hopes to become a preschool teacher so as to repay some of the help she has received. When she is not studying, she works as a teaching assistant in our group for schoolchildren so as to be able to finance her studies. At the same time, she can successfully gain invaluable practical teaching experience at Casa Criança Querida. Perhaps she will one day direct our daycare center. What would have become of her without the extensive support of our local team? Wherever she goes from here, she is just one of many successful cases of helping people to help themselves.

Success stories like this motivate us to keep on fighting for these seemingly ill-fated boys and girls. We hope that we can enlist many more people in this important work.

Back in Germany, I was pleased to note that the work of Aktionsgruppe "Kinder in Not" e. V. had again been recognized at the highest level. Federal President Joachim Gauck issued a personal invitation to voluntary workers to attend a public festival in Bellevue Palace. I was able to accept this honor on behalf of all of those involved in "Kinder in Not." ■



Best regards,

Gisela Wirtgen
(Chairperson)
Charity Group "Kinder in Not e.V."



1



2



3

To check up on the success of the projects, including the education program (1), Gisela Wirtgen (2) traveled to Brazil, where "Kinder in Not" provides assistance to children from an early age (3).

CLOSE TO OUR CUSTOMERS



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▶ www.wirtgen-group.com/customer-support

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